THE MODERN BANK

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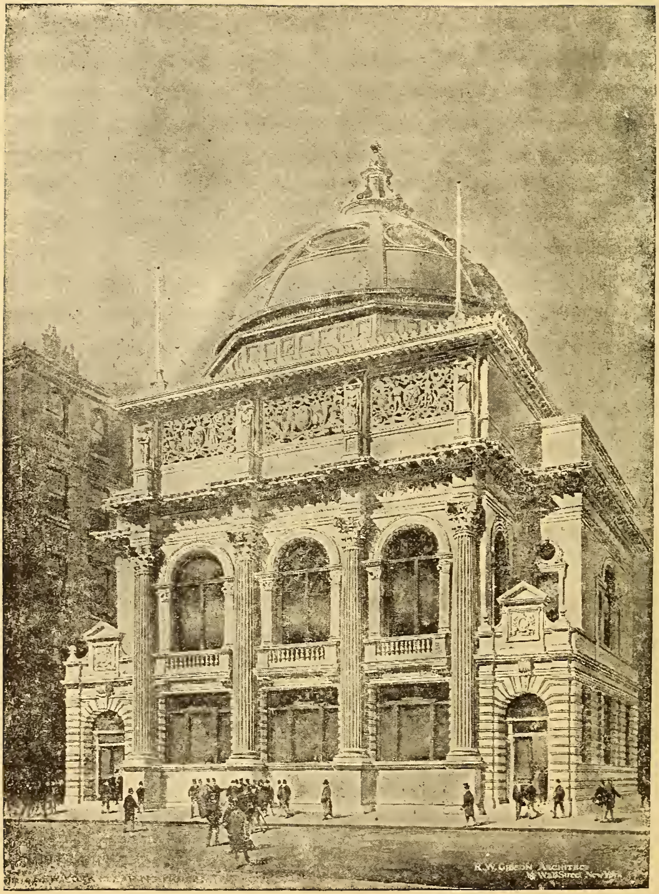
THE MODERN BANK



THE NEW YORK CLEARING-HOUSE.

THE MODERN BANK

A DESCRIPTION OF ITS FUNCTIONS AND METHODS AND A BRIEF ACCOUNT OF THE DEVELOPMENT AND PRESENT SYSTEMS OF BANKING

BY

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PREFACE

The main purpose of this volume is not to set forth or discuss theories and principles, or to give a history of banking or an account of different systems, but to describe in plain terms the various functions of the present-day bank in the United States and the methods by which its work is done. It is intended to give as clear an idea as possible of what an up-to-date bank does and how it is done. For this it is necessary to take what may be regarded as a typical bank and deal with its mechanism and methods, as all others will be only variations upon it, and it would be confusing to attempt an explanation of differences of detail. A large commercial institution with a full variety of banking operations in the financial center of the country has been taken as the model, and what it does and the manner of doing it fairly represents or suggests the business and methods of banks in general.

While this has been the purpose of making a new book on an old subject, it has seemed best to lead up to it with some preliminary chapters on elementary principles and general methods, and to follow it with a rapid sketch of the development of banking and of existing systems, in order to make the volume fairly complete. Some chapters are also given on such subsidiary topics as trust companies, savings-banks, private banking-houses, foreign exchange, safe-deposit companies, etc. For the historical part free use has been made of the literature of the subject, with which the writer has long been familiar, and no particular authority is entitled to special acknowledgment, though it perhaps ought to be said that in dealing with the actual history and with foreign systems Mr. Charles A. Conant's History of Modern Banks of Issue has been found particularly useful.

Information regarding the actual working of the American bank of to-day has been derived from the banks themselves by personal observation and inquiry, and here a number of acknowledgments must, in justice, be made to a very courteous and obliging set of men. The writer is especially indebted to Mr. James G. Cannon, vice-president of the Fourth National Bank, and to Mr. A. S. Frissell, president of the Fifth Avenue Bank, both of New York, who have afforded every opportunity for inquiry and investigation in those institutions. Mr. Walter L. Burckett, chief clerk of the former, and Mr. William C. Murphy, chief clerk of the latter, have been very kind and assiduous in answering questions and explaining the work of the different departments, whenever and wherever light was sought, and the latter examined critically the chapters relating to the practical work of a bank and made some valuable suggestions. The proofs have been carefully read by Mr. Frissell. Acknowledgment is also due to Mr. Henry Goldman, of Goldman, Sachs & Co., for points in relation to private banking-houses and international banking; to Mr. Beverley Chew, vice-president of the Metropolitan Trust Company, for information regarding the methods of trust companies; and to Colonel Charles E. Sprague, of the Union Dime Savings-Bank, for suggestions on the chapter relating to savings-banks. In short, all banking men applied to for information have shown unfailing courtesy in answering questions. It should also be mentioned that the Hon. William B. Ridgeley, Comptroller of the Currency, obligingly furnished material relating to the organization and the reports of national banks; and the author is indebted to the American Institute of Bank Clerks for permission to use one of its charts showing the distribution of functions and duties in a prominent bank.

The writing has been done in odd hours and snatches of time in the midst of a rather exacting daily occupation, and doubtless lacks the symmetry and completeness that might have been attained by more continuous and leisurely work. But with its acknowledged defects it is submitted to the public with the hope that it will give a fairly clear and full idea of the complex operation and great utility in the business of the day of the modern bank.

A. K. F.

New York, *December, 1903.*

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THE MODERN BANK

I

SOME ELEMENTARY PRINCIPLES

Barter, Money, and Credit

THE bank is the most important instrumentality in the modern system of industry and trade. Without it this system could never have developed, and without it could not now be maintained. It makes possible the immense scale upon which labor is divided and applied to a multitude of processes upon which mechanical appliances for saving labor or increasing its effect can be used, upon which the work of transportation and distribution can be carried on, and upon which the interchange of commodities for the satisfaction of the wants of man can be effected. This scale of cooperative activity results in obtaining from the natural resources of the earth a volume of products far beyond what would be conceivable without it, and this abundance of production from human effort raises immeasurably the level of human well-being. It has been the chief motive power in the advance of material civilization in the last century, and it has been made possible by the device of banking, which is based upon trust and confidence among men and has consequently been a potent agency in stimulating and strengthening integrity in commercial dealing. Banking is the agency by means of which credit is made to effect the bulk of the operations of production and interchange. To make this clear it is necessary to trace briefly the natural course of commercial development.

The clue to all the intricacies of modern finance is to be found in the elementary principle that trade, however complex and highly developed, is always in effect mere barter, the exchange of one product of human labor for another. By holding fast to this clue we shall be able to follow the development from the simple conditions of primitive life through the vast labyrinth of traffic and exchange, with their manifold agencies and methods, which has been built up with the increase of production in recent times, and we shall never lose our way. At the beginning of the process of economic growth each man gets from the resources of nature by his own efforts what is needed for his subsistence. In the course of time men learn to work together, to increase the store of what they can get to satisfy their wants or desires by uniting their efforts. Their wants and desires increase with the means of satisfying them, and they soon come to a division of labor, one set of men devoting themselves to producing one kind or class of articles for their use or enjoyment, and the other set another kind. Then they exchange products on a basis of their relative values, value being at first determined by the amount of labor required to produce the different articles. One will give of his own for the products of another as much as has cost the amount of labor that he would have to bestow in order to obtain the other for himself. Both are saved from trouble and mutually benefited by the exchange.

As occupations increase in number and variety and men can not easily turn from one to another, a new element enters in to modify the simple measure of value determined by the amount of individual labor necessary to obtain one object or another of need or desire. With the growth of the primitive industrial community different articles are not produced in exact proportion to the various demands of its members, and there comes to be, within limits that constantly vary, a relative scarcity of one and a relative abundance of another. Exchangeable values are modified by the relation of supply to demand and gradually come to be determined by it, the original labor cost being lost sight of, though still the decisive factor. How much of one product will be given for another depends not simply on how much labor is required to produce one or the other, but upon how much of each is immediately to be had and how strong is the desire to have it. That which is scarce will have a higher value measured in that which is plentiful, but the adjustment tends to correct itself by labor going from the occupation that is producing a surplus to that in which the production is deficient, so that the labor cost still has a controlling effect in keeping a certain balance between supply and demand.

But this individual exchange of one thing for another can not go on long. There must be some general means of exchange even by barter, some market-place at which the different articles can be assembled and from which they can be distributed, and the trader, or middleman between producers and consumers, becomes necessary. He must receive a share in the fruits of production for his service in furnishing a market for sellers and buyers, who are the real parties to the exchange of products. He does not merely enable them to sell and buy—that is, to exchange products among themselves—but himself becomes the buyer from those who have to sell and the seller to those who wish to buy, making his profit and accumulating a capital by giving to the seller a little less and taking from the buyer a little more than would be the values if they exchanged directly with each other. Their advantage, for which this difference pays, lies in being saved the time and trouble of finding a variety of customers for their different wares, and this enables them to produce more than they otherwise would do.

But this system of direct barter of one commodity for another can not keep up long in an industrial community that is really progressing. It would be too cumbersome and inconvenient, and as the volume and variety of production increase there must be greater facility in effecting the exchanges by which its fruits are distributed or the community will cease to develop. The first step is to fix upon some one commodity, of value as universal and as stable as possible, which all sellers can receive for whatever they have to offer in the market and which all buyers can give for whatever they wish to obtain. This constitutes a medium of exchange which all can use. Trading is greatly facilitated and industrial development continues to advance. This common article of exchange, whatever it may be in substance or quality, is what we call money.

We need not for our present purpose go into an account of the development of money systems. One article after another was used in the early stages according to the conditions prevailing, until the precious metals were settled upon as most stable and uniform in value, most universally acceptable, and most convenient for this use. They were made into coins by governments so as to provide certain specific quantities of ascertained value in convenient form for constant use, and to give assurance that they were at all times and in all places what they purported to be in material and quality and therefore in value. The point to be impressed and to be kept in mind is this, that money is a commodity, carrying its value in itself like any other, and exchanged for other things upon precisely the same principle that applies in the exchange of other things for each other. If the standard is of gold, for instance, it furnishes as a unit of exchange and of reckoning a certain specific amount of that metal to be traded by whomsoever may possess it for an equivalent amount of any other article that he may desire. Now the man that goes to the market with the product of his labor gets its value in money, and the man that goes to the market to obtain the product of another's labor gives money for it. The seller of commodities buys one commodity now instead of many, but that one will buy any other when he wants it.

The buyer of commodities sells his money for them, and that will buy anything that he may want because it is a commodity that all desire to obtain since they can always use it to exchange for others. This is because it carries a value in itself equal to that for which it is exchanged and will command the equivalent wherever it goes. It is a medium of exchange because it will always exchange for anything else of equal value, and anything else of equal value will always exchange for it; but plainly its purpose is to enable the possessors of commodities of one kind to secure in return for them commodities of other kinds which they may have occasion for, without having directly to swap them regardless of immediate needs. It enables them to dispose of what they have when they are ready to do so and to obtain what they want when they are in need of it, in the meantime holding in possession the universal commodity, money. So it does not eliminate from trade the essential character of barter, the exchange of commodities for commodities according to their relative values, determined by the cost of their production and the relation of the amount to be had to the desire to have it, or of supply to demand. It only facilitates that process and vastly increases the scale upon which it can be carried on in any community and between one productive community and another. Thus far we hold fast the idea that all trade is in its essence barter, and are ready to consider the next advance in increasing the ease and magnitude of its operations. This is in the use of credit.

As the inconvenience of a direct exchange of one article for another leads to the use of money, the inconvenience of making payment with money every time a thing is bought or sold leads to trusting. The man who carries his products to market does not require to be paid in money every time, but allows the trader to owe him for them, thereby giving him credit and permitting an account to accumulate to be settled at some future time. The man who makes purchases at the market is not required to pay each time for what he obtains, but receives credit, and his account is allowed to run, in order that he may make payment at his convenience. Mutual confidence becomes an important element in business. The same customers now become both sellers and buyers at the same trading-place, and what they owe is offset against what is due them, and there are only balances to be settled at intervals, once a month or once a quarter or a year, as the case may be. The trader keeps an account of these transactions, and each customer will do the same, if he is prudent, and between them there is a "book account." There is much less need of money in settling balances than in paying every time anything is bought or sold, and credit in this simple form facilitates business. Still, it is plain that what is exchanged is one commodity for another, and this can be effected by the use of credit even better than by the use of money, but the latter is necessary to furnish a standard of value and a means of reckoning values and to settle balances.

If the payment of any amount due is deferred for some time, it is only fair that a little more should be paid to compensate the creditor for being deprived so long of the money to which he is entitled, and of which he might make a profitable use in laying in a larger stock of merchandise. This gives rise to interest or compensation for credit. Sales may be made at certain prices with the understanding that payment will be made, or any balance due will be liquidated, within a certain length of time, and beyond that time a certain rate of interest will be paid on the debt. One may buy not only commodities from another, but his labor or service, which may be paid for in the products of other labor to the same value, or in money which will exchange for such products. This is still barter, in whichever form the payment is made. The laborer may trust his employer or give him credit and receive his pay at intervals. It is a matter of convenience and mutual agreement and does not change the essential character of the transaction.

This is the use of credit in its simplest form, but it is a form in which it is still universally applied for economizing the use of money. Another form of early origin and large development is its use in borrowing and lending. By that means accumulated resources may be so distributed and applied as to be made most useful in the varied processes of production and distribution. Expressing ourselves for the moment as if the universal commodity money were the real object of acquisition, with the reservation always in mind that it is so only as a means of reaching other commodities, we will say that one man has more than he has the occasion or the opportunity of using to advantage, while another has the occasion and the opportunity but not sufficient money to take advantage of them. The man who has will lend to the man who has not, provided the latter is to be trusted and can give reasonable assurance that he will repay with that fair compensation for the use of what belongs to another known as interest.

The man who borrows may have sufficient substance not immediately available for his present purpose, he may have capacity for a profitable use of more money than he has at command, and he may have a character that begets confidence. If he is one to whom the other is willing to lend, he is said to have credit, and because he has credit the other gives him credit, or trusts him. The simplest form of borrowing is on one's note of hand, or promise to pay the amount lent at or within a certain time with interest at a certain rate. This promise signed with the borrower's name may be deemed sufficient security by the lender that he will be paid according to the terms of the note, or he may desire to have the note indorsed by another whose credit he considers still stronger, and who thereby pledges himself to pay the debt in case the signer of the note fails to do so. Instead of such indorsement, or in addition to it, further security may be given in a pledge of actual property to an amount equaling or exceeding that of the loan, which is turned over to the creditor or upon which a lien is given enabling him to hold it or dispose of it to satisfy his debt in case the payment is not duly made. It is not necessary here to enlarge upon the subject of loans, the purpose being merely to illustrate this particular use of credit as a means of transferring the resources of one man to another for employment.

We speak of this as an individual transaction, as a mere accommodation of one man by another, but in the growth of the industrial system this kind of accommodation, or money-lending, becomes a separate and important function. Men devote themselves to it as they devote themselves to producing commodities and trafficking in them, because it facilitates those operations and enlarges their results. Men who have considerable money at command make a business of lending it at interest, and being necessarily men of substance and of credit they are trusted with the money of others to lend. They may be trusted with it for mere safe keeping, or, if they have large opportunities for loaning profitably, they may pay interest upon it, thereby themselves becoming borrowers that they may lend upon a larger scale. Money-lenders were the first bankers, though often they were engaged in other business. The utility of credit, as it appears in this simple and direct form of borrowing and lending, consists in the transfer of capital, or accumulated wealth, from one to another in a way to admit of its more effective application to the process of production, which is to be taken as including all the operations necessary for bringing the materials of nature to the consumer of the finished articles. The capital which might be idle or wasting in the hands of one man is put at the command of another who can employ it in producing and trading to the advantage of the community as well as of himself. In bringing together this scattered capital from sources where it would be idle or useless and placing it at the command of those who can make use of it, the banker plays an important part in increasing production and is entitled to compensation commensurate with the value of his service.

The individual banker, originally a mere money-lender or a tradesman who made it an incident of his business to take charge of the funds of others for safe keeping in return for the privilege of using or lending them for profit, was the forerunner of the modern bank, and we are in a position now to consider a little more at large the general principle of the bank's use of credit. For this it is necessary to refer in a preliminary way to the character and methods of a banking concern, which are to be dealt with in detail hereafter. To start with, a bank must have a certain amount of capital of its own with which to make loans and to establish the basis of its own credit, for it is mainly credit and not money with which it is to deal. But the volume of its business is not to be limited by its own capital, for its chief function is to make the capital of others available to the best advantage. While its main purpose is to make loans, it is not from its own capital that they are to be chiefly made. It is to stand to the community as an embodiment of credit, making the scattered and unknown credit of some available for the benefit of others through its own concentrated and known responsibility, bringing together demand and supply in the use of credit by its own unifying force. So it begins at once not only to offer funds for loan but to receive funds on deposit.

II

GENERAL PRINCIPLES AND METHODS IN BANKING

We will not at present undertake to trace the development of the modern bank from the original money-lender or the trader who made the care and use of the money of others an incident of his own business, but take a brief preliminary view of the chief functions of the bank as it is to-day and the methods by which those functions are exercised. It may still be an individual or a private firm, but in its larger significance it has come to be a corporation organized under specific regulations of law, and conducted under public supervision. It requires capital and definite responsibility, and these can be best secured on an adequate scale by incorporation. The need of capital is not merely or mainly to have funds for its business of lending, but to establish its credit, to enable it to command the confidence that will lead men to entrust it with their money, and to give assurance that it can meet every obligation that it assumes.

The first business of a bank is to receive deposits, that it may have larger resources than its own capital for making loans, which is to be its chief function in facilitating the operations of production and trade. As the deposits, or rather their equivalent, will belong to its customers and be subject to their demand at any time, it must keep on hand a reserve of cash to meet such demand by paying back without hesitation such sums as may be called for. This is an important use of its own capital. Let us take a hasty glance at the purpose and manner of making loans and see how it leads to increasing deposits and making of them a mass of credits rather than of money. A man in business has to buy and incur large expense before he can sell and get his money back, and he has to give credit and wait for his payments. He wishes to obtain the money that is ultimately coming to him, or a part of it, for his purchases or the expenses of his business in advance of the time of collecting it. He goes to the bank and offers his own promissory note for the amount he desires, to be repaid at the end of a certain time with interest. If the bank has confidence in him it will discount his note, which means that it will pay over to him the amount at once, deducting the interest at the start instead of collecting it in addition to the principal at the time of payment. If it is doubtful of trusting him for the amount for the desired length of time, he may strengthen his own credit with that of another by having his note indorsed. In one case the bank takes his "single name paper" and in the other his "indorsed paper," but in either case he raises the needed money and the bank becomes his creditor.

Or he may have the note of another man who is owing him money payable at a future time, and if that man has standing and credit in the community he can indorse the note over to the bank and have it discounted in the same way and get his money at once, less the interest. Then his debtor becomes the debtor of the bank, and the latter will look to him for the payment of the note when it matures instead of to its own borrower, though the borrower will be held by his indorsement for the payment of the note if the signer fails to meet it. In the course of mercantile business there is much of this kind of discounting. The merchant sells goods on time and the purchaser gives his note for the payment in thirty or sixty or ninety days, or in four or six months, or it may be in a year, but the merchant is a buyer as well as a seller and he wants money now and is willing to make a deduction for interest to get it. The bank is his resource for meeting this want, and it discounts these notes and attends to their collection at maturity.

Or a man who is making an investment or a purchase or has a payment to make may desire a loan from the bank, as distinguished from a discount, and he has property, or titles to property in the form of securities, which he is willing to pledge for the payment of the loan, with interest, at end of a certain period. If the securities are satisfactory to the bank it will take them in pledge and loan up to within a certain margin of their value. In this case the borrower's personal credit is of less consequence, as the bank has his property or an effective lien upon it, to insure the collection of the loan. In this case the man gives his personal note and puts up the securities as "collateral," but he gets the money for his immediate needs, and the bank gets it back with the interest agreed upon when the note matures, either by its payment or by selling the collateral security, though even in this case the interest is sometimes deducted when the loan is made. This is a "time loan" on collateral; but the borrower may wish to borrow for an indefinite time, it may be a day or two, or it may be a week or two, and to pay at his convenience, while the bank may be willing to lend on those terms provided it is at liberty to demand payment at its own convenience in case it needs the money or can do better with it. This occasion of borrower and lender leads to "demand loans," or "call loans," on collateral security, and the rate of interest is determined from day to day by the demand and supply of funds for such accommodation, while the securities may be subject to change from day to day according as they fluctuate in value or the owner may have other use for them or as changes may be made in the amount of the loan. This change or substitution of security applies as well to time loans.

We are now in a position to understand how loans are used to create or increase deposits, converting these from money into credits. When the mercantile customer has his notes or his "bills receivable"—that is, the notes of his own debtors—discounted, or when any borrower gives his note and pledges security for a loan, he may not wish to use the money at once but to have it at command where he can draw upon it in making his payments. Then the bank may make him a depositor, if he is not one already, and credit him with the amount upon its books instead of paying it over to him, giving him the privilege of drawing upon it to suit his own convenience. In an active mercantile and financial community a large proportion of bank deposits are created in this way by borrowing, and consist of credits, not money. It is the credit of the bank turned over to the credit of the customer for his use, and he can turn it over to the credit of others in making his payments, so that money may play an inconspicuous part in the process, though not an unimportant one. It must lie at the bottom and be ready to make good all promises and pay all balances when settlements in cash are required.

Though deposits consist so largely of credit, the bank is bound to pay in money whenever it is called for, and for that it keeps a "reserve," which must be sufficient to meet all demands. A bank in active operation is engaged in a continuous process of lending, creating and receiving deposits, collecting maturing notes and bills and making payments, and it derives its profit from discount and interest and incidental charges for its service. It is always owing a large amount and a large amount is always due to it, and transactions upon both sides proceed mainly on credits which are continually offset against each other. So long as payments to the bank come in in due order, payments by the bank are readily made and all goes well; but if payments should fail to any serious extent, there might come a severe demand upon its resources to meet its own obligations. Then would come the test of its credit, which may be the support of the credit of thousands of others, and that test would depend upon its reserve, its available resources, and the conservatism and skill with which it has been managed.

Some inkling may be obtained from what has been said of the extent to which business is carried on by the use of credit through the instrumentality of the bank, but it can not be fully understood without considering the use of checks. This is a modern device of great potency for transferring credits through deposits in banks and economizing the use of money in effecting the exchange of commodities. A check is simply an order upon a bank from one of its depositors to pay a certain sum from his deposit to the order of himself or some one else, and when it is indorsed by the payee and presented the money will be paid over. If it is payable to the order of another person and that person is also a depositor in the bank, instead of having the check paid, the latter may deposit it as if it were money and it will be credited to his account and deducted from, or "charged to," the account of the drawer. In this case a payment is made between the two customers by a transfer of credit in the bank and no money passes. Payments are constantly made in this way.

But the person receiving the check may be a depositor in another bank, and in that case he deposits it in his own bank, where it is credited to his account and this second bank sends it to the first, upon which it is drawn, where it is "charged," or "debited," to the drawer's account. The two banks may have many customers who draw checks in favor of each other in making payments and receive checks from each other for payments, and each of whom deposits the checks received in his own bank, whether drawn upon that or the other. The settlements between the depositors are made by transfers of credits in the banks and without the use of money, so long as they have the necessary funds on deposit, but the banks will have accounts to settle with each other. If one bank receives in a day more checks in aggregate amount drawn upon the other bank than the other receives of checks drawn upon it, there will be a balance due to it from the other bank. One day the balance may be in favor of one and another day in favor of the other, and they must settle these balances between themselves. They may be paid each day in money or by transfers of credit between the two banks until some stated settlement time when a single balance may be struck.

In a populous community where there are many banks, this process becomes complicated. Each bank has many depositors drawing checks upon it which are deposited in various other banks by those in whose favor they are drawn, and it receives upon deposit from its own customers checks drawn upon various other banks. The credits and debits are duly made in each case and the balance struck every day, and each bank has a balance to settle, or to be settled, with all the others. To some it has payments to make and from others it has payments to receive. The sending about of clerks or messengers to clear up these settlements becomes an onerous matter, and this has led to the establishment in every large city of a central agency called a "clearing-house." This agency is established by an association of the banks, which pay the expense of conducting it in proportion to the average volume of their "clearings."

While the working of the clearing-house seems complex, it is only an extension and multiplication of the simple elements of a transfer of credits and settlement of balances, such as appears in the case of two or more depositors in the same bank. The clearing-house is a kind of bank of banks. Each bank makes out a list of the checks of each of the other banks that it has received and credited to its depositors during the day, and sends it the next morning to the clearing-house. Clerks and messengers of all the banks meet there with their lists, each having his place or desk in a common room, and by a comparison of accounts a balance is struck for each, for or against it in every case, and these balances are adjusted against each other for all the banks by the clearing-house officers, and only a single balance upon the aggregate of all accounts remains to be settled by each bank with the clearing-house itself. If on the day's business a bank has received and credited to its depositors more in aggregate amount of the checks of all the other banks than all the other banks have received of its checks, a balance is due to it from the clearing-house funds; and if the balance of the aggregate is the other way, it owes that much to the clearing-house. By this process, so simple in principle and so complex in operation on account of the multiplicity of factors, all the balances between the banks are settled and reduced to a balance between each bank and the common agency of all. The checks, being mere paper orders for payment, after having effected their purpose come back to the banks upon which they were drawn and are ultimately returned to those who drew them, as vouchers for the payments made in their behalf.

It will be readily seen what a volume of business transactions may be effected by this process with comparatively little use of money, though banks are bound to pay money whenever it is demanded if it stands to the credit of the persons calling for it. The system is still further complicated by the relation of banks to each other not only in a single community, but in different and widely separated communities having dealings with each other. For instance, a person living in one city or town and keeping a deposit there may draw a check upon his bank to make a payment to a person in another city or town at a distance, and that person on receiving the check may deposit it in the bank where he lives; or a man who is at a distance from the bank in which his account is kept may draw checks upon it to make payments wherever he happens to be, and these may be deposited by the recipients in any bank. This necessitates an arrangement between banks in different cities for adjusting such matters and sending checks to each other for collection, thus extending the process of exchange upon mere orders to pay over a wide area.

This process of using credit through the agency of banks for effecting mercantile transactions, and for borrowing and paying on a large scale by a small use of actual money in settling balances, may extend over a wide area of the same country and into different countries. It contributes vastly to the volume of trade that can be continuously carried on and to the facility and economy of its operations, and thereby it gives a scope to productive industry of all kinds which it could not otherwise attain. In the United States in time of industrial and commercial activity, about ninety-five per cent of all the exchanges which take place in the interval between the production and consumption of the commodities by which men live are accomplished upon credit and mainly through the agency of banks.

III

CREDIT CURRENCY, OR "PAPER MONEY"

THERE is another matter pertaining to the use of credit, especially of bank credit, of which it is necessary to have a clear understanding as a preliminary to what is to follow about the actual operation of banks at the present day. We have spoken of money, the universal medium of exchange, as having in itself the value for which it exchanges in other things, but it may have substitutes or representatives that will serve its purpose more widely than is done by bank checks, something that will pass from one to another in making payments without resort to the actual money until some one sees fit to demand it. Such substitutes form a "credit currency," and in order to serve their purpose safely must be issued by somebody, a government or corporation, or an individual, who is bound to redeem them in actual money whenever it is demanded, and does so redeem them. They are in effect promissory notes, which must be paid on demand or there will be a failure of credit and a depreciation of value. Confusion of mind has been produced by calling instruments of credit thus used "paper money." Paper would have to be of a very precious quality to become money, but it is easily used to represent credit.

Disputes about what money really is, like most disputes, come from a confusion of the meanings put upon words. Money may be used in its original sense of a medium of exchange, which is a commodity having its value in its own substance and thereby affording a measure for the value of other things; or it may be applied to anything used in effecting exchanges; or again, it may be used as an equivalent of value in any form, as when we say a man is worth so much money, meaning to include all his property. These are different senses of the same word, all proper enough if they are clearly distinguished in its use.

Suppose that at an early stage of industrial development a man keeping a market-place, instead of paying those who bring him the products of their labor in money, for which they may have no immediate use or which they may not care to keep on hand, gives them slips of paper containing his promise to pay the money whenever they may want it on presentation of those slips. These may be written or printed and bear his signature or any device of his to identify them as genuine, or they may be on any cheap material. He may call them "notes," or "bills," or "tokens," or what you will. They certainly are not money, but evidences of what he owes and promises to pay, and they are based upon his credit, or upon trust in him. He will not merely pay over the money for them when presented, but will accept them for goods bought of him instead of money; and when he receives them he may destroy them or use them again in the same way, or replace them with new ones. Instead of making one each time to fit the amount of payment, he may have a lot of them made of different denominations, corresponding to the coins in use.

If the man who issues tokens of this kind is widely known and trusted, if he has ample property and credit, and if he always accepts them in payments to himself or redeems them in money whenever it is demanded, these mere slips of printed or pictured paper bearing his name and device may be used by the people around in making payments among themselves, because they know that they will command the value they represent so long as the issuer is able and willing to redeem them on demand. They thereby become a kind of credit currency or "paper money," and they will circulate as such so far and so long as the man who has put them out is known and trusted, though nobody will be bound to take them, and they will be refused whenever and wherever they are distrusted. Many a time a device of this kind has been resorted to in a community of greater or less size in times of scarcity of actual money. It involves in its simplicity the whole theory and practise of "paper money," or credit currency.

But suppose instead of the marketman or storekeeper, some person of known wealth and integrity, who makes a business of lending money in the manner described in the previous chapter, issues his notes to borrowers instead of money. They will be more convenient to use and just as good for their purpose so long as others will take them, depending upon the issuer to redeem them in money whenever they are presented to him and the coin is demanded. He will naturally keep a supply of coin on hand to meet such demands, for the notes will depend upon his credit for their power to circulate as money, and he must keep that credit good by prompt payment whenever it is asked for. Go a step farther, and suppose it to be an established bank that issues the notes. It may have its notes finely engraved and signed by its officers, and its resources and credit may be so large and so widely known that they will be readily accepted and will circulate all over the country; but that will not make them money, though they may be called so. They will be mere promises of the bank and their value will be representative, not actual. Their power to purchase and to pay will depend upon the fact that whenever and by whomsoever they may be presented at the bank the coin they promise will be forthcoming. The moment that fails they will begin to be refused, their circulation will stop and their value will vanish, because the value is not in the notes but in the money they represent. In other words, "paper money" is not real money and will not continue current when the credit on which it was based is gone.

Issuing circulating notes is but an incident in banking, whereby banks make what appear like "cash loans" with their credit. Banks which issue such notes have them secured by available assets, or property in some form; that is, they keep on hand a certain amount of coin with which to redeem those presented, a certain amount of securities that can be readily converted into coin in case the demand for redemption should be unusual, and in any case ample property to make them all good. If there were no danger of failure to meet these obligations at all times from dishonesty, bad management or misfortune, and no fear of imitation or counterfeiting of the notes, there would be no occasion for a legal restriction or regulation of bank issues; but, in point of fact, they are generally put under restriction and regulation for the protection of those who accept the slips of paper and come to regard them as in effect the same thing as money. Banks are usually not permitted to issue circulating notes beyond a certain proportion of their actual capital, and they are required to hold a certain reserve of specie for their redemption, unless they are otherwise secured by a safe deposit of negotiable securities. Besides this reserve for the immediate redemption of any notes that may be presented there must be sufficient security in some form to insure the payment of all of them, if for any reason such payment should be demanded or if the bank should fail and have to wind up its business. Whatever may become of other creditors, holders of its circulating notes must be sure of their pay.

It is not the purpose here to consider different systems of bank currency but merely to press the point that, while we are wont to call bank-notes "money," they are really only substitutes for money, owing their power to effect exchanges, like checks, to the fact that money can be got for them at any time. They are not usually made a "legal tender" for debts, which means that no one is obliged to take them or go without payment, and when they fail of redemption they become worthless.

But the government may issue its own notes or promises to pay and have them circulate as substitutes for coin, and may even make them a legal tender for the payment of debts, as has been done in the United States; but to maintain their value they must be redeemable on demand and a reserve in coin must be kept for their redemption. If they are not so redeemable, their purchasing power will depend upon faith in the government's final payment of what it has promised, and they will depreciate and fluctuate in value, having no solid basis to rest upon. No legal-tender law or forced circulation will keep them stable or on the level with coin. The United States notes are pertinent to our subject because they have been for forty years a part of the currency of the country, have been declared a legal tender for all debts, and are treated as "lawful money," or the equivalent of coin, in banking reserves. Their volume has been unchanged at $346,681,016 for a quarter of a century, their redemption in gold coin on demand is pledged by the Government, and a fund of $150,000,000 in gold is held in the United States Treasury for the purpose. Nevertheless, they are not money, but notes that are reissued whenever paid, and our monetary system would be sounder without them, but for banking purposes they are now money.

A form of "paper money" which is not credit currency consists of gold and silver certificates representing dollar for dollar coin of those metals actually deposited in the treasury and always to be had in exchange for them on demand. These maintain the exact value of the coin they represent and are in the strict sense substitutes for actual money, which is safely kept from loss and wear while they circulate in its place for safety and convenience. These various forms of paper in the United States circulate together on an equality and on the level of standard money, only because that money can always be obtained with them. No matter what is used for money in effecting the exchange of commodities or making payments for goods or services, setting value against value, the standard unit of measurement upon which the whole process turns is the commercial worth in the world's market of the 23.22 grains of fine gold in the American dollar.

IV

ORGANIZATION OF A BANK

We are now sufficiently prepared to understand the organization and working of the present-day bank, and an account of the development of modern banking and of the different systems now in existence will be deferred until we have traversed that ground. For our purpose it will be best to adopt for description and illustration a typical institution belonging to the national system of the United States and located at its chief financial center. General principles and methods are the same for all, and they differ only in the detailed application, according to location, volume and character of business, and the ideas of the men who manage them. It might almost be said that no two banks are exactly alike in the details of their internal administration, and it would be confusing to attempt to deal with the variations. A large banking institution exercising all the functions belonging to such an establishment will serve to cover the whole ground of exposition, and it is only necessary to remember that differences in detail are simply variations of method for securing expedition, accuracy, and safety in operations that have the same general purpose. In describing the organization of a bank we will confine ourselves to one belonging to the national system, for, while State laws differ, they follow in the main the lines of the national banking act so far as these are applicable. Some of them still have provisions of their own governing circulation, but as the federal tax upon the notes of State and private banks is prohibitive they have no circulating notes.

There must be at least five persons to join as stockholders in forming a banking association under the National Bank Act, and the first thing they have to do is to make an application to the Comptroller of the Currency for the privilege, stating therein the business and financial standing of each of them, whose character and responsibility must be vouched for by a United States Senator or Representative or some other "person of prominence." It must also state the name and location of the proposed bank and the amount of capital it is to have. If the Comptroller approves of the application he will furnish the necessary blanks and instructions for carrying out its purpose. Then the persons making the application must enter into "articles of association" prescribed by the law, in which the title and location of the institution must be stated, the number of directors and the time of the meeting for their election—or the first directors may be named in the articles—amount of capital stock and other provisions conforming to the requirements of the statute. There can not be less than five directors, and each must be a citizen of the United States and owner of at least ten shares of stock, and three-fourths of the board must have resided at least a year in the State or territory and must continue to reside there while acting as directors. The shareholders have one vote at elections for each $100 share of stock. The articles of association must be signed by at least five persons and certified by the president or cashier. Then there must be a "certificate of association," signed and acknowledged by the same persons, in which, besides the title, location, and amount of capital, the names and residences of all the subscribing shareholders must be stated. The capital may be as low as $25,000 in a place of 3,000 inhabitants or less, $50,000 in a place of not more than 6,000, $100,000 in a place of not over 50,000, and must be at least $200,000 in larger places. One-half must be paid in cash on the organization of the bank and the rest in instalments of not less than ten per cent a month, though the whole may be made up in a shorter time.

The directors must subscribe severally and collectively an oath that they will "diligently and honestly administer the affairs" of the association and not knowingly violate the law or willingly permit its violation, and they must as soon as practicable elect a president and cashier, and elect or appoint such other officers as may be required. The election of a vice-president is optional. They must also call in the subscriptions of capital, and as soon as 50 per cent is paid in there must be a certificate of the fact signed by the president, cashier, and a majority of the directors, with a declaration that the provisions of the law have been complied with. This must be attested on oath. All these documents and certificates, for which forms are furnished by the Comptroller, must be filed with that officer, and a deposit of registered Government bonds must be made with the Treasurer of the United States, equal to at least one-fourth of the capital of a bank of which the capital is $150,000 or less, and not less than $50,000 for those having a larger capital. Circulating notes may be taken out to the par value of the bonds, but not exceeding the amount of the capital stock. These will be supplied by the Comptroller, who has the plates engraved and the notes printed at the expense of the bank. They must be applied for on a regular form designating the number of sheets, which are mostly of four notes each, of the different denominations required, but not more than one-third of these can be of the denomination of $5. Other denominations are $10, $20, $50, $100, $500, and $1,000, though few are issued higher than $100. The first order must be for one-fourth more in total amount than the par value of the bonds, the excess being retained for future issues to replace worn-out or redeemed notes. It takes about forty days for the engraving and printing, and no application is acted upon until all the legal requirements have been complied with.

The notes are of a common design for each denomination and all bear on their face the signatures of the United States Treasurer and the Register of the Treasury certifying to the security by deposit of bonds, but those of each bank have the number of that association engraved upon them and a letter and numbers stamped in colors indicating the series and the extent of the issue. When the notes are received from the Comptroller the promise to pay to bearer on demand which appears on the face of each must be signed by the president and cashier before they are issued. This means that they must be redeemed in standard money whenever presented for the purpose. The taking out of notes is not obligatory, but the minimum deposit of bonds prescribed must be made in any case.

When all the formalities have been observed and the papers duly filed, the Comptroller will, if all the proceedings meet his approval, issue a certificate authorizing the institution to begin business, assuming that the proper facilities have been provided, but he must afterward have a certificate of the full and final payment on the subscriptions of stock. No certificates of shares can be issued until full payment has been made. Provision is made for subsequent increase or reduction of capital, if authorized by owners of two-thirds of the stock and approved by the Comptroller, and of this a formal certificate must be filed. Provision is also made for the conversion into national associations of banks organized under State laws, when authorized by the owners of two-thirds of their capital stock. In that case there must be articles and certificates of association and other formalities similar to those observed in an original organization. Charters are limited to twenty years, but may be extended for a like period by act of Congress. Such extension has been twice made since the Bank Act was first adopted, namely, in 1882 and in 1902. Each bank must make application to the Comptroller for the privilege of renewal and get his approval to the necessary amendment of the articles of association, and must file the amended articles and a certificate that all required action has been duly taken, for which the consent of the owners of two-thirds of the stock is necessary. The Comptroller has an examination made, and if all the proceedings meet his approval he will issue his certificate of extension. A new series of circulating notes must then be issued of a different design from the former ones. These will be furnished as the old ones are received for redemption, and at the end of three years "lawful money" must be deposited to redeem any that may then remain out.

The certificates of stocks which the shareholders receive as evidence of their ownership are prepared by the bank according to its own design, and are signed by the president and cashier, testifying that the persons whose names appear thereon are entitled to so many shares of the capital. These certificates are bound together in a book from which they can be conveniently extracted and are numbered in consecutive order. They usually bear the statement that the shares are transferable only on the books of the bank on surrender of certificates, and in case of transfer a new certificate is issued to the new holder, and also to the former holder for any number of shares that he may retain. The leaves of the stock-book have a stub for each certificate, upon which is entered the number of the certificate, the number of shares, the date of issue and the name of the holder. Below this entry is a receipt to be signed by the holder, but there is a separate form of receipt to be used if he can not sign this in person.

There is another space upon which any transfer of all or any part of the shares may be noted, with the date and the name of the new holder. A stock register is also kept containing the names of shareholders, in the order of their subscriptions and the numbers of their certificates, their residences, dates of issue, and a note of any transfers, with their dates. The names of new shareholders are added to the list of old ones and the numbers of certificates continue consecutively. Canceled certificates are usually attached to the stubs to which they belong in the book and from which they were first detached.

Transfers must be made in person or by authenticated power of attorney. Most banks have a separate transfer book with a printed form of assignment to be filled out and signed. In this are entered the names of the persons from and to whom the transfer is made, the number of the old and new certificates, the number of shares and the pages of the stock-ledger on which the shareholders' accounts appear, for such a ledger is kept, recording each transaction in the stock. A clear record of the ownership of the bank and any change therein is thus systematically kept.

After the organization of a bank, the first duty of the directors is to elect officers and adopt by-laws governing its management, framed in strict accordance with the provisions of the law. A form of by-laws is furnished by the Comptroller, but it is in the nature of a suggestion as to their essential requirements, and needs to be strictly followed only so far as it embodies those requirements, details being subject to the discretion of the board. The by-laws of different banks vary in many particulars and are determined largely by the volume and complexity of their business. They prescribe the time and manner of holding the meetings of stockholders and directors, designate the officers to be chosen and define their duties, authorize the committees of directors and lay down general rules for the conduct of business in conformity with the requirements of law. A seal is adopted by the directors, an impression of which is reproduced in the by-laws. A periodical examination of the affairs of the bank by a committee appointed for the purpose is provided for. Assuming that a properly equipped place of business has been secured, the bank may now be considered as an established and "going" institution.

Its capital may range from $25,000 in a small town to millions in a large city. The highest limit yet reached in New York is $25,000,000. The law requires one-tenth of the net earnings to be set aside before dividends are declared, in order to accumulate a surplus, until a fund is raised equal to 20 per cent of the capital stock. Many banks have a surplus far exceeding that proportion and some have several times their capital stock. Sometimes in these days a bank starts with a surplus contributed by the shareholders in proportion to their quota of shares. This strengthens the position of the bank and gives it resource against early losses without trenching upon capital. A part of the capital may be invested in a building and the equipment for its business, and these are included in its assets. It can not invest in real estate for other uses or make loans upon real estate mortgages, but it may take such property in payment for debts incurred in the course of its business and not otherwise collectable, and may take mortgages as security for such debts, foreclosing in case of failure to pay according to their tenor. Property thus acquired can not be held more than five years.

Another portion of the capital is invested in the Government bonds required to be deposited with the United States Treasurer. If circulating notes are taken out in excess of this amount, additional bonds must be deposited, so that the entire security shall be equal in par value to the volume of circulation. The bank receives the interest on the bonds and the notes serve the same purpose in making loans and payments as would the capital thus invested, though if the bonds are bought at a premium a larger amount of capital will be tied up than of notes issued in its place. Other Government bonds, and securities of other kinds, may be held merely for the investment of funds for which at any time there may be no more profitable use. An amount of "lawful money," which includes coin and coin certificates and legal-tender notes of the Government, but not bank-notes, must be kept in the bank's vaults, equal to 25 per cent of its deposits if it is in a "reserve city," and 15 per cent elsewhere, though three-fifths of the reserves in the smaller places may be kept on deposit in reserve city banks, and these may keep one-half their reserves on deposit in a central reserve city, of which there are only three, New York being the principal one. The state of this reserve has to be regarded in receiving deposits and making loans, as it is a limitation upon the freedom with which the bank's resources are to be used from day to day. The drawing down of the reserve is a warning that loans must be curtailed, which is usually effected by advancing rates. The rising of the reserve much above the legal limit is a notice that available funds are lying idle and loans need to be pushed, even if some concession must be made in rates of interest.

Banks organized under State laws and having no circulating notes are not subject to all the requirements and restrictions imposed upon national banks. Regulations differ in different States, but as a rule no such minimum limit is fixed for capital stock and no deposit of securities is required. A reserve to be held against deposit liabilities is usually prescribed, the common ratio being 15 per cent. Their certificates of organization are filed with some State authority exercising supervision over them, analogous in different degrees in different States to that of the Comptroller of the Currency over national banks.

NOTE.—For a fuller exposition of the law relating to national banks the reader is referred to the chapter on the subject near the end of this volume.

V

PREMISES AND EQUIPMENT

A BANK may hire the premises upon which its business is conducted, in which case the rent will be an item in its expenses, or it may have a building of its own especially constructed or adapted for its use, upon which the taxes will be an item of expense. The premises will be spacious and elaborate or otherwise according to its requirements for room or its resources for display. In the general arrangement of a large city bank there is ample space for customers open to the public and separated from the departments occupied by the working force by a partition, the upper part of which is usually open or transparent, frequently of wire lattice. This space is supplied with desks and stationery for the accommodation of those who have deposits to make or other business to transact. It may run along the front of the enclosed part or around two or more sides of it, so as to occupy the exterior area, or the enclosed part may run along two or more sides of the open space, leaving it in the interior area. It depends upon convenience of arrangement and the character of the building, but in any case the space occupied for the work of the bank is divided into compartments, usually by wire partitions with communicating gates and wickets for the different departments of the service. These divisions are arranged with reference to the relation between one department and another and the need of ready communication, and are equipped with desks, drawers, cases, etc., adapted specially to the use of their occupants. Those with which customers have occasion to deal directly have windows or wickets opening upon the public space, and over each of these is a designation of the department, or of the teller or clerk in charge of it. Some departments with which customers do not deal directly, as that of credit and that of bookkeeping, may be in a separate room or on a different floor.

The principal officers may have accessible enclosures by themselves, or they may be in separate rooms or private offices. The degrees of seclusion or accessibility will depend upon the volume of business and the need of security from unnecessary intrusion, or upon the disposition of the officers to be readily seen or not. The cashier is usually easily accessible, as he is the officer with whom customers have most occasion to deal. Of the equipment of a bank it is necessary to speak only in general terms. Its most important requirement is ample vault and safe accommodation, proof against fire, burglary, or tampering of any kind. These differ greatly. There may be one large vault of the most approved pattern, accessible through heavy doors with complicated combination and time locks, the interior walls containing compartments of various sizes with their separate locks, for the deposit of cash, of securities, of documents and papers, of books, etc.; or there may be more than one vault for different purposes, and special safes more conveniently located than the vaults for constant use. Usually the vault for books and files of documents is separate from that for cash and valuable securities. The latter is likely to be secluded in the basement and securely guarded. With all precautions for safekeeping a vigilant watch will always be kept by faithful guardians, especially at night. A city bank has usually more than one watchman and requires a round to be made at intervals through the night, and has an electrical mechanism which registers his visit to the different stations in response to his pressing the proper button, marking the hour of each visit. It usually requires more than one person to open a combination lock, each being entrusted with a different part of the combination. The time-lock is an additional safeguard, preventing the opening of a vault before the hour for which it is set. The combination numbers are kept in sealed envelopes, to be resorted to only in case of the failure of the persons entrusted with them to appear. When the day's business is done, there is a general storing away and locking up of the cash, securities, and other valuables of the bank, including the books of account.

It is hardly necessary to speak more in detail of the variety of desks with which the working departments are provided, adapted to their several uses, or the cabinets, drawers, pigeon-holes, file-cases, and other appliances, or of the books and stationery and the many forms and blanks necessary to facilitate work. The character and use of these will sufficiently appear as we go along, as will that of certain mechanical devices for saving labor which have been introduced in many banks. That the telegraph, the telephone, the typewriter, and the letter-press are in common use as in other business establishments need not be said.

VI

DIRECTORS AND OFFICERS

If the first directors of a national bank are not designated in the Certificate of Association, they must be elected at a meeting of shareholders before the organization is completed, and thereafter their successors must be thus chosen at each annual meeting, the time of which is prescribed in the by-laws. Shareholders have one vote for each share of stock, and it is the majority of stock and not of holders that prevails. Voting may be done by proxy, but no director or officer can legally act as proxy for others. The directors are usually among the largest and most influential of the stockholders and each must own at least ten shares, and they are presumably chosen for their business capacity, sound judgment, and a character and standing that will command confidence. The time of the stockholders' meeting and manner of conducting the election of directors are prescribed in the by-laws, and the cashier is required to give thirty days' notice by publication in a newspaper. At the first meeting a president and secretary are named, but subsequently the president of the bank presides and the cashier acts as secretary. Careful minutes of the proceedings are kept in a "minute-book." The number of directors can not be less than five, but beyond that it may be prescribed in the articles of association, in which a minimum and maximum may be fixed between which it may be changed by action of the shareholders or with their approval.

At their first regular meeting the directors choose from their own number a president of the bank, who is also president of the board, and a cashier who acts as the secretary of their meetings and recorder of their action. It is their business to shape the policy of the institution and direct its administration. The frequency of their meetings will depend upon the volume and character of the business under their charge and will be prescribed in the by-laws. They may depute their functions to a certain extent to an executive committee or a finance committee or to officers, but they can not avoid the final responsibility for their proper execution and for a careful supervision of the management. The use of the funds belonging to the bank and to its customers is under their control. In a small country bank there may not be a directors' meeting more than once a month, to which the president makes his reports and from which he receives confirmation of his action and instruction for his future guidance. In a city bank there may be a weekly meeting and an executive committee to exercise continuous supervision, but with some large banks there is a meeting more than once a week, and frequently more than one committee is appointed.

The directors not only choose the officers of the bank but appoint all its employees, either directly or by approval of those selected by the officers, and see to their being held under proper bonds proportioned to the importance of their duties and the extent of responsibility entrusted to them. They may, if they choose, decide who shall be among the depositors and customers of the bank, though that is commonly left to the officers, and they must pass upon loans and investments involving the use of its funds. In a large bank the negotiations and bargains, the agreements and actual discounting and loaning in the current day-to-day business, are ordinarily left to the discretion of the president or the vice-president acting for him, to whom the applications are made, but what they do must be reported to the directors at their meetings and receive confirmation and approval. That is generally given as a matter of course, as the methods are of their own devising and have their authority, and the officers are careful to do nothing that is not likely to be approved. For the expedition of business in a busy institution the exercise of discretion by officers in the first instance is necessary, and it is to be remembered that borrowers who do not give ample security are usually depositors of the bank and known to its officers, or men in active business with money coming in from it, and that means are taken to keep constantly informed of their financial standing and condition. It is only in exceptional cases that applications for loans will be referred to the board of directors before being acted upon, or will be made directly to it. The general division and distribution of labor within the bank is made by the directors and the methods pursued are prescribed by them, though often on the advice of officers. They act in a relation of authority over the management and in a fiduciary relation to both depositors and shareholders, while the business is of such a nature and so regulated by law that they are under a distinct responsibility to some public authority.

The duties of the president and vice-president of a bank are pretty clearly implied in the description of the functions of directors. The president presides at their meetings, reports to them upon the bank's doings or has the cashier do so, and receives directions from them. He represents their authority and gives it effect, exercising supervision in their behalf. He is in direct contact with what is going on, and in the bank he is the final arbiter for the decision of all matters that need to be carried up to him. He may go about scrutinizing and inquiring to such extent as he sees fit, to keep himself in touch with details as well as familiar with the general state of affairs, and to him are brought such questions as subordinates, or the cashier, who is their immediate head, may be unable to settle or are in doubt about. It is to him that those come who desire to borrow from the bank or to use its resources or facilities, and he conducts its general dealings subject to the instructions or the approval of the directors. But where the business is heavy the bulk of these duties may be put upon a vice-president, and only matters of special importance referred to the president.

Most of the daily routine of the president's office will be discharged by this deputy, while the superior officer reserves himself for consultation regarding larger transactions and settles matters that only he can finally pass upon. There are many cases in which the president's signature is necessary to documents and papers, unless on account of absence or disability the vice-president is authorized to act for him in such capacity. He must, for instance, sign the papers, usually in conjunction with the cashier, involved in organizing the bank, the certificates of stock, the circulating notes, and most official reports. There are many papers, such as contracts, drafts, etc., not requiring the signature of both president and cashier, that may be signed by either alone. To the public and in the eye of the law the president stands as the head of the bank and the representative of the authority and responsibility of the board of directors. The election of a vice-president is not obligatory, and in some banks the office is dispensed with or is rather honorary than otherwise. In such cases he is merely one of the directors who acts for the president in his absence or in case of his disability, the practical work falling to the cashier, who in a small country bank often "runs the business." But in a large city bank an "active" vice-president is one of the busiest men in the place. He receives callers, listens to applications, answers questions and decides many matters of ordinary moment, relieving the president of the burden of routine duties. In a few banks there is more than one vice-president.

The cashier of a bank is its chief executive officer and directs and supervises its internal work. He is necessarily familiar with all the details of the service and the methods of business, and is the commanding officer over the force of tellers, clerks, and other employees. He acts as secretary at the directors' meetings, verifies reports, certificates and statements, and signs various documents with the president, including stock certificates and the circulating notes. He is responsible for the funds, securities, and all the valuables of the institution, signs its own checks, drafts and vouchers, makes its indorsements, attends to the buying and selling of exchange, receipts for securities deposited and is responsible for their safe custody, and may rediscount paper or pledge securities for borrowing money, but with the knowledge and consent of the directors. Usually, however, the president or vice-president who conducts a negotiation involving loan or payment will sign the checks in such transactions, and most of the indorsing is done by assistants of the cashier. New depositors are referred to him, and he assures himself that their custom is desirable before admitting them to the books. It is necessary for him to be at all times conversant with the bank's condition and to be able to inform the president or vice-president how it stands in all departments of its business. He has charge of its correspondence and accounts, though detailed duties in connection with these may be deputed to others, who get his approval and signature when necessary. A statement is made up for him every day by the general bookkeeper showing how all the important items of business stand, as to deposits, loans, receipts and expenses, cash on hand, etc., so that he may see at a glance the relation of assets and liabilities and the state of the cash reserve. His intimate knowledge is an indispensable guide in each day's operations.

It is obvious that the cashier in a large bank is a busy man and must have a clear head and decisive ways, and in the increasing extent and complexity of banking operations it has been found necessary in the larger institutions to give him one or more assistants. In some there are several of these, each devoting himself to the immediate oversight of separate departments of the work under the cashier's direction.

Sometimes a bank keeps a legal adviser, who is paid a salary to look out for the legality of its proceedings, attend to the form of contracts and the validity of documents and to advise upon many points that are constantly liable to come up; but, after all, his duties are those of a lawyer and he can hardly be regarded as a bank officer. In every large bank there is an auditor, who keeps a close supervision of accounts and of the vouchers and records of receipts and expenditures.

VII

THE DEPARTMENTS OF A BANK'S WORK

Various departments in the work of a bank have been incidentally referred to, and it may be well before going farther to get a general idea of what they are and what their relation to each other is. Taking them in what seems to be their logical order, that of the receiving teller comes first, for, while the main business of a bank is loaning and investing funds in order to derive a revenue from them, as well as to make them in the highest degree useful to the community, the greater part of what it employs comes from depositors. This teller, as his title implies, receives the deposits that come in directly over the counter, and he occupies one of the most conspicuous of the divisions of the banking-space with which the public has communication. He has charge of the funds received until he has fully accounted for them. Next in order to him comes the note-teller, who, however, is closely associated with the collection and corresponding departments and the departments of discounts and loans. Some of the items which come to the receiving teller, such as drafts, checks upon out-of-town banks and such as are not exchanged through the clearing-house, and coupons, have to be collected. These, if they are to be collected in the city, go directly to the note-teller, and after the collections are made the proceeds are accounted for by him. He also, as his title implies, receives all payments upon notes whether discounted by the bank or given as evidence of loans in any form, or merely presented by a customer for collection.

While other departments have charge of discounts and loans and out-of-town collections, the final payments pass through the note-teller's office and he is responsible for rendering an accurate account of them. Collateral loan payments, however, are made to the loan clerk and the proceeds turned over to the note-teller. Thus next to that of the receiving teller his department is the important channel through which receipts come in.

The collection-clerk has charge of those items which are not payable on demand and credited at once as cash, but have to be held for maturity, as time drafts and notes. He keeps charge of these until the time comes for collection, when they are turned over to the note-teller if payable in the city and to the corresponding clerk if payable out of town. The latter has charge of a very important department in connection with the work of collecting, as he keeps a record of all items to be sent away by mail and despatches them to their various destinations, whether they are checks to be paid on demand, which have been already credited to customers, or "time items," as drafts or notes, turned over by other departments, which are becoming payable and have to be collected out of town. In some banks there is a mail-teller, who receives remittances that come in from these collections and accounts for them, but his work is subsidiary to that of the note-teller, and is blended with it in the final accounting. Where there is no mail-teller remittances are received by the corresponding clerk and by him turned over to the note-teller. In some banks, also, there is a separate coupon-clerk who attends to the collection of interest accruing upon bonds and represented by coupons, whether included in deposits or left for collection. Some of these may have to go out by the note-teller's messengers and some through the corresponding department, but, as in other cases, the proceeds pass into the former's receipts to be accounted for.

om the Receiving and Note Tellers;
ceived by the Paying Teller. Counts
money. Makes up packages for the
ed money for Sub-Treasury at New
ton, D. C., until enough has accumu-
This department is a sub-division of

and individuals located in the City of

ger, State Banks and Bankers, and
atements for these ledgers are made
Desk.

redits and keeps record of the same.

accounts. Fills out new pass books
on introduction card of new accounts;
osit. Takes charge of all orders for
ks. and for the delivery of stocks and
others, on instructions from dealers.
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r morning additions, also cash items
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epartment at 9 A. M.

NESS.

The Accompanying Chart will serve to present in a Summary and Graphic Way the Division into Departments and the Distribution of Functions in a Large Commercial Bank. The Outlines will be filled as we proceed with an Examination of the Work.

PRESIDENT { VICE-PRESIDENT, CASHIER, ASSISTANT CASHIER

PAYING TELLER (Assistant Paying Teller) (Specie Clerk) (Assistant)	Pays checks presented over the counter. Certifies notes and checks. Issues Custom House transfers. Pays and receives Clearing House balances. Ships currency and silver. Deposits legal tenders and gold in Sub-Treasury for account of correspondents.
RECEIVING TELLER (First Assistant and Nine Assistants after 12 M) (Three Floaters when work requires it)	Receives deposits of all city dealers. Issues certificates of deposit.
NOTE TELLER (First Assistant and Eight Assistants) (Six additional Clerks on A. M. Work)	Receives all cash remittances from out-of-town customers. Enters credits for same. Credits all collections paid received from the City Collection Department. Receives all express packages. Makes all credits for the general ledger. Collects through City Collection Department all bills receivable.
DISCOUNT CLERK (Two Assistants)	Times and registers all notes offered for discount by dealers and paper bought by the bank after being passed on by the officers. Holds this paper until maturity, when it is charged to the Note Teller. Holds, with record of due date, all bills receivable held as collateral to call or time loans. Has charge of and keeps record of past-due and suspense paper. Takes care that nothing in either of these accounts expires under the statute of limitations. Keeps the officers posted as to all these matters.
GENERAL BOOKKEEPER (.........................)	Keeps the general ledger of the bank. Makes up daily statement of the condition of the bank, also quarterly statement called for by the Comptroller of the Currency. Makes up various statistics for the use of the officers. Has charge, together with another clerk, of the securities in special deposit, and the collection of coupons from bonds left for safe-keeping.
LOAN DEPARTMENT (Two Clerks)	Has charge of all time and call loans, whether of dealers or brokers. Examines all collateral. Watches quotations. Advises the officers when margins are running down. Reports on a slip each day the transactions of the previous day. Cuts off and turns over to the corresponding department all coupons due on securities left as collateral by dealers. Sends out notices for interest due on call loans. Sees that the same is promptly collected and Interest Account credited.
COUPON CLERK (One Assistant)	Pays bonds and coupons. Receives and checks up all acknowledgments of out-of-town banks, bankers and other customers, of statements rendered and vouchers returned. Reconciles the statements from banks to whom collections are sent. Examines all error tickets. Makes proper entries in books showing the error to have been corrected. Initials same, and then hands to the proper officer for his inspection and initial.
CHECK DESK (Check Clerk) (Twelve Assistants)	Has charge of making up exchanges for Clearing House in the morning. Receives the exchange from the Clearing House. Examines and sorts checks for the bookkeepers. Charges same in debit cash books. Makes out account current for out-of-town banks and dealers. Charges in debit cash books all checks paid over the counter, received on deposit, or through the mails. Enters total debit proof of all departments in the general debit cash book. Check clerk examines signatures of all checks and vouchers which are presented through the exchanges.
GENERAL CLERK	Receives, sends and keeps record of all telegrams and cables. Transfer clerk for the transferring and issuing of all stock of the bank. Draws the drafts on out-of-town correspondents. Has entire charge of the clerks of the bank, keeping record of absentees, making provision for extra work, filling in vacancies caused by sickness or vacations in the different departments. Hears and settles all disputes between heads of departments and others, all subject to the approval and supervision of the Cashier.
CORRESPONDING AND COLLECTION DESK (Corresponding Clerk) (First Assistant) (Twelve Assistants)	Writes the letters. Proves up and mails foreign checks and cash items received from the Receiving and Note Tellers. Registers all out-of-town collection items. Enters same in collection register. Acknowledges all letters received. Sorts and files all letters and advices and registered mail receipts. Forwards for other departments (excepting Paying Teller and check desk) all matters sent by express or registered mail. The collection ledgers are also included in this department. Receives all coupons for collection, turning same over to City Collection Department.
CITY COLLECTION DEPARTMENT (Three Clerks)	Takes for collection all city items not collected through the Clearing House. Distributes same to the runners. Receives returns from the runners, proving their work of the day and turning over receipts and items not paid, to the Note Teller. Has charge of all cash and collection coupons, proving the cash coupons with the amount charged by the Note Teller, and the collection coupons by amount charged by the Corresponding Desk.
MONEY DEPARTMENT (Two Permanent Clerks assisted in morning by all the clerks in Receiving Teller's department below First Assistant)	Receipts for all money received from the Receiving and Note Tellers; also all money from city banks received by the Paying Teller. Counts the money. Assorts the mutilated money. Makes up packages for the Paying Teller. Carries the mutilated money for Sub-Treasury at New York and the Treasury at Washington, D. C., until enough has accumulated to send in for redemption. This department is a sub-division of the Paying Teller's Desk.
CITY BOOKKEEPERS (Four Balance Bookkeepers) (Four Individual Bookkeepers) (Four Assistants)	Accounts of all corporations, firms and individuals located in the City of New York.
OUT-OF-TOWN BOOKKEEPERS (Three Balance Bookkeepers) (Three Individual Bookkeepers)	Divided into National Bank Ledger, State Banks and Bankers, and Country Ledger. Vouchers and statements for these ledgers are made up and proved daily by the Check Desk.
CREDIT DEPARTMENT (Credit Man) (Two Assistants, one of them a Stenographer)	Obtains information in regard to credits and keeps record of the same.
CASHIER'S CLERK (Assistant)	Arranges for the signatures of new accounts. Fills out new pass books for same. Keeps complete record on introduction card of new accounts; also detailed statement of first deposit. Takes charge of all orders for buying and selling bonds and stocks, and for the delivery of stocks and securities to banks, brokers and others, on instructions from dealers. Takes charge of all dividend and interest checks sent for the credit of depositors, making out the credit tickets and turning same over to the Note Teller. Fills up and files away powers of attorney and special instructions from dealers.
MORNING MAIL (In charge of designated Clerk, with 35 junior clerks)	Opens mail. Takes out checks for morning additions, also cash items drawn on bankers and others; and turns over items for the Clearing House to the head of the Check Department at 9 A. M.

CHART OF A NEW YORK BANK WITH LARGE GENERAL BUSINESS.

347—9—4

BY PERMISSION OF THE AMERICAN INSTITUTE OF BANK CLERKS.

Some large city banks have a bond and stock department, which attends to the buying and selling of securities for the bank or for its customers, but this is usually done through Stock Exchange brokers, the bond and stock clerk having charge of the details and of the records of the transactions. A few that deal largely in foreign exchange have a separate department for that work in charge of a foreign exchange clerk.

Some of the departments already referred to have a certain relation to payments as well as receipts, but that which has direct charge of all the bank's cash payments and custody of its cash funds is that of the paying teller. His position ranks first in importance and responsibility among those subordinate to the cashier. He is the "first teller" and accounts for all payments and all the cash received or paid out. The receiving teller is the second teller and the note-teller is the third teller. In a large bank there is also an exchange-teller, who has immediate charge of the checks of the bank received from other banks through the clearing-house in exchange for their own. In a smaller bank these exchanges are looked after by the "check-clerk," who attends to all paid or returned checks.

The work of all the departments concerned with either receiving, collecting, loaning, or paying converge upon the bookkeeper in whose department all final accounts of the bank's business are systematically kept.

Quite independent of all these is the credit department, which every bank that has a numerous clientele and a large volume of business in discounts and loans maintains nowadays as a means of ascertaining, recording, and keeping in form for ready reference evidences of the financial condition and standing of its customers.

A few large and busy banks have an Information Bureau, in charge of a clerk whose main duty it is to answer questions and to have the oversight of the pass-books of depositors when they are in the bank to be balanced, receiving them when presented for that purpose, seeing that the entries are duly and correctly made and returning them when called for.

These departments cover in a general way the work that is constantly going on within the bank under the direction of the cashier as the executive head. There may be a chief clerk who under him has supervision of the clerical force, giving them general instructions and guidance, and settling points of doubt on matters of detail about which the cashier need not be troubled. There are assistant tellers and clerks, messengers, porters, and various employees whose number and duties are determined by the volume, character, and variety of the business of the particular bank. Though departments may be clearly defined in their main function, they come in contact at many points and there is much passing to and fro between them.

VIII

DEPOSITS AND THE RECEIVING TELLER

However abundantly supplied a bank may be with capital and resources of its own, it relies mainly upon funds deposited with it by others for the means of carrying on an extensive business in discounts and loans. Once under way, what determines its capacity for loaning is the relation of reserve to deposits, and capital and surplus give assurance of its general ability to meet all obligations. As a rule, its deposits are several times its capital, while a considerable part of the latter is otherwise invested. Though a large line of deposits is desirable, more and more attention is given to their character and the probability of profit from them. Much service is rendered in connection with deposits, and, depositors being regarded as customers in the bank's business, it is expected that a reasonable balance will be kept and that those who are liable to call for accommodation or become borrowers shall have a corresponding character and standing in the community. Hence a large commercial bank requires something more than an application for the privilege of making deposits and keeps a careful record of those admitted to its books. It has become a general practise to keep a card-index of depositors, arranged in alphabetical order in a cabinet of drawers. Upon each card is the depositor's name and address, and it is ruled in perpendicular columns for a series of years with a line for each month. Upon this is kept the average monthly balance to his credit, and at the foot of the column the average for the year is entered. With this may be kept statements regarding the depositor's business and character, affording evidence of his responsibility and his title to credit, but in most large banks this material is kept separately in a credit department. Sometimes upon the balance-card is entered in red ink the discounts granted to the depositor in each month, showing their relation to the balance kept. This record is a guide to the value of the account.

When a person applies for the privilege of becoming a depositor in a bank that is at all strict in its requirements, unless personally well known or introduced and recommended, he is expected to present letters giving evidence of his character and financial circumstances, and a blank is filled out, with his name and address, his business and its location, and references to his sponsors. If his credentials are satisfactory, his name is entered in the books and his account is opened. His signature is taken in one or more books kept for the purpose, or more commonly nowadays upon cards that may be pasted in the "signature books" in their alphabetical order. Usually more than one and sometimes several of these are required, that signatures may be conveniently verified in different departments of the bank's work. His account being opened he receives a "pass-book" in which a running account is kept for his own guidance, and in this the bank is debited with every deposit as it is made. It is left from time to time to be balanced, and then the bank is credited on the opposite page with the payments that have been made on his checks and all charges to his account, so as to show the balance that is still credited to him on the bank's ledger. To make his deposit he fills out a blank "slip," a supply of which is always conveniently at hand, with the date and his name properly entered at the top. He enters separately on the slip the amount of cash and of each check or draft and a

90162

DEPOSITED BY

Bell & Street

IN THE

BANK OF THE METROPOLIS

Sept. 2, 1903

BILLS	62	50
GOLD		—
CHECKS	4	25
	10	00
	76	75

DEPOSIT SLIP.

footing of the total. If he has coupons to deposit, they are placed in separate envelopes provided for the purpose, their character and amounts being noted on the outside. Placing the slip and the funds in the pass-book where the entry is to be made, he presents this at the receiving teller's window.

The receiving teller's qualifications and responsibility will appear from the character of his work. He must count the money and see that it is good, notice that each check is properly dated and filled out with the amount in writing as well as in figures and duly signed and indorsed, and that the amounts agree with those noted on the deposit slip. Little attention is given to signatures if they appear to be all right, for many of them will be unknown to the teller, but he is expected to scrutinize indorsements more carefully, especially if the deposit is not made by the customer in person, whose indorsement every check must bear. If there are checks not drawn to his order and bearing other indorsements, these may or may not be known, but the depositor's own name is the bank's only guarantee that he is entitled to the credit. If a customer whose account is a small one and whose known financial responsibility is not high deposits an unusually large check, there may be some question about receiving it and giving him credit upon which he can draw before it is positively ascertained that the check is good, lest, if it should prove otherwise, he might not be able to make good the amount. The bank is merely put upon its inquiry and the teller has to exercise caution. He may question the depositor, or the check may be referred to an officer before actual credit is given, and the bank upon which it is drawn may be communicated with. Such precautions are likely to be taken, especially when there is a previous indorsement about which nothing is known. There is another case in which care is taken about indorsements. Sometimes joint accounts are opened in the name of two persons, either of whom is entitled to deposit to it and draw upon it, and checks drawn payable to the order of one may be indorsed by the other, if it is so stipulated.

The receiving teller, finding the funds offered to be in all respects acceptable and to correspond with the deposit slip, distributes the money and checks in compartments of his drawer, keeping the denominations of the former separate for convenience and legal tenders apart from bank-notes, writes the total upon a book before him with the name of the depositor and enters it upon the debit page of the pass-book, with the date and his own initial, puts the deposit slip upon a spindle, returns the pass-book to the customer and is ready for the next in line. It should, perhaps, be explained that the pass-book, representing the depositor's side of the transaction, contains the bank's account with him, not his account with the bank, so that the sums deposited being due to him are entered as debits of the bank. The entries in the teller's " deposit book " may be made as the deposits are received, or they may be made afterward from the slips by himself or an assistant, but the record must be carefully kept. The slips afterward go to the bookkeepers for the entry of credits in the ledgers, the money is passed over to the paying teller in the course of the day or after the close of banking hours, with a proper exchange of vouchers, and the checks and other items that are to be collected or paid take different courses which we shall have occasion to trace hereafter.

Just here let us consider what may be deposited and immediately credited besides actual cash. There may be checks drawn by other depositors on this same bank, checks upon other banks which are members of the same clearing-house, checks upon banks or trust companies which are not members but make exchanges through some bank that is a member, checks or drafts upon banks, trust companies or other concerns from which direct collection will have to be made, sight drafts upon individuals or business houses in town, checks upon banks and drafts upon persons or concerns out of town. There may also be matured interest coupons, and almost any authenticated item that is payable or collectable on demand, even including a matured note payable at a bank, provided a certification has been obtained at that bank insuring its payment.

It is obvious that while all these are received from the depositor and credited to his account as if they were cash, there is much to be done with them before the proceeds are realized, and the receiving teller must set them upon their proper course and give a strict account of their passage through his hands. The money, properly classified by kind and denominations, goes to the paying teller and is charged to him and receipted for. The checks upon his own bank are kept apart to be charged as debits to the accounts upon which they are drawn; the checks to be exchanged through the clearing-house form another lot and much the largest, and those items that have to be collected in the city are turned over to the note-teller, while those that are to be collected out of the city go to the correspondence department, the former being called "city" and the latter "foreign" collections. The receiving teller has a case of pigeonholes in which to distribute this material preliminary to disposing of it. There is a pigeonhole for the checks of each of the clearing-house banks, arranged in the order of their numbers as members of the association, and the teller or an assistant must assort the checks preparatory to listing them for the clearing-house settlement.

The receiving teller has a "rack" of slips upon which to enter the several items of his day's receipts. There is one for each of the clearing-house banks with its clearing-house number and its name at the top, followed by "from" and the number and name of his bank, and a space for the date. Upon each of these he enters a list of the checks of the bank whose name and number it bears, the checks having been distributed to the pigeonholes for the purpose, and then foots up the total. This gives him the material for drawing up a list of the aggregates for all the banks, which he does upon a strip of paper by means of the arithmometer, or adding-machine. This, as the reader is doubtless aware, is a mechanism on the principle of the typewriter and cash register combined, by which the separate numbers are impressed successively on a strip or a sheet of paper by the use of keys and a lever, and the aggregate is at the same time so kept that it can be instantly inscribed at the bottom of the column by a double movement of the lever which is drawn once in entering the separate items. It makes the listing a rapid process with one clerk calling off the figures and another operating the machine. Where there are many checks it may be used in listing those of a single bank on its separate slip, but its chief use is in making the list of aggregates for all the banks and footing it up mechanically. Unless it is out of order the machine can not make a mistake in adding or in entering the amounts indicated by the keys struck, but the operator may cause an error by striking the wrong key. The extent to which this contrivance is used differs greatly, but it is commonly employed where long lists of figures are to be made and footed up.

The clearing-house checks are thus listed as a matter of record and preparatory to the process of clearing, hereafter to be described. The teller also enters upon one of his rack-slips all the items turned over to the note-teller for collection and upon another those sent to the corresponding clerk. He also has a slip for the actual cash, or money, taken, the kinds and denominations of the money being noted as well as the total. This cash is made up in packages, perhaps by an assistant, and labeled with the amounts, for the use of the paying teller, but the receiving teller must keep an account of all that passes through his hands. He also has a list of the checks drawn upon his own bank, which can be immediately debited to the accounts upon which they are drawn and go at once to the bookkeeper's department.

A process which is required wherever evidences of receipt or payment pass through the hands of a teller or clerk is known as "proving" or "making a proof." It consists in setting the items covering a total amount into different categories independently and seeing that they agree; and often "proofs" have to be made between different departments serving as a check upon errors. The receiving teller keeps two books, a deposit-book and a proof-book. In the former he makes a record of all the deposits made each day and credited to the depositors. In the latter he records his proof of each day's work when it is completed. This is made by entering on one side the total of deposits and of receipts from any other source, for he may receive money sent in by express or turned over for one cause or another by the first or third teller. Against his total receipts he sets the amount of clearing-house checks or "exchanges," checks on his own bank, or "debits," "foreign items," and city items turned over for collection, and "charges" to first and third tellers, and the cash or money in hand. This should account for the whole amount and so balance with it. This process completed, the receiving teller's work for the day is done, but in the morning he will have to attend to making up the "exchanges" for the settlement clerk to take to the clearing-house.

He has upon the left-hand margin of each day's page of his proof-book a list of the clearing-house banks in the order of their numbers as members of the association, and against each has been entered the amount of its debit

2d Teller.

PROOF.

THE EIGHTH NATIONAL BANK.

Sept 2nd. 1903

Deposits, ...	5501	541	47
Money " by Express,	86	250	
Rec'd from 1st Teller,	74	023	02
" " 3d "	1	532	49
Collection Exchange,		3	60
	5663	350	58
Exchanges, . . .	4301	465	24
Eighth Nat. Checks,	1276	193	70
Foreign "	41	122	86
Legals, ...	14	488	88
City Office, ...	30	079	90
Charged to 1st Teller,			
" " 3d "			
Morning Adds, . .			
	5663	350	58

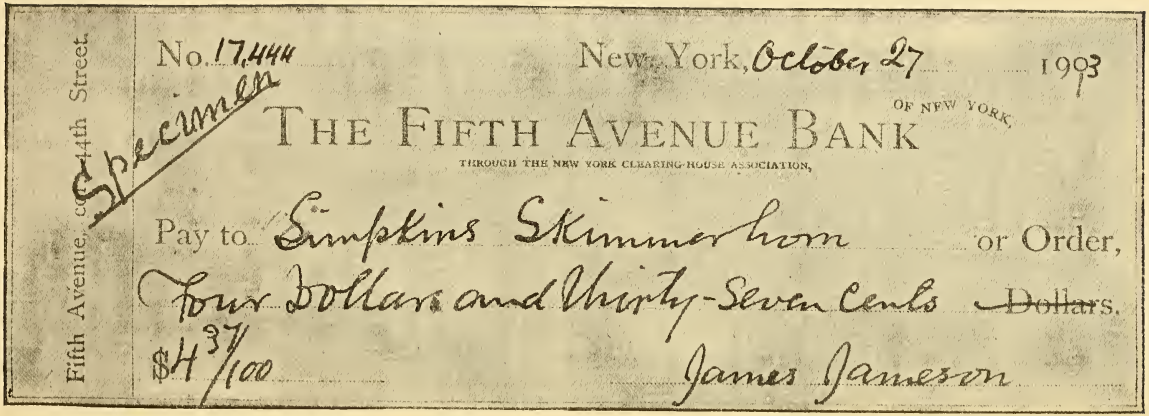
Receiving Teller's Proof.

to this bank for the day, represented by its checks. Each check is stamped upon the back with a receipt-stamp, bearing the number of the bank which has received it and is now sending it back, the date and the legend "received payment through the Clearing-House." The settlement-sheet, finally made up the next morning, has a similar list of banks, but the aggregate set against each includes the checks received by the note-teller as well as the receiving teller and additions coming by mail in the morning, or any early deposits that it may be desirable to put through that day. In some clearing-houses the morning "additions" appear in a separate column, with a third column for the aggregate credits of the bank, to be entered against each of the others. Not all banks have the practise of including the list of banks and the debit of each in the proof-book.

Among the depositors of such a bank as we are considering will be not only individuals, but business firms, corporations, savings-banks, trust companies and other financial institutions, out-of-town banks, some of them in distant parts of the country, and perhaps the financial departments of the local or State government, or even the Treasury of the United States. Sometimes interest is paid where large balances are kept, but that is a matter of special arrangement. On ordinary deposits no interest is allowed by conservative banks, and in many cases the matter is regulated by a clearing-house rule for banks that belong to the clearing-house association. The rate is in that case prescribed together with the minimum balance upon which it is allowed, but in most places it is left to the discretion of the banks.

The depositor is now entitled to draw checks upon his deposit with which to make payments, and these may be indorsed by the recipient and deposited in the same or another bank, or presented for payment to the paying teller. This statement should be qualified by saying that in case of a new depositor or one about whom little is known, the bank may defer honoring drafts upon the account until the checks included in the deposit are proved good by being accepted as such by the banks upon which they are drawn. There is such a thing as "kiting checks," or depositing one drawn by an accommodating friend for the purpose of immediately drawing cash upon it, when it may not turn out to be good. If there is any suspicion of that, the game may be balked by waiting for the deposited check to prove itself all right before accepting that drawn against the account. In these days of telephone communication the kite-string may be easily cut.

The bank will furnish a book of blank checks, as well as the pass-book, and each bank has a form of its own more or less tastefully designed and printed, and books of different sizes to meet the needs of its various customers. But any depositor may have a design of his own, if he likes, and have his own check-books made with the name of his bank printed upon each check with the customary legend of "pay to the order of." A check written upon a plain piece of paper, as an order to pay, will be perfectly good, if there is no doubt about its genuineness. In the check-book each blank check has a stub from which it can be detached, and upon this there are spaces for entering the balance, the date, the number of the check drawn, the name of the payee, the amount, and the balance remaining. Upon this the depositor can keep a record for himself by which to verify the entries in his pass-book. In drawing checks he should number them consecutively, though that is not necessary, and be careful to insert the correct date, write the amount to be drawn plainly, and enter the same amount in figures and sign in his ordinary handwriting. Though indorsing with a stamp is permitted, a signature must always be hand-written. Many business houses and



Fifth Avenue, cor. 44th Street

No. 17,444 Specimen

New York, October 27 1903

THE FIFTH AVENUE BANK OF NEW YORK,

THROUGH THE NEW YORK CLEARING-HOUSE ASSOCIATION,

Pay to Simpkins Skimmerhorn or Order,

Four Dollars and Thirty-Seven Cents ~~Dollars~~.

$4 37/100 James Jameson

FACE OF ORDINARY FORM OF BANK CHECK.

corporations and most banks use a stamp for indorsements. If the amount written on the face is different from that entered in figures the former controls. Care should be taken not to change the date or amount after it is once written, as doubt will be raised when the check comes to the bank whether the change has not been made since the check was drawn and by another than the drawer. This may be obviated by noting the change with signature or initials, but it is best to draw a new check.

IX

THE NOTE-TELLER AND HIS RECEIPTS

Not all of the receipts of the bank come in the form of deposits at the receiving teller's window, and, though the note-teller has more important relations to other departments, to be considered hereafter, we will give a passing glance to his share in the receipts, because they take practically the same course in the interior of the bank as those of the receiving teller, and it is desirable to follow those which go through the clearing-house without delay. At the risk of anticipating, and even of repeating to some extent, the matter can be made clearer by this way of advancing over the ground. We have already seen that certain items included in deposits must be turned over to the note-teller for collection. If there are sight drafts or checks upon trust companies or upon banks that do not "clear," to be collected in the city, he makes a proper entry of them and sends out messenger or collectors to collect the several sums. As these are payable on demand it is presumed that they will be paid without demur, but if there is a refusal the item is returned, and charged to the depositor's account and notice is sent to him with the dishonored draft or check. Payments may be made in cash or in checks payable to the bank. If the latter is the case, it is the rule that the checks must be such as can be exchanged through the clearing-house, unless drawn upon the collecting bank itself, but sometimes checks will be taken that have to go through the process of a second collection. Trust companies and banks that do not "clear" commonly keep deposits in banks that do, and make their payments by drawing upon them.

The proceeds of these city collections come into the hands of the note-teller, usually designated in the bank as the "third teller," and are accounted for in much the same way as the receipts of the receiving or second teller; but he is also in receipt of payments upon notes and loans, and remittances from out-of-town collections come to him through the correspondence department or the mail-teller. These payments come mostly in checks, and we are here concerned not with the business of the departments which attend to the collection of "time" or of "foreign" items, but only with the actual receipts when payments are made. It is with these that the note-teller has to do, precisely as the receiving teller has to do with the funds deposited. He receives money and checks from messengers making collections for the "city office," from customers paying on account of discounted notes or loans, and from collections out of town through the correspondence department, and these he has to account for in substantially the same way that the receiving teller has to account for his receipts direct from depositors. He has in his charge the "supplementary" credit and debit books in which the entries are made of credits and charges from his department. The relation of these to the bookkeeping department will appear more clearly hereafter, but for the present we are interested in the funds which pass through the third teller's hands. There is cash and there are checks upon his own bank and upon other clearing-house banks, and there may be other checks or drafts, to take another turn at collection. He makes up his total receipts and the classified items and prepares a "proof" similar in form to that of the second teller. His cash goes to the first or paying teller, and his checks must be assorted and listed upon " rack " slips, and he, too, makes up a list of clearing-house " exchanges " to be added to those of the receiving-teller on the " settlement-sheet."

If the bank has a large number of correspondents and does a heavy business in out-of-town collection, it may have a separate mail-teller. In that case the note-teller deals only with the collections and payments made in the city, and the mail-teller, or fourth teller, receives the out-of-town remittances; but when the latter has duly recorded and accounted for them, the proceeds are turned over to the note-teller to be included with other entries in his books, and they enter also into his " proof " and upon his clearing-house list. Many of these appear as morning " additions," the regular teller's lists being made up at night.

Interest coupons have been mentioned as among the items to be collected. Many banks in a large city which is a financial center have a separate coupon-clerk to record these and attend to their distribution for collection, some going out by the note-teller's city messengers and some out of town through the correspondence department, but the proceeds enter into the note-teller's account. Having got these various items of the bank's receipts together, in which checks upon clearing-house banks or institutions that clear through them figure prominently, we are prepared to follow the interesting process of " clearing," and appreciate how much it signifies in facilitating the exchange of values by means of credits and debits.

X

EXCHANGES THROUGH THE CLEARING-HOUSE

The association of banks to support clearing-houses and for other purposes will be treated in a subsequent chapter, after we have become more familiar with their varied functions, but this is an appropriate place in our progress for describing the process of "clearing," or exchanging the checks which have been received in deposits and in payments to the bank. As New York is the banking center of the United States and the clearings there usually constitute more than three-fifths of the volume for the entire country, the description will apply especially to the method pursued there, but variations upon it in other cities will be noted afterward. The immediate purpose is to see how the checks and other "clearing items" are disposed of. Besides checks upon banks that are members of the association or institutions that have the privilege of clearing through members, drafts payable at clearing-house banks or even matured notes may be passed through these exchanges if they have been certified or "accepted" by those banks beforehand as so payable.

It should be noted here that many banks and trust companies which do not belong to the Clearing-House Association obtain the privilege under its rules of having their checks exchanged through members with which they make arrangements for the purpose, and these checks are treated precisely as if they were drawn upon the bank which does the clearing, and it becomes responsible for their payment.

In many cases the institution so situated keeps a regular account as depositor with the bank acting as its clearing-agent, and deposits with it the checks it has received, which then have to be assorted and listed with those of the clearing-bank. In other cases they are assorted at the bank receiving them and sent in listed by themselves to be included in the morning "additions." Every bank in the association has to keep a careful record of these non-member banks and their clearing arrangements so as to include their checks received among deposits with those of their clearing-agents in making the exchanges. In New York there is a charge of one dollar for every check that has to be returned as "sent wrong," though the charge on any single batch can not be more than five dollars.

When a man draws his check upon his bank it is simply an order to the bank to make payment on his account. When the one who receives the check deposits it in another bank he turns the order to pay over to that bank and it undertakes to collect the amount from the first bank, which is assumed to make the payment for its own depositor and charge it to his account. But as each bank receives many checks drawn upon several others, and each of those others has checks drawn upon it, instead of making collections all around, each exchanges the checks it has received drawn upon the others for those they have received drawn upon it, and only the balances are settled. By all meeting at the Clearing-House they can ascertain the aggregate balance to be paid or received, instead of dealing with each separately, and the Clearing-House officers and clerks will attend to receiving the payment of all balances due, or "debit balances," and making payment of all "credit balances," thus reducing to one operation the settlement for all the banks. This will clearly appear as we proceed.

We will now start with one of the banks. The hour of

6-28-'03-350 742

No. 61. THE FOURTH NATIONAL BANK.

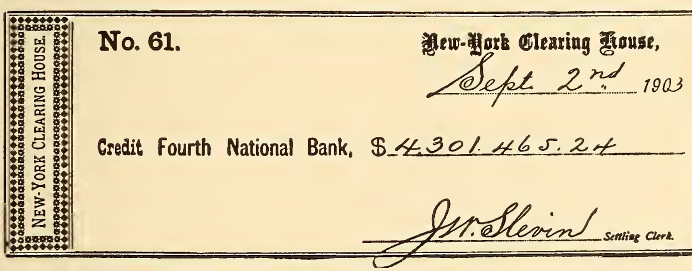
Settling Clerk's Statement. Sept 2 1903

No.	BANKS	DEBIT	DEBIT	CREDIT	
1	Bank of N. Y. Nat'l Bk'g Assoc'n,	242 155 85		319 718 37	1
2	Bank of the Manhattan Company	257 514 30		142 168 06	2
3	Merchants' National Bank,	3 792 60		14 313 16	3
4	Mechanics' National Bank,	136 558 77		603 105 08	4
6	Bank of America,	221 754		118 274 72	6
91	Liberty National Bank,	6 533 98		14 151 23	91
92	N. Y. Produce Exchange Bank	47 64		6 628 92	92
93	New Amsterdam National Bank,	136 67		795 35	93
94	Astor National Bank,	701 59		318 04	94
95	Western National Bank of the U.S.	80 509 81		124 902 04	95
	FOOTINGS,	4301 465 24		3460 548 30	
	BALANCES.			840 916 94	

BEGINNING AND END OF SETTLEMENT SHEET, WITH TOTAL FOOTINGS AND BALANCE.

clearing in New York is ten o'clock and the final settlement-sheet is made up in the morning, to include all the "exchanges" of the previous day and any early "additions," so that a single entry may be made of the amount due from each bank. The sheet has printed upon its left-hand margin a list of the Clearing-House banks by number and name in consecutive order, and next to this a column headed "debits." In this column is entered against the name of each bank the amount due from it on its checks and the other items that it is bound to pay, and the footing shows the total credit of the bank presenting the sheet, or the total amount due to it from all the other banks. Some banks use a settlement-sheet with two debit columns, the morning "additions" being separately entered, but the total will include all the items. A "credit-ticket" for this total amount is prepared, to be delivered to the clearing-house manager or his "proof-clerk." The checks of each bank are enclosed in a strong envelope with a list of the amounts of the several checks and the total on the outside. A small "check-ticket" accompanies it, bearing the number and name of the bank to which it is to be delivered and those of that making the delivery and the total sum of the enclosed checks. On the sheet next to the debit column, already filled and footed up, is a column headed "credits," in which is to be entered at the Clearing-House the amount due from this bank to each of the others as it appears upon their several returns.

When the sheet is ready for the Clearing-House it is taken in hand by the "settling-clerk," who is accompanied or followed to the Clearing-House by a delivery-clerk. The latter takes the envelopes, arranged in consecutive order, beginning from his own number and running through the list to the end and down to the number again from the head, unless the bank should chance to be No. 1. The envelopes are carried in a convenient receptacle, the size and form of which are determined by the volume of the bank's exchanges. The delivery-clerk also has the "credit-ticket," small "check-tickets," and a duplicate of the settlement-sheet with the debit entries and a column in which the clerks of the other banks are to receipt for their several envelopes when delivered. The settling-clerk may also have an assistant, or more than one if necessary, the most important duty of whom will be receipting for the envelopes to be delivered by the other banks. Arrived at the clearing-house, the settling-clerk takes his seat at his own desk with his assistant, if he has one, at his back, or


NEW-YORK CLEARING HOUSE.

No. 61. New-York Clearing House,

Sept. 2nd 1903

Credit Fourth National Bank, $4.301.465.24

J. W. Slevin Settling Clerk.

Clearing-House Credit-Ticket.

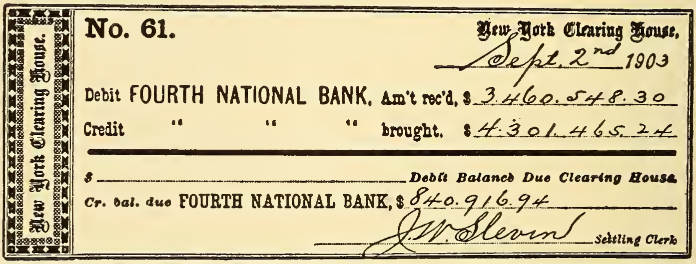
by his side, and his sheet before him. The delivery-clerk passes the "credit-ticket" of his bank up to the manager's clerk in the gallery and takes his place with his bag or case of envelopes, his duplicate-sheet and his check-tickets, in the passage in front of the desk of his bank.

Before proceeding further, let us glance at the arrangement of the room from the manager's gallery at the end. The manager and his assistant have a narrow desk in the front of the gallery facing the room, and near by is the desk of his "proof-clerk" with an open book, whose page for the day, like the settlement-sheet, has the list of banks by number and name, and columns for "debits" and "credits." It has also two columns for balances, one for those "due Clearing-House," and one for those "due banks." There is a little endless-chain arrangement by which the credit-tickets have been sent up by the delivery-clerks as they come in, and from these the manager's clerk enters the credits in the book as he finds them on the tickets of the different banks and makes his own footing of the totals. Looking from the gallery to the floor we see the desks arranged in four rows, each divided from the next by a latticed wire partition. Behind each sits a settling-clerk with his sheet before him and an assistant at his elbow and, it may be, another standing by. In front stands a delivery-clerk with his receptacle on his arm and his delivery-sheet in his hand, and if his task is heavy he too may have an assistant, a messenger or porter from his bank.

The manager, or his assistant, appears in the gallery and one minute before the hour of ten strikes a gong. Everybody is at attention and on the alert. On the hour the gong sounds again and the lines of delivery-clerks in the passages along the front of the desks begin to move. Each clerk moves to the next desk and delivers an envelope, lays down his sheet in front of the clerk sitting there and drops a check-ticket into a slot in the top of the desk. The settling-clerk takes the envelope and begins to enter at once from its outside the credit of the bank from which it comes, while his assistant puts his initials upon the duplicate-sheet in token of receipt. Meantime the delivery-clerk has placed an envelope on the next desk, reaches back for his sheet and places that there for his receipt and drops a check-ticket in the slot. This is going on all along the four lines of desks and is a continuous movement of ten or twelve minutes, when each delivery-clerk is before his own desk again with his receptacle for envelopes empty, while the settling-clerk has before him all the envelopes delivered to him by the other banks, and either has all their debits entered in his credit column or is still engaged upon the process of entering them. Each bank has back its own checks from all the others and has a receipt for them in the line of initials on the delivery-sheet, and when the settling-clerk is through making credit entries from the envelopes, these, containing the bank's own returned checks, are gathered into the empty bag and taken to the bank without delay, the "check-tickets" being now used to verify the entries.

The settling-clerk foots up the credits which he has entered to the several banks and strikes a balance of the aggregates. If this is a credit balance to his own bank, it shows the amount due from the Clearing-House. If it is a debit balance, it shows the amount his bank has to pay to the Clearing-House. As soon as he has ascertained this, he fills out a "balance-ticket," entering the amount received, the amount brought, and the balance, and sends this up to the manager's proof-clerk, who is busily entering all the credits and debits of the several banks and striking a balance in each case and entering it in the proper column. The aggregates of his balances should be the same as those of the settling-clerks, and the balance for each bank should correspond to that appearing upon its ticket; otherwise there is some error to be corrected. The manager calls off the several balances for verification and for report to the banks. Forty-five minutes is allowed for completing the "proof," and fines are imposed upon the delinquent clerks for any error or delay. The settling-clerk makes a report to his bank on another sheet showing all the debits and credits, the aggregate and the balance due to or from it.

The settlement of the balances remains to be effected, and every bank having a debit balance is required to pay in at the Clearing-House between 12.30 and 1.30 o'clock the amount thus due from it. Payment must be in cash available for reserves, but this includes Clearing-House gold certificates, and a large part of the settlements are made with these. Each bank has on actual deposit in the Clearing-House vaults gold coin for which certificates are issued that can only be used in settling balances between the banks. The certificates are numbered and dated, and on the face certify to the deposit of so much United States gold coin which is payable to the order of the bank making the deposit on demand of any member of the Clearing-House on surrendering the certificate indorsed by the bank demanding payment. On the back is also the number and


New York Clearing House.

No. 61. New York Clearing House,
Sept. 2nd 1903

Debit FOURTH NATIONAL BANK. Am't rec'd. $ 3.460.548.30
Credit " " " brought. $ 4.301.465.24

$ .... Debit Balance Due Clearing House.
Cr. bal. due FOURTH NATIONAL BANK, $ 840.916.94
J. W. Slevin Settling Clerk

Clearing-House Balance Ticket.

a space for the date, with the order " Pay only a Bank, member of the New York Clearing-House Association," and notice of a fine for any other use of it. Certificates may also be issued for gold deposited at the Sub-Treasury and used in the same way. Government coin-certificates and legal-tender notes are also used.

The money paid in is made up in packages according to denominations and properly labeled, the coin being in bags, and a receipt is given to each bank, signed by the manager. In case any bank fails to appear to make its payment, the banks to which it owes balances must each furnish its quota of the balance necessary to complete the settlement and must make their own settlement with the defaulting bank

No.................. New York,..................................1898. $ ....

New York Clearing-house Association

THIS CERTIFIES *that there have been deposited with the NEW YORK CLEARING-HOUSE ASSOCIATION by the*

....

.... *Dollars*

in United States Gold Coin, to be held as a special deposit, payable in said coin to the order of said Bank, on demand, to any Bank member of the New York Clearing-house Association, only on surrender of this certificate indorsed by the Bank demanding payment of the same.

Registered at the New York Clearing-house,

NEW YORK CLEARING-HOUSE ASSOCIATION,

by W. A. NASH, Acting Chairman Clearing-house Committee.

WM. SHERER, Manager.

THIS CERTIFICATE IS ISSUED FOR CLEARING-HOUSE PURPOSES ONLY.

FACE OF GOLD CERTIFICATE, NEW YORK CLEARING HOUSE.

afterward. The banks having credit balances are required to appear at 1.30 o'clock to receive the amounts due. These are paid over by the manager and receipted for in a book, and when the process is over every dollar of the money paid in by the banks owing balances has been paid out to those to which balances were due. It should be mentioned that the United States Sub-Treasury has the privilege of clearing through the Clearing-House, though not a member, as that is an accommodation to the banks as well as to itself. It receives bank-checks in payment of various Government dues, and issues checks in paying interest, premiums, etc., which are deposited in banks. It is necessary to have these exchanged from day to day. When the Sub-Treasury has a credit balance, it takes that much money away from the banks and locks it up. When it has a debit balance, it pays out that amount from its surplus funds and it goes into the banks. A complete and careful record of each day's clearings is kept by the manager of the Clearing-House and his clerks.

The principle and purpose of the clearing process is the same everywhere and there is no essential difference in the manner of making the exchanges. At New York the volume of clearings sometimes reaches about $1,500,000,000 a week, while those of all the rest of the country are less than $1,000,000,000. In some of the other clearing-houses the time of meeting, the detailed methods, and the mode of settling balances are different from those of the metropolis. Few, if any, of them have a building of their own, and some of the smaller ones only rent a room for their purpose. In a few cases there is more than one meeting in the day, an early one for exchanging the checks received the day before, and a later one for additional items received in the morning or certified as payable on the day of the meeting. Any funds to be deposited against which certificates are issued are kept in a bank or some

COUNTERSIGNED

.... Cashier

This Due-bill is only good when signed by one and countersigned by another authorizing person, and is payable only in the exchanges through the Clearing-House the day after issue.

CLEARING-HOUSE DUE-BILL

No.__________ *Philadelphia,*..............................*189*

Due by the..............................*Bank*

To..............................

..............................*Dollars*

$..............................

..............................Teller

CLEARING-HOUSE DUE-BILL, PHILADELPHIA.

other depository. In some cases bank-notes may be included in the funds used in settling balances, and in others arrangements are made for running accounts between the banks and transfers of balances. In Boston there is a practise of loaning credit balances among the banks, and in Philadelphia due-bills may be given for balances below $5,000. These are simply acknowledgments signed by a bank that so much is due. They are good for only the day's settlement, and are deposited in a bank by the Clearing-House manager and passed through the exchanges the next day.

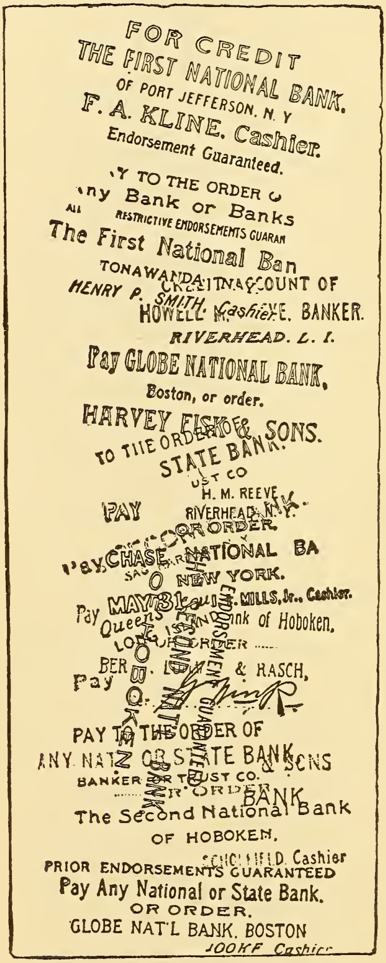
The present purpose being merely to show how the exchange of checks is made, further consideration of clearing-houses will be deferred to a subsequent chapter. What should clearly appear at this point is the immense volume of actual payments that are consummated through the banks by the use of checks, with no use of money except as a small part of their deposits by customers, and with comparatively little use of it by the banks. It is an imposing illustration of the extent to which mere orders to pay accomplish the purpose of currency in effecting the interchange of values, bringing the mind back to the idea that what is virtually effected is a barter of values on a vast scale.

XI

COLLECTING OUT-OF-TOWN CHECKS

The receipts of the bank in the form of checks is not yet fully accounted for. Those which are drawn by one of its own depositors for payment to another and deposited with it by the other merely effect transfers between their accounts, the amount being "charged," or debited, to the account of the drawer and credited to that of the drawee or second depositor. Those deposited with it which are drawn upon other banks belonging to the clearing-house or using its facilities are exchanged through that institution, as we have just seen. Those drawn upon banks, trust companies, private bankers, or others in the place where the bank is situated and not exchanging through the Clearing-House are collected directly by messengers under the direction of the note-teller, as we had previously seen. But there are still the checks drawn upon banks in other places to be accounted for. The practise of making payments with checks upon banks has so extended and is found so convenient that little heed is given to distance or to the trouble that may be involved in making collections.

A man in a western or southern city or in a remote country town who has a bill to pay in New York does not hesitate to draw a check upon his local bank and send it by mail. A man in New York who has a payment to make in a distant city or town in like manner draws his check and sends it along, with the feeling that the matter is settled to all intents and purposes. The same is true between all manner of places, near or remote, payments naturally going most to trading-centers from places tributary to them or dealing with them, but moving also on diverging lines from them and on connecting lines between them. There is a vast network of routes over which checks are going to and fro all the time through the mails; but the actual payment is not made when the check is sent, though it is left to the banks to see that it comes to that. Therein they perform one of their most troublesome and least appreciated services. A man in New York may receive a check for some small payment, drawn upon a bank in a little town in Kansas or Oregon. He indorses it and puts it in his bank with assurance that it is all right and gives himself no more trouble about it.



Back of Collected Check, with Indorsements of Banks and Bankers through whose Hands it has passed.

Not so the bank. It has practically paid the depositor by crediting him with the amount of the check, but it must get its pay from the bank upon which the check was drawn, which must get its pay by charging it to its own depositor who drew the check. But the New York bank has no relation with the remote country bank and it stamps its indorsement on the check with an order to pay a bank with which it has relations in Chicago or St. Louis, guaranteeing previous indorsements, and sends it along with others for collection. It gets credit and acknowledgment in due time, but the Chicago or St. Louis bank still has the collection to make and may have no relation with the bank upon which the check is drawn. It has to go through the process of making the necessary entries in its own books and sending the check with its own indorsement to some correspondent near the remote town. The process may be repeated several times before the strip of paper reaches its destination, with its back covered with bank indorsements, and the payment is actually effected. The check may be indorsed "Pay to the order of any national bank," or "any bank or banker," and sent to the most convenient point on its way, with confidence that it will ultimately reach the account of the drawer, and, if good, the settlement will be made. If not, it will be sent back protested and charged to the depositor in New York with the costs of the whole operation. In any case, the cost of collection is charged back along the line until it reaches the depositor on whose account it was incurred.

This case is an extreme one but illustrates the meaning of collecting "country checks." The volume of this business of collecting out-of-town checks by a large city bank is very great, and such banks have correspondents in different parts of the country through which these and other "foreign" collections are made by means of their correspondence departments. Most of these correspondent banks keep regular accounts with a bank in New

York, and make deposits with it, including the New York checks they receive, which is equivalent to sending them to it for collection. Similar arrangements are made with other cities, but New York is the chief center and has connections of the kind with all important banking places in other parts of the country, and with many smaller places near by. An account of the methods pursued by a prominent New York bank in making these collections will cover the whole ground, and suggest the less elaborate ways that may serve the purpose where business is less voluminous and complicated.

This bank keeps regular ledger-accounts with its correspondents similar in form and method to those for individual depositors, but arranged alphabetically by the names of places, in which they are credited with their deposits and the sums received from them from time to time, and charged with payments made on their account. Different arrangements are made with correspondent banks as to remittances and settlements and the terms upon which the business is done, varying with its character and volume. The New York bank may act as the reserve agent for some of these out-of-town banks and may have considerable deposits belonging to them. Upon some it may allow interest. It may itself keep a deposit account with some bank in an important Western or Southern city, like Chicago or New Orleans, for the convenience of its business. It has an index of its correspondents in card-catalogue form for convenience of reference, and upon each card is inscribed the terms of the arrangement it has with the correspondent. With this may be filed other information about the out-of-town bank and a memorandum of the average balance it keeps and the general condition of its account. The arrangement may involve keeping the funds collected and making remittances at intervals, with regular periods of settling accounts, or it may require remittances to be made without delay. It depends upon the amount of the business and the particular relations established between the banks, but in any case prompt acknowledgment is expected of all items received for collection. Another alphabetical card-index is frequently kept of cities and towns arranged by sections of the country, covering all places where there are banks or where collections may have to be made, with their proximity to the more important places noted on the cards. This is to enable the bank, when any item appears from an obscure or out-of-the-way place to ascertain at once where that place is and to what city the item should be sent to secure collection with the least delay, for in many cases it is not sent to a regular correspondent, but to any bank in the right part of the country.

All these provisions for making "foreign collections" being presumed, we may return to the process of having them made. This comes within the province of the bank's correspondence department, and for the present we are only concerned with checks that have been deposited, though they are by no means the only "items" to pass through this department.

We have seen how the receiving teller disposes of checks upon his own bank, upon other clearing-banks, and upon institutions in the city. Those upon out-of-town banks which he receives, or which the note-teller may take, or which may come to the bank in any form of payment, are turned over to the corresponding-clerk. He makes a record of these in a book kept for the purpose, with names, dates, amounts, and the names of the banks upon which they are drawn and the correspondents to which they are to be sent. Some banks keep this record by a duplicate of the letters of transmission, which are in the form of a double sheet, so that two copies are made at once by placing a carbon-sheet between the leaves, one copy being detached for the mail and the other kept on file. The checks are assorted and arranged alphabetically by the places to which they are to be sent and the bank's indorsement is stamped on the back of each. There is a series of stamps for this use. Checks that are going to regular correspondents are indorsed " Pay to such and such a bank." Others may be indorsed " Pay to any national bank," or to " any bank or banker," or the name of the bank to which it is sent may be written in a blank space. The essential point is to transfer the order to pay with a guarantee that previous indorsements are valid. The stamp bears the name of the bank and its cashier, who is the real indorser. Before the checks are sent away, or as soon as they are despatched, the amounts are charged to the several correspondents, or collecting banks, under that date in the ledger kept for the purpose. This is known as the " collection ledger," or sometimes the " foreign ledger." The bank has practically paid these checks and now looks to the correspondent for its payment.

When the correspondent, or collecting bank, receives the checks it credits them to the bank from which they come, sends a letter of acknowledgment, enters the items in its own books and makes the collections, with others that it may have to make, in the regular way. If any of them are drawn upon itself, they are debited to the depositors who drew them. If there is a clearing-house in the place and any of them are drawn upon other members, they go through its exchanges. Where there is no such exchange they are presented for payment. If they are drawn upon banks in other places they are forwarded for collection with a new indorsement. Payments are thus gathered in until the accounts of original drawers of all the checks are reached and charged and remittances are duly made from bank to bank. When these reach New York they are credited on the ledger to the various correspondents or collecting banks which were first charged with the amounts to be collected.

Formerly all this work was done for depositors without charge, but the New York Clearing-House Association and those in some other cities have established charges for collection, usually one tenth of one per cent, but not less than ten cents for any item, and the correspondents may also make charges for collecting beyond their own jurisdiction. The practise differs in different places and with banks not subject to Clearing-House rules, but it may be stated as a general practise that there is a small charge for collecting " foreign " checks, which is usually designated as " exchange." The correspondents remit the amount of the check received less their exchange charges, but are credited with the full amount, the exchange being entered as a separate item in the credit column of the ledger opposite the original charge, and the date of receipt is noted. The exchange is charged up to the depositors for whom the collections are made in the debit columns of the individual deposit-ledgers before this settlement is complete. Thus it will be seen that while the depositor is credited at once with everything that is accepted at the receiving teller's window for his account, there may be a good deal to do before it is reduced to actual cash that he is entitled to draw out or turn over to others, though while he keeps up his balance he is not troubled with the details of exchange or collection. Though we have been especially concerned with the course taken in collecting checks, it will be appropriate to note here that other items received on deposit may be collected through the correspondence department, such as sight drafts and coupons payable out of town.

If a " foreign " check proves not to be " good " when it reaches the bank upon which it is drawn, that fact is duly certified by a notary in solemn " protest." Then it is returned with the certificate of protest, formally signed and sealed, to the bank from which it came and by it to the depositor, who is charged with the amount of the check and the protest-fees and postage, and any other costs that may have been incurred.

This business of collection involves the use of various forms of letters of transmission and advice and of acknowledgment, and copies of all of them are kept. Where duplicates are not made by the carbon process, press copies are made, and even in printed forms a kind of ink is used that will give the desired impression. An improved press-copying machine is in use by some banks with which the paper is in a continuous web, or roll, and one letter after another is copied by turning a crank and is wound up on a reel, from which they are afterward unwound by a reverse movement and cut off one by one by means of an attachment for the purpose, to be filed away. Many letters have to be written besides those for which there are regular forms, and all these go through the process of copying and filing for future reference. On the other hand, all letters received in the course of business are arranged and filed for ready reference in case of need, to verify or rectify anything that may require it.

The methods that have been described for a New York bank apply wherever there is a large business in collection, but there are many variations of detail in actual practise. Between smaller places there is a less elaborate system, and the banks keep book-accounts with each other and make periodical settlements. Their payments are usually made by bank-drafts or cashier's checks upon some bank in a reserve city, or perhaps in New York, where they have funds to their credit. Such drafts are always acceptable, as they are in demand for exchange upon the cities where they are payable. Collections to be made in New York or any reserve city are almost always covered by exchange upon those cities. To make the meaning of this more plain, we will assume that a bank in Boston or in a Western city receives many checks upon New York banks, and has many demands for drafts for making payments in New York. It sends the checks for deposit in a New York bank where it keeps an account and it draws upon its deposit there by its own cashier's check for remittance to other banks. This it does whether the remittances are to be made to New York or elsewhere, for checks upon New York are everywhere in request, as they can be used to establish credits in that city to make drafts upon.

This business of receiving and collecting all sorts of checks from all sorts of places has become an onerous part of the service of a bank, and is practically in the stage of the old method of collecting all checks instead of exchanging them through clearing-houses, with the added necessity of using the mails extensively in accomplishing the work. There has been some agitation for a better system for making collections outside of the cities from which they are sent, analogous to that devised for making city exchanges through the Clearing-House. A tentative plan has been adopted by which one bank in Long Island City makes all the collections for New York city banks over Long Island. The items are sent to it and it distributes them and receives the remittances, accounting to the banks from which the items come. In Boston a branch of the Clearing-House called the "foreign department" has been established for collections throughout New England. It is similar in principle to the old Suffolk bank system for exchanging and redeeming bank-notes. All items are sent to this agency from the banks and there they are credited to the several banks sending them in, classified, recorded, and transmitted to the various banks from which collections are to be made, and from them the remittances are received the next day or within a day or two, according to the time required for the mail service. These are charged to the banks to which they are due and turned over to them. The business is thus concentrated and simplified and much trouble is saved to the individual banks, which pay their several quotas of the expense in proportion to the volume of their transactions with the "foreign department" of the Clearing-House.

XII

THE PAYING TELLER AND THE BANK'S CASH

We have dealt thus far with the taking in of funds by the bank in the form of deposits and the methods employed for realizing upon those which are not cash, but orders upon other banks or upon persons. In this latter process we have been compelled to treat incidentally of a considerable part of the payments of the bank at the same time, for in exchanging checks through the Clearing-House it is in reality paying those drawn upon itself as well as collecting those drawn upon the other banks. While only balances are settled, what is really effected by the exchange is payment and receipt on a vast volume of orders passing between the banks. It is no less payment and receipt because it is accomplished by transfers of credit, for this credit represents actual values in some form outside of the banks, and these values in property, commodities, etc., are what is in reality transferred and exchanged. If we could follow a strictly logical order the next step after describing the receipt of funds by the bank in deposits would be to account for the use of these funds while in the keeping of the bank. Making use of them is in fact its principal business, the object of taking deposits, and the main source of profit. What it chiefly does is to lend out funds deposited with it and credited to its depositors. But the functions of a bank in carrying on its business of obtaining funds, loaning them, and repaying, work simultaneously and become so intermingled and interlaced in their operation that it is impossible to follow them in strictly logical order.

As we have accounted for a considerable part of the process of paying back to depositors, or paying to their order on checks, when describing the exchange and balancing off of these orders, it will be simpler now to account for the rest in the actual cash payments of the paying teller. The receiving teller's department was not taken up first because it is the most important. The position of the paying teller is regarded as the most important and responsible under that of the cashier. He has immediate charge of the cash of the bank. It goes out through his hands, and there is more risk involved in its going out than in its coming in. Next to the officers the paying teller ranks first among the employees, receives the highest salary, and is placed under the heaviest bonds. His chief occupation during banking hours is paying out money on the checks of depositors.

Checks are drawn nowadays for making all kinds of payments, large and small. Among business men they are mostly indorsed and deposited by those receiving them in their own bank, which may be the same one upon which they are drawn or some other. What effect they have then and what becomes of them we have already seen. But they may be presented for payment in money, and primarily that is what they are for. A check may be made payable to bearer, and in that case the person presenting it is entitled to payment without identification or indorsement, and if the signature is genuine the bank assumes no risk in paying it, though it prefers to have the name of the payee on the back. If a check is drawn payable to the order of So-and-so or to him "or order," it must be indorsed with his name by himself or by somebody known to be authorized to sign for him. In case of a partnership it is understood by whom checks are to be either drawn or indorsed. With corporations it is the usual practise for the treasurer to sign and indorse checks with the corporate name, followed by his own signature as treasurer.

As we have said, the paying teller has immediate charge of all the cash of the bank. That which is taken in by the receiving teller and note-teller or comes in at the correspondence department is turned over to him with proper vouchers during or after banking hours. Whatever is to be used in the current business of the day and not kept in the vaults for other purposes or as a reserve is in his immediate control for making cash payments. In the morning he has a slip upon which is entered all the bank's cash duly classified as gold coin, gold treasury certificates, gold Clearing-House certificates, Sub-Treasury receipts, silver coin, silver Treasury certificates, silver Treasury notes, legal-tender notes, national bank-notes, etc., with the amounts set against each entry and all footed up. Separately there is a statement of the three items of the "reserve chest"—legal-tender notes, Treasury gold certificates, and Clearing-House gold certificates, showing just how the reserve stands. This shows the condition of the bank in the matter of cash at the beginning of business on this day.

In his drawer, or conveniently at hand, the teller has the amount of money that he expects to have occasion to use during the day, though he may draw from the receiving teller in case of need. This is distributed in separate tills by denominations and kinds of money and in packages of various sums in the manner that experience has shown to be most convenient for expeditious payment. For "making change" an ingenious machine has been invented and is more or less used, called the "automatic cashier." All the fractional coins are arranged in the interior of the mechanism in such a way that by pressing a key corresponding to the exact fraction of a dollar that he requires the teller brings out that precise sum in coin and can safely hand it over without counting. The machine can make no mistakes. It is a common practise with banks to make up sums that may be required by a customer for a special purpose, such as providing for a pay-roll, in the denominations desired, if notice is received beforehand. A bank with many women depositors will keep on hand a supply of new bills for making payments to them, as ladies are apt to be fond of receiving "clean money." Other customers may be accommodated in a similar way, if they express the wish, for it is the policy of a well-managed bank to be always obliging. At the hour of opening, which is usually ten o'clock in the forenoon, the paying teller is prepared to pay any checks drawn upon his bank.

He keeps himself as familiar as possible with the state of the different accounts, but will rely upon his confidence in well-known customers of high standing. When in doubt, he will ascertain the condition of the account from the balance-ledger, which is always accessible to him. He is familiar with the appearance of most of the customers who present their own checks, and that of many others who are accustomed to present checks on the bank, and with their indorsements. He is able to recognize most of the signatures, but has one of the signature-books at hand to verify them in case of doubt. When a stranger presents a check, identification is required even though there is no doubt about the signature or indorsement. A check may have passed through several hands and it is desirable to know to whom it is paid. If the person presenting the check is not the original payee, his indorsement is required as well as personal identification. In these matters the paying teller is particular, and has to look out for forgeries or changes in the amount of the check, for when payment is once made recovery is difficult, and the bank and not

FIRST TELLER.
CASH.
THE NEWARK NATIONAL BANK.

Sept 16. 1903

Gold Coin,		2	837	50
" Treas. Certificates,	2	315	000	
" C. H, "		815	000	
Sub-Treas Receipts,		7	850	
Silver Coin,			459	48
" Treas Certificates.		237	494	
" " Notes,				
Legal Tender "	2	083	050	
National Bank "		2	100	
2d & 3d Teller's Money,				
Cash Items,				
	5	463	790	98

Paying Teller's Morning Cash Schedule.

the depositor will be the loser, unless the latter is a participant in fraud.

Frequently a check will be presented not for payment but for certification or acceptance, which is made across the face in writing or with a stamp, usually with the words "accepted" or "good when properly indorsed," the date, and name of the teller. A record is kept of all certified or accepted checks, for the amount is at once debited to the depositor, and his balance that can be further drawn upon is reduced by that much. These checks are entitled to payment in preference to those of later date. National banks are forbidden by law to certify for a larger amount than stands to the credit of the drawer, but in practise the rule is somewhat relaxed in favor of good and trustworthy customers, and the excess is treated as a temporary loan. Outstanding certified checks figure among the bank's liabilities. If a check is presented for a larger amount than the drawer has to his credit, payment is refused, but exceptions are also made to that and "overdrafts" are sometimes allowed to good customers, but a record is made of them and notice sent to the drawers to make their balance good. Overdrafts are items in the bank's "assets," as they represent sums due to it.

It is hardly necessary to say that a good paying teller is quick at figures, an expert in handwriting, and an adept at counting money, for in a busy bank he works with great rapidity at times, and it is important that he should be accurate and sure. He will be as ready as the receiving teller to detect "bad money" in case it should come into his hands or any question should be raised by the person for whom a check is cashed. If a check upon some other bank is offered, there is no obligation to pay it, but if the person offering it is known it may be done as an accommodation, and banks usually make a point of being accommodating. But such a check must be turned over to

U. S. (C. H.) Gold Certificates,	300 185	000 000		485	000
Gold Coin,	14 40	000 000 585		54	585
Gold Certificates,	450 10 120 15 23	000 000 000 000 800		618	800
Legal Tender (C. H.) Ctfs.,					
Legal Tender Notes,	110 2	000 305		112	305
Nat'l Bank Notes,	7	000		7	000
Silver Coin,	1 7 9 1	150 250 290 38 000 970 550 240 95 234	47	20	8174
Silver Certificates,	329 60 47 3 53	000 000 000 600 645 600		1033	845
Second Teller					
Counter Checks,					
Third Teller's Items.					
Treasurer U. S.					
Clearing House Debit,					
Overs & Shorts First Teller (Short), Asst. Paying Teller			31		
Overs & Shorts (Over) Previous Day, Check Clerk			50		

Paying Teller's Proof, showing Amounts of Different Kin

August 17th 1903.

			Cash.	2369	083	15
			Second Teller,	12	990	39
			Third Teller,	5	159	67
			Clearing House Credit,			
			Treasurer U S	16	000	
			Cashier's Account,			
			Overs & Shorts (Short) of Prev. Day,			
			Second Teller (Special),			
			Overs & Shorts First Teller (Over),			
332	352	47				
	600					
11	085	78				
2	952	53				
56	241	62				
		81				
403	233	21		2403	233	21

...F MONEY AND OTHER ITEMS, SET AGAINST THE SOURCE OF SAME.

the receiving teller or note-teller to be exchanged or collected. If drawn on a clearing-house bank it will take its course through the "exchanges" and be charged to the bank upon which it is drawn. If it is on a bank that does not "clear," or is out of town, it takes its course to the departments that deal with such for collection. If it is an out-of-town check, the regular exchange charge will be made to the person for whom the check is cashed. Such checks appear as items in the proof of the teller to whom they are turned over.

The paying teller has before him a book upon which he enters the amount of each check as it is paid, with the initials of the drawer, just as the receiving teller enters his receipts. He also makes up a "proof" after banking-hours to test the correctness of his work, and this is entered in the "first teller's proof-book." Payments may have been made upon cashier's orders or in cashing checks of other banks, as well as those upon his own bank, and additions may have been made to the morning's cash by transfers from the receiving teller. In the proof-book are entered the aggregate of payments made under different heads, and this must agree with the footing of the vouchers representing them, in order to "prove." Among the payments made during the day may be a balance due at the Clearing-House and the paying teller makes that up as soon as he receives notice of the "debit balance" and its amount. On the other hand, there may be a "credit balance" which comes from the Clearing-House to be added to the paying teller's cash.

In some banks a "Teller's Settlement-Book" is kept, of which a page is devoted to each day's work. This shows the balance at the beginning of the day, the several amounts received from different sources, as second teller, third teller, Clearing-House credit balance, if any; and the sums paid out on checks, Clearing-House debit balance, if any, etc., and the balance remaining, spread out in a description of the different kinds of money and the amount of each. Finally, as the teller began the day with a schedule of the money on hand belonging to the bank, he ends it with another of the same kind. This not only classifies the cash as gold coin, certificates, legal-tenders, bank-notes, etc., but gives the amount of each denomination of the certificates and notes, except those of national banks. This shows at a glance the state of the bank's cash as it is gathered into the vault at night and furnishes the means of comparison with what it was in the morning. With most large national banks a separate statement is appended of the items of the "reserve-chest," as this can only include "lawful money," and it is desirable to have it stated apart, so that its relation to deposits may be readily noted. The aggregate of the deposits can be ascertained each night from the general bookkeeper, and the relation of the reserve to it is a matter of importance. State banks do not make this separate statement of reserve items in their cash schedule, because they include national bank-notes in their reserves.

XIII

HOW PAID CHECKS ARE DISPOSED OF

When the customer of a bank takes in payment a check drawn upon another bank and deposits it in his own, the latter credits him with the amount and proceeds to collect it from the other bank. Whether this is done by sending it directly to the other bank by messenger, by exchanging it through the Clearing-House, or by sending it out of town through the correspondence department, it is in substance simply collecting this payment for the customer. When the depositor makes a payment by drawing a check upon his own bank and giving or sending it to the person to whom payment is to be made, the bank has to see that the payment is actually effected out of his deposit, and duly charged to his account. In fact, it has actually to pay the check which is simply an order upon it to pay. If it is presented at the paying teller's window, it is a simple matter, and the checks received and cashed there are immediately charged against the depositor's account. If it is received in a deposit at the receiving teller's window, it is equally simple. The amount is transferred between the account of the drawer and that of the payee depositing it, by being charged to the former and credited to the latter. The debits are entered from the checks in the first place—just as the credits are entered from the deposit-slips. When the bank gets its checks back from the process of exchanging through the Clearing-House it is equally a matter of paying the checks. They have been paid with checks of the various banks in which they have been deposited, and by the settlement of the balance at the clearing-house. The bank has made all the payments for its customers and has now to make the charges to them.

To a clear understanding of this it is necessary to make a preliminary explanation of the balance-ledger, though that properly belongs to the bookkeeping department, to be considered more fully hereafter. In a large bank the ledgers are divided into several volumes designated by the initials of the first and last name contained in them, as the "A–F ledger," the "G–L ledger," and so on. In the balance-ledger the names of depositors are arranged alphabetically on the left-hand margin of the left-hand page, and across two broad pages runs a series of narrow double columns for debits and credits, so that successive dates may be included upon the two leaves as the book lies open. The purpose of this book is simply to keep up the balance of every depositor as promptly and closely as possible, so that it can be readily ascertained. In the first half of the double column for the day any debit of that day is entered opposite the name to which it is to be charged, and in the other half is entered any credit that may belong to that day, together with the balance. Deposits are entered as credits directly from the slips. Payments of the bank for the depositor are entered as debits from the returned checks, and the balance is kept up each day, being usually entered in the morning in advance of new debit and credit items. Where there are many "inactive" accounts, in which entries are made at irregular and comparatively long intervals, they are included by themselves in a separate set of pages in the ledgers, and are sometimes designated as "sundries."

In a large and active city bank by far the largest volume of its checks come through the Clearing-House in the envelopes that were sent in by the other banks. There may be thousands of them, representing the payment of millions of dollars by a single bank in one day. As soon as these are brought in from the morning's clearing they are taken in charge by the "exchange-teller," or a check-clerk, who has a force of assistants. The first thing to be done is to see if the returns from the other banks are correctly made, and the checks are not separated from the several envelopes in which they come until they have been compared and "ticked off" on the accompanying list and the several amounts are ascertained to be correctly stated. If not correct, the checks with which errors have been made are laid aside for the purpose of making or allowing reclamations. The banks have until three o'clock to adjust such errors. All the checks are then assorted and divided according to the division of the ledger and books of entry, and are arranged in alphabetical order for each. They are examined one after another by different clerks as to date and "filling"—that is, to see that the date is not later than the time of payment and that the amounts as written and as given in figures correspond. Any possibility of the amount having been "raised" is also looked out for. As fast as this is done they are entered in books with names and amounts in their proper order, the books corresponding to the volumes of the ledgers. This is for "proving," which is done by listing the checks of each page of the book on the adding-machine and seeing that the totals agree with the returns from the banks. The books also serve as a record of the exchanges.

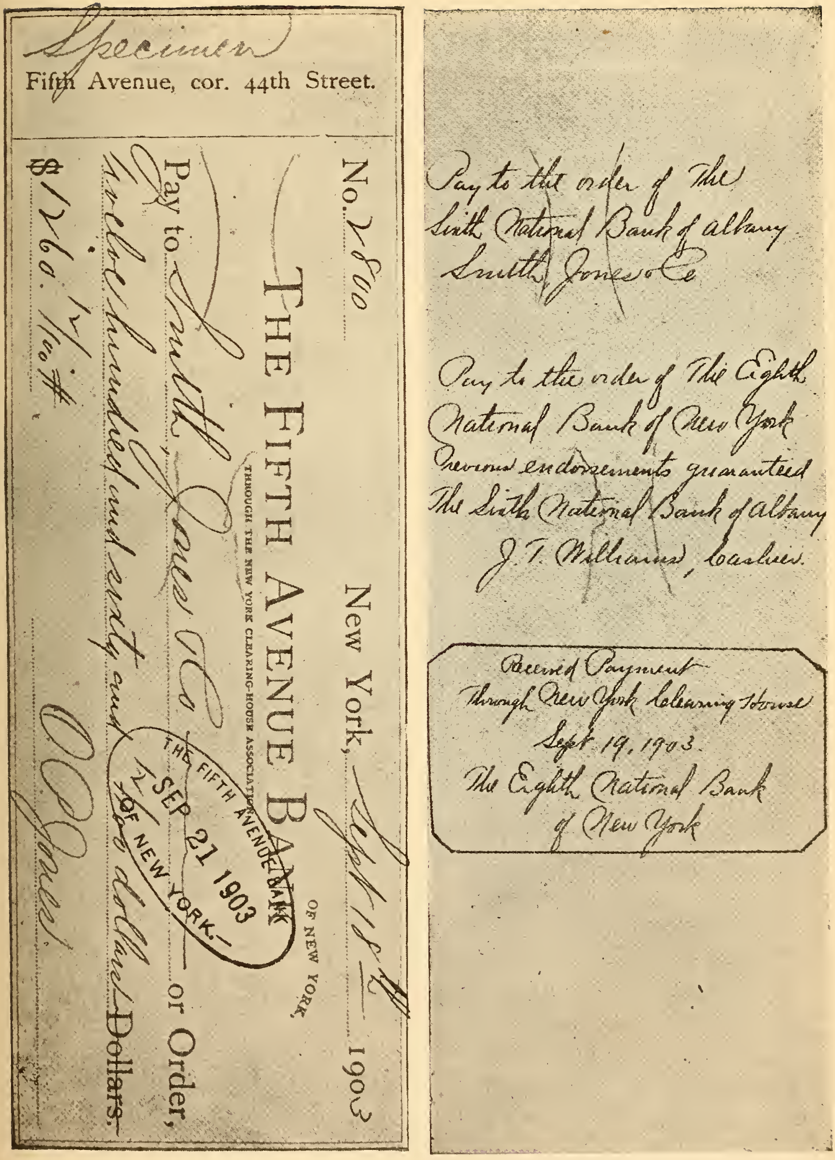
When this is done, or while it is going on, the checks are taken by the balance-bookkeepers to charge as debits in their ledgers, and it is part of their duty to see that they are "good"—that is, that none is an overdraft of the balance. They have already entered the "home checks," or those paid or deposited in the bank itself, and the necessary examination of these has been made by the tellers through whose hands they have passed. All checks are run over by a "stop-clerk," to see if payment has been stopped upon any of them. He keeps a list of checks on which the bank has received notice to stop payment, and goes through the entire lot each day to find any to which this applies. There is an examination of signatures as a safeguard against fraud or forgery. A competent body of check-clerks will become so expert that they can pass upon the great mass of checks with rapidity and certainty. They are not only familiar with the signatures of most of the depositors, but with those of many of the indorsers. It is the business of the banks taking the checks on deposit to look out for the latter, but if the amount drawn is large or there seems to be any irregularity in the indorsement, trouble may be saved by an exercise of caution. Anything that excites suspicion will be subject to keen scrutiny. In spite of every precaution an untrustworthy customer may be taken, and the forgery of names is a crime that the utmost vigilance has not wholly eliminated. There is a practise known as "kiting checks" that has to be looked out for in handling the "exchanges." A customer not known to be wholly trustworthy, or a new depositor, may deposit a large check. The check may prove not to be good, but before it comes back from the bank upon which it is drawn the customer may have taken advantage of the credit to draw on his own account and get the cash. Where there is suspicion of anything of the kind, payment will be delayed, if possible, and a sharp watch kept for the deposited check. The telephone is serviceable in interfering with this kind of kite-flying.

After checks have gone through the process of examination, recording, proving, and posting, they are ready to be sorted to the names of the depositors and filed away to be returned to them. Those that have been laid aside for any error or irregularity are submitted to the cashier or his assistant, or to some officer or clerk authorized to decide whether they shall be taken without correction. If any bank has made an error in its return, or if a check is postdated or not good, all those so affected are sent back and reclamations made for the amount, to be credited in the exchanges of the next day, but the claim must be made before three o'clock to secure the correction. An overdraft may be allowed to pass and the depositor notified to make his account good at once. In the case of a stopped check, it is simply not paid and is returned to the drawer. If when the notice comes it has already been paid, nothing can be done unless it has come through the exchanges on the same day the notice is received in time to be returned to the bank in which it was deposited as "not good."

After the entries have all been made and all irregularities have been cleared up, the paid checks are finally brought together, and the check-clerks sort them to the different depositors' names, cancel those which have come through the Clearing-House by cutting, and stamp each on the face with a stamp bearing the name of the bank and the date, as final evidence of payment. Those that were received by the paying teller, receiving teller, and note-teller have already been canceled by them by putting upon a spindle or file, and each has a different cut, so that every check bears the evidence of the mode of payment. The books in which the checks have been entered, those from the Clearing-House and those taken by the several tellers, are used by the "deposit" bookkeepers in making the postings in their ledgers of individual accounts, though usually the "home checks," or those paid in the bank itself, are posted directly. Those taken by the second and third tellers have to be credited to those depositing or making payments with them, as well as charged to those who drew them. It is the next morning when all are finally sorted away as paid and become " vouchers " for the payments.

They are then placed in drawers, those of each depositor having back of them a card or strip of pasteboard with his name on the edge, which for part of its length projects above the checks so that the name can be readily seen. These are arranged alphabetically, and additional checks can be easily inserted from day to day until such time as the pass-book may come in to be balanced. When that happens, the book goes first to the check-clerk, who takes out the paid checks and other vouchers and enters the amount of each on the credit-page. If there is a large number, the checks may be listed on the adding-machine and only the footing entered in the book, the list being returned with the canceled checks. The charge-tickets for any other debits to the depositor, which are credits to the bank, representing charges for " exchange " in collecting out-of-town items or any payments of the bank on the depositor's account, have been filed away with the checks and are included with them as vouchers. Thus prepared, the pass-book goes to the bookkeeper in charge of the " individual ledger " to be verified and " proved " by comparison with his entries. The balance being struck, the book is ready to be called for by the depositor, who receipts with his signature or initials, on the page where the balance is stated, for the number and amount of the vouchers returned.

In some banks, instead of making separate entries of the paid checks and charge-tickets in the pass-book or listing them when the book is balanced, a voucher-list is kept upon which the entries are made when the checks or tickets are charged up. This is complete when the pass-book is balanced and is footed up, and accompanies the book when the total has been entered. In a few large



FACE AND BACK OF PAID AND CANCELED CHECK.

banks the practise has been adopted of having an "information-clerk" as an intermediary between the depositors and the clerks and bookkeepers who deal directly with their accounts. He has a desk, and a window open to the public, and it is his business to answer general questions and give information, but his particular charge is the pass-books when left to be balanced. He receives them, looks up the checks, and sees to the verification by the bookkeepers. If there are any inquiries or any errors to be corrected, he attends to these details and has charge of the books until they are called for. One object is to relieve the check-clerks and bookkeepers of this particular work and to concentrate responsibility for it. Incidentally it is a precaution against any possible collusion between a depositor and those having charge of his account. When the checks have been returned to those who drew them, they have final evidence that the payments these represent have been made by the bank.

XIV

COLLECTION DEPARTMENT

There is in most large banks a separate department for making collections for customers upon other items than those payable on demand. The latter have been already explained as made at once through the note-teller in the city and through the corresponding clerk out of town. But if a customer has a time-draft or a note to be collected, instead of attending to the matter himself, he may leave the " item " with the collection-clerk of his bank any time before maturity and have it attended to for him. If he has much of this kind of collection to be done he may have a special pass-book for it, but ordinarily the clerk will enter the items in the back part of his deposit pass-book. Then he will make a careful record in a collection register. Where there is much of this kind of business he will keep two registers, one for city and one for " foreign " or out-of-town collections. The items are consecutively numbered in the books and entries are made in the City Collections Register of the date upon which the items are left, the name of the signer of a note or the person upon whom a draft is drawn, the date when payable, the name of the person for whom the collection is made, and the amount. There is also a column for noting the result, as " paid and credited," " returned unpaid," etc. In the Foreign Collections Register besides these there are entries of the place where payable and the correspondents to whom the items are sent. The clerk also keeps a book called a "tickler," which has a page for each day, and the items are entered in this under the date on which they become payable, so that by looking ahead he can always tell what notes and drafts are maturing day by day. The notes and drafts themselves are kept in a large wallet arranged in the order of maturing.

On the day before any city item becomes due, or on the morning of that day, it is turned over to the note-teller and he includes it with those sent out by messenger for collection. He receives the payment as in the case of demand items, and accounts for it in the same way, adding it to his credits to customers for that day. Then it is credited for the first time on the ledgers to the person for whom it is collected. If it is a "foreign item," it is turned over to the corresponding clerk long enough before the due date to have it sent to a correspondent for collection in proper time. Collections are made by the correspondent, and the manner of remitting and crediting is substantially the same as in the case of checks. Foreign demand drafts are sent to correspondents in the same manner. The remittances come to the mail-teller, or, where there is none, to the corresponding clerk, to be turned over to the note-teller, and then the proper "credits" and "charges" are made upon the books.

Sometimes sight drafts or checks are placed in the hands of the collection-clerk, instead of going directly to the note-teller or corresponding clerk, but only when collection is to be made under some special instruction, or in some exceptional way outside of the ordinary routine. The collection department is in a way supplementary or subsidiary to those of the note-teller and corresponding clerk, and covers cases requiring time or special methods to secure payment.

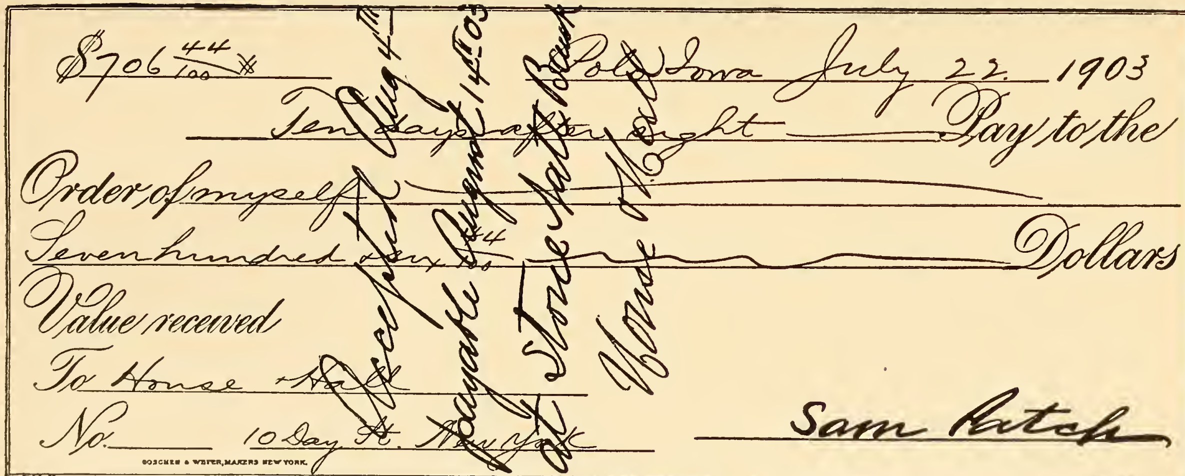
In some banks an important part of the work of this department is collecting coupons left for the purpose before they have matured for payment. In others this is attended to by a separate coupon-clerk, but in either case a systematic record is kept of the coupons, with the names of those to whom they belong, the bonds from which they have been detached, the amounts, the persons, corporations, or officers from whom, and the places at which the collections are to be made, and the dates of maturity. There may be a large accumulation of these, adding materially to deposits when they are collected. It is no uncommon thing for persons going away for a long absence to leave their coupons at the bank for months ahead, to be collected and credited as they mature. The collection is made through the note-teller, or "city office," or through the correspondence department, according as they may be payable in town or elsewhere, and the proceeds pass finally through the note-teller's account in all cases. It is his business to account for all cash receipts that do not come to the receiving teller.

XV

DRAFTS AND DOMESTIC EXCHANGE

Personal drafts differ from checks in being drawn by one person upon another and not upon a bank. A draft may be an order of one person upon another to pay a third, or it may be an order to pay the drawer himself. It may be payable " at sight," which means as soon as it is presented, or it may be payable after a specified number of days or upon a particular date. In the latter case it is usually presented for " acceptance," and this is indicated by the person upon whom it is drawn writing across its face the word " Accepted," with date and signature. It is then commonly called an " acceptance." A person receiving a draft drawn upon another may present it himself, but nowadays it is usual to leave it with a bank for collection. If it is a sight draft it may be indorsed and deposited like a check, as we have already seen, and if it is made payable at a bank it may go through the exchanges like a check after being certified as accepted by the bank. Otherwise, it will be collected " by hand." If it is a " time-draft," it will be left for collection, presented at once for acceptance by the bank's messenger, and then kept to be collected at maturity.

Business men in different places having dealings with each other make considerable use of this form of draft. For instance, a merchant in one city may buy and sell in the same place some distance away and therefore have occasion both to make payments there and to collect pay-



$706 \frac{44}{100}$ ——— Polo, Iowa July 22. 1903

Ten days after sight Pay to the

Order of myself

Seven hundred & six $\frac{44}{100}$ Dollars

Value received

To House & Hall

No. 10 Day St. New York

Sam Patch

Accepted Aug 4th

Payable August 14th 03

at Trade National Bank

House & Hall

GOSCHEN & WEBER, MAKERS NEW YORK.

Sample of Accepted Draft.

ments due him. Instead of sending money or a check to a person whom he owes and having the person who owes him remit in the same way, he will draw a draft upon his debtor, ordering him to pay a specified sum to his creditor, and will send this to the latter, who may collect the amount or have it done by his bank. The same method may be used at the other end of the line and between different places in all directions. The result, where there are many accounts running, will be continual payments by transfers between debtors and creditors in the same place, instead of by sending money or checks back and forth between different places. These accounts are not likely to balance between persons or between places, and there will be balances to settle by checks or by remittances of money from time to time. Both in making the transfers and the remittances banks play the leading part. Drafts when paid through banks come back to the drawers like checks.

Another form of draft largely used is drawn payable to the order of the person who draws it. Many large transactions are effected by the use of such drafts. To illustrate, we will suppose that a merchant in New York or Boston is sending goods to a dealer in Chicago, or any other distant place. He consigns the goods to his customer and has a bill of lading made out when they are shipped. He draws upon his customer for the amount of the bill, attaches the draft to the bill of lading, and takes it to his bank. The bank may advance the amount, giving him credit for it at once and make collection for itself, or more commonly it will take it for collection and credit him with the proceeds and charge him for "exchange" after the collection is made. The bill of lading gives the bank title to the goods until they are paid for. It sends the draft with the bill attached to a bank in the place where the goods are to be delivered and that bank attends to the collection. It presents the draft for payment, and does not surrender the bill of lading so as to permit the consignee to get the merchandise, until the draft is paid. Then it credits the amount to the Eastern bank, and in the course of subsequent exchange it goes back to that bank and ultimately to the drawer, paid and canceled. A time-draft may be used in securing payments of this kind, if there is an agreement to that effect between the parties. In that case it is presented when received by the distant bank for "acceptance" and held for collection until its maturity. Whether the bill of lading is surrendered on acceptance, thereby permitting the delivery of the goods, or held until payment, will depend upon instructions. Time-drafts are not much used for this purpose, and only those of short date, unless the merchandise is to be stored and kept for some time.

The same method is used in collecting payment in the opposite direction. We will suppose, for instance, that a man is engaged in shipping grain from Minneapolis or Duluth to Chicago, and it is to be despatched thence, part to New York, part to Boston, and part to Philadelphia or Baltimore, some for the home market and some for export. He sends a cargo or a train-load to the dealer in Chicago and draws upon him for payment, turning the draft and bill of lading over to his bank, which sends it to a bank in Chicago for collection. Thence the bulk of grain may be divided, and part retained in the city by the lake and part sent in different directions to various consignees upon whom drafts will be drawn. These, with separate bills of lading attached, will be placed with a Chicago bank to be forwarded along the different lines to banks at the points of destination, and they will see to their collection from the several consignees before the bills of lading are given up and the grain is delivered. Parts of this cargo or train-load may be "billed through" to the Eastern destination instead of going through any transfer at Chicago. In that case the drafts and bills of lading pertaining to those parts will be sent direct from the bank at the starting-point to that in the Eastern city to which the grain is destined.

Assuming now that a draft has reached New York with a bill of lading attached for certain car-loads of grain, the bank receiving it will present it for payment and when it is paid will give up the bill of lading and credit the Western bank with the amount collected, which that bank has already paid to its own customer. Charges for collection, or "exchange," will be duly made by the banks concerned in the transaction, and these will be met by the recipient of the money collected.

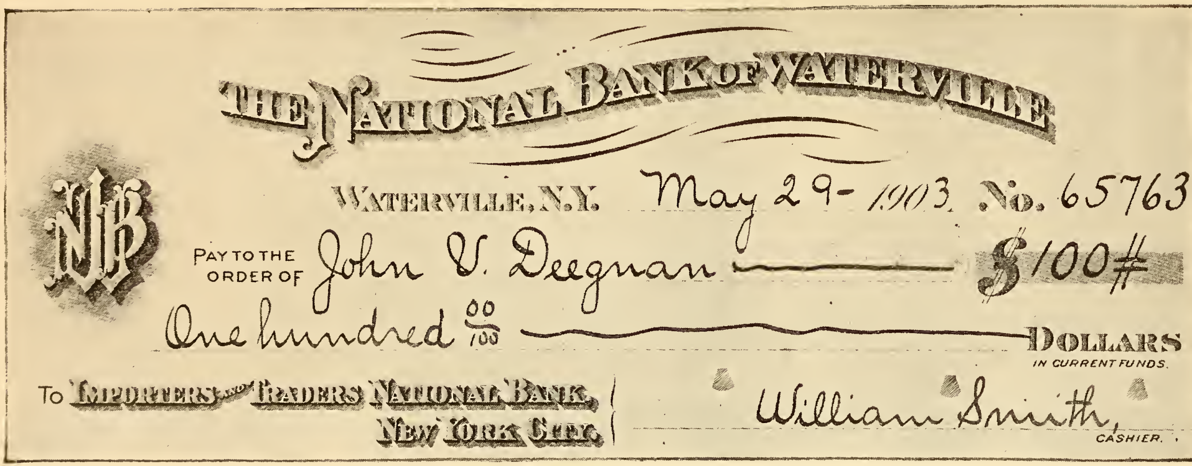
Supposing this grain or a part of it is for export, there will be another banking operation in drawing a foreign bill of exchange upon the consignee abroad and attaching a new bill of lading to that, which bill of exchange will be sold to a bank or banking-house. This kind of business is attended to mostly by private banking concerns having foreign connections, which will be the subject of a separate chapter later on, but it has come to be more or less a practise to ship grain from Chicago or even farther West, intended for export, on "through bills of lading" to a foreign consignee. In that case the intermediate collections of those concerned in the operation are made on domestic drafts, and the foreign bills of exchange are drawn at the port of shipment, the same bill of lading accompanying the successive drafts and the final bills of exchange. The through bill of lading chiefly concerns the business of transportation, and through freight-rates are made, apportioned by agreement between railroad and steamship lines. The principle and method are essentially the same if the shipment is of cattle or provisions from the West, or of cotton or tobacco from the South, or of any of the products of the interior to places on the borders of the land. It is in this large traffic that drafts of the kind described are mostly used, and it is an important service of banks to facilitate this sort of interchange.

Some of the products consigned to central points of distribution, East, West, or South, whether intended for the domestic market or for export, may not be sold or shipped at once. In that case they are usually stored in warehouses and negotiable receipts are given for them. On the security of these, which may transfer title to the goods by appropriate indorsement, money may be borrowed from banks. This is a matter that belongs to the subject of loans, to be considered in another chapter, but it is proper to mention here that it is no uncommon thing to make arrangement with the bank for borrowing money on the warehouse-receipts to pay the drafts and obtain the bills of lading that represent the original purchase of the merchandise.

There are other forms of making payments and collections between distant places in which banks play an important part. Traders in different cities may keep running accounts with each other and make periodical settlements. If one wishes to send a considerable sum, we will say from Chicago to New York, he may buy from his bank what is sometimes called a "bank-draft," but what is usually in effect a check of that bank drawn upon a bank in New York with which it keeps an account. The Chicago bank very likely has checks and drafts drawn upon New York which have been deposited with it or left for collection, and it sends these on for deposit to cover the draft it has sold to its customer. This is known as selling New York exchange. Of course a corresponding transaction may take place in New York, a bank selling its draft, or check, on Chicago and sending Chicago checks and drafts that it has received from customers to cover it. The same proceeding is going on between all manner of places, but drafts upon New York banks or those of some other financial center are much used in making remittances between smaller places because these are always in demand. New York exchange especially is used all over the country, because that is the chief distributing point, and a great volume of payments is being made to it and from it all the time. To a less extent and for greater or larger sections of the country this is true of other cities, but there is a convergence of financial lines upon New York from the other leading centers and from many subordinate points, either direct or through these other centers. If the network were visible it would appear like an intricately tangled web, but payments and receipts are running smoothly over its lines all the time, though there may be occasional hitches and breaks.

There are still other ways of transmitting funds and transferring credits by the instrumentality of banks. Suppose a man in New York wishes to make a direct payment of cash to a man in Chicago. He need not send it by mail or express, but pay it in at his own bank and obtain a "letter of advice," addressed by that bank to a bank in Chicago directing it to pay the money on presentation of the letter. The New York man sends this "letter of advice" to his friend or creditor in the distant city, and he can go to the bank to which it is directed and obtain the money, the two banks settling between themselves. The small charge for this service is an insurance against loss of the money in transit and saves the expense of transmittal. No money passes between the banks on that particular transaction, but only a transfer of credits, the bank making the payment charging it to the bank that received the money, and the latter crediting it to the former.

Instead of a letter of advice, a certificate of deposit may be used for a transfer of cash to a distant point. These instruments will be dealt with farther on, but as they enter



THE NATIONAL BANK OF WATERVILLE

WATERVILLE, N.Y. May 29- 1903 No. 65763

PAY TO THE ORDER OF John V. Deegnan $100#

One hundred 00/100 DOLLARS
IN CURRENT FUNDS.

To IMPORTERS AND TRADERS NATIONAL BANK,
NEW YORK CITY.

William Smith,
CASHIER.

BANK DRAFT, OR CHECK OF COUNTRY BANK UPON A NEW YORK BANK.

into domestic exchange it may simply be stated here that by depositing a certain sum in a bank a person may obtain a certificate of that fact which will direct its payment to another person. The other person, if at a distance, will have no difficulty in getting the certificate cashed, or the amount credited to him by a bank in the place where he is. Letters of credit, which will also be spoken of hereafter, are obtained by paying money to a bank in one place and used in getting the money from banks or bankers in other places. All these things are referred to here as entering into the operations known collectively as "domestic exchange."

In domestic exchange is involved those payments and collections within the country which are effected between places at a greater or less distance from each other by transfers of credits and debits and the offsetting of accounts payable and accounts receivable through the agency of banks. There can never be an exact balancing and offsetting of these accounts, but there must be a frequent settling of balances in cash, and money must be sent back and forth to a greater or less extent. It is an important function of banking to reduce this necessity as much as possible by extending the utility of credit as a means for effecting exchange to the utmost limit, for in the use of credit in place of money there is great economy.

Out of the varying inequality between credit and debit accounts and the necessity of settling balances arise what is known as "rates of exchange." At Chicago or New Orleans exchange upon New York may be at par at one time, at a premium at another time, and at a discount at yet another. This applies at any centers of business between which exchange operations go on. Smaller places make their settlements in or through the larger ones, and the main transactions go on between a few leading cities, with converging lines on New York, because its banking operations considerably exceed in volume those of all the rest of the country and are intimately connected with them. We can best understand this matter of fluctuating rates of exchange and the actual movement of money in settling balances by taking up concrete instances.

It will be understood from what has been already said that credits are being all the time created in banks in one city on account of banks in other cities and are being continually drawn upon. Suppose now that importers and jobbers in New York are sending out large amounts of merchandise in foreign and domestic manufactured goods for distribution in the West and South. They are drawing heavily upon Chicago, Cincinnati, St. Louis, New Orleans, and other distributing points for payment, having their own drafts collected or receiving checks and drafts from their customers and piling up credits in the New York banks at the expense of those in the other places. For the sake of simplicity we will concentrate attention upon Chicago. When the balance of traffic is strongly westward and the larger amount of payments is made in New York, there will be an accumulation of local credits there and a depletion of those of the Chicago banks. A man in New York who at such a time has payments to make in Chicago will have no difficulty in buying the exchange. In fact, there will be so much offered by competing banks that it will be at a discount, because the supply exceeds the demand.

How much "below par" will it go? That depends upon how much it will cost to bring actual money from Chicago to New York to pay off some of the balances rolling up against it and reduce the volume of obligations. The banks, rather than sell their exchange below the margin of that cost, will draw the money from their correspondents, forcing the Chicago banks to curtail their loans and reduce their reserves. At the same time New York exchange will be scarce and at a premium in Chicago. There will not be enough to cover the remittances required, and when the premium goes to the limit of the cost of sending cash to build up credits to be drawn upon, the cash will be sent. Suppose the cost of sending money by express from one city to the other to be fifteen cents per thousand dollars. Then, when the discount in New York or the premium in Chicago reaches that limit, the banks will arrange for the transfer of money to the East rather than have the rate of exchange go any further. Thus it happens that when the value of merchandise going from the Atlantic coast to the interior exceeds that of the commodities going to markets of the East, there will be a movement of currency to New York.

Now take the reverse case. At the beginning of the autumn, when the great crops of grain begin to be sent from the West and cotton begins to move from the South, there is a call for money from those sections. There are payments to be made to harvest-hands and to farmers and for expenses of local transportation, and when the products begin to be consigned to Eastern dealers heavy drafts are made upon New York. Exchange upon that place will become plentiful and fall to a discount. As the funds of Western banks become depleted and their New York credits heavy, there will be a transfer of actual currency to the interior to meet the accumulated obligations there and reduce the balances so as to keep the rate of exchange down to the limit of the cost of making this transfer, which will be equal to express charges and insurance. The matter is arranged between the banks according to the condition of their accounts with each other and their mutual interests, and ordinarily their customers will have nothing directly to do with sending the money that affects their individual transactions. They will merely buy exchange at the ruling rate, as they have occasion, and the rate will be practically determined by the action of the banks. Usually money is sent by express from one bank to another, but sometimes it is deposited with the United States Sub-Treasury, which will order its payment by the Sub-Treasury at the other end of the line by telegraph. The advantage of this lies in the promptness and safety of the transfer, which can be made immediately. There may be occasions when that is important.

This movement of money eastward at one season and westward at another, or from and to "the interior," is of course not a transmission over any single line, but over several, and it involves distribution locally over many. Its effect upon the money market has become a familiar subject of discussion. It appears most conspicuously in New York during the "crop-moving season," because there and then it is most concentrated. It causes a considerable withdrawal of funds which banks in the interior have kept on deposit in New York, and which the latter have used in the loan market. Western banks sometimes loan funds in New York on their own account through their agents or brokers, and these are liable to be withdrawn when there is use for them at home. The result may be, and usually is, a stringency in the New York money market. The reserves are drawn upon and loans have to be called in, with the effect of curtailing deposits, and interest rates are advanced. The effect is felt not only on the Stock Exchange, where much borrowed money is used, but in commercial circles as well. It is even extended to foreign exchange and the movement of gold, as we shall have occasion to note when dealing with that subject.

This stringency, produced by the interior movement of money, may be aggravated by the action of the United States Treasury in making its collections and disbursements, which never closely correspond in volume and time. When it is collecting more than it pays out, it draws money on balance from the banks and keeps it out of the channels of circulation. This effect is mitigated, when there is a large surplus of receipts, by the deposit of public money in designated national banks instead of keeping it locked up in the Sub-Treasury, but customs receipts can not under the present law be so deposited, and banks receiving public deposits have to give security for safe-keeping and repayment by lodging Government bonds with the United States Treasury, " and otherwise," according to the requirements of the Secretary of the Treasury. Relief is sometimes given to the money market not only by increasing these deposits, but by making extra payments in anticipating interest on Government bonds or buying up some of those obligations for the sinking fund.

A tendency of the increased demand for currency at such times is to induce the banks to put out more circulation, but this does not work promptly or easily, because of the necessity of buying Government bonds to secure the additional circulation, and the restriction put upon its withdrawal when it is once out. Not more than $3,000,000 a month in the aggregate can be retired under the existing law, and legal-tender notes have to be deposited with the Treasurer to take up the bond security and provide for the redemption of the notes. If the banks could issue their notes, when more currency was needed, on their credit and the security of their own resources, and were made exclusively responsible for their redemption on demand, they could adjust the volume of this part of the national currency to the varying requirements of business in different periods of the year. The course of domestic exchange is materially affected by the system of regulating bank-note circulation.

The reader will of course understand that in dealing with the subject in this concrete way, it is intended to illustrate the principle and working of domestic exchange, and will see for himself the application in the innumerable transactions that are all the time going on not only between the principal centers in different sections of the country, but between all manner of places having business relations with each other. But balances between smaller places and within narrower limits are mostly settled by exchange, or drafts upon financial centers, and the actual transfers of money in considerable amount for final settlements are made only between these centers. New York is the main point upon which the lines converge and from which they diverge in the vast network of banking operations, though they intersect and spread from numerous other points of varying importance.

XVI

DISCOUNTS AND COMMERCIAL PAPER

We come now to the principal business of the bank, that for which it has resources of its own in capital and accumulated surplus, and for which it receives the funds of others, making payments and collections for them at considerable expense. That business is lending money, or, more strictly, it is lending credit based upon its resources in money. Few realize how largely, in the modern development of production and trade, business is conducted by borrowing. The most important form of the bank's lending is that known as discounting commercial paper. It is that which furnishes the largest accommodation to the mercantile community and does most to facilitate the operations of trade. As the greater includes the less, the more complex the simpler, we will deal with this subject as it appears in the working of a large down-town bank in New York city, only referring incidentally to variations from its methods as it may seem necessary to a full understanding.

Discounting, as the reader doubtless understands, differs from ordinary lending on a promissory note in deducting the interest, at the rate and for the time agreed upon, at the beginning of the transaction, instead of adding it to the repayment at the end. Strictly speaking, banks discount paper only for their own customers, but they buy the notes of others, and that, as a loaning operation, comes to the same thing, since they advance the amount of the note less their charge for the use of their credit, and collect at maturity the same as in the other case. Purchased notes are included in "bills discounted" in the bank's operations. But in discounting for a customer he is credited on his account with the sum advanced, instead of receiving the money or a check to be deposited elsewhere, and it is partly in that way that deposits are created by loans. They are not only thus created in the bank making a discount, but when it gives a check for a note they are created in the bank where that check is deposited. That in part explains why "deposits" and "loans and discounts" so nearly keep pace with each other in bank statements, and why in active times they may both be several times the amount of cash reserve held to meet accruing liabilities, and largely in excess of capital and surplus.

One common form of commercial paper subject to discount is known as "bills receivable." A jobber or wholesale dealer sells goods on time, taking his customer's notes for thirty, sixty, or ninety days in payment. Instead of waiting for these to mature before getting his money, he indorses them over to his bank and gets it to discount them. Thereby he gets the money, less the interest, to his credit at once, and the bank undertakes to reimburse itself by collecting the notes at maturity. Whether such paper will be taken depends upon the standing and credit of the parties, for banks seek to reduce the risk of loss as much as possible, and nowadays inquire closely into credit, as we shall have occasion to see a little farther on. The indorsement makes the customer responsible for payment, but the bank wishes to be satisfied of the responsible character of the maker as well. The rate of discount is somewhat affected by the strength of credit represented by the paper. This form of commercial paper is relatively less common than formerly, because dealers are less disposed to give this kind of credit, and prefer to make a reduction from the price at which they sell "for cash."

But there is an interval between their buying and selling that makes this class of traders large borrowers from the banks, even when they do not have bills receivable discounted. Though they may have ample capital, it pays them when business is thriving to borrow for their large purchases and to repay from the proceeds of their smaller sales. Much of their borrowing is done by offering their own notes for discount. These are known as "single-name paper," or they may be strengthened by receiving the indorsement of some other person or firm of high standing, when they become "double-name" or "indorsed" paper. The rate may be made lower by a strong indorsement. Such paper may run for thirty, sixty, or ninety days, or for four or six months, or even a year. The rate charged will be affected by the time as well as the names. Instead of offering his note to his own bank for discount, a man may sell it to another bank, or more likely to a note-broker, who may dispose of it to a bank. There is a large business of this kind done, as it enables a borrower to distribute his obligations to advantage, and the brokers serve to bring the demand and supply together. All this, which is in effect loaning upon commercial paper, comes within the purview of the bank's discount department. Except in the largest banks there is a single department of "loans and discounts," but we will deal with discounting as a separate matter under the charge of a discount-clerk.

When an application is made for a discount the first thing to be done is to inquire into the advisability of granting it, a matter which is usually entrusted to the discretion of the president or vice-president, subject to the authority and responsibility of the directors or a committee to which they have deputed it. One consideration is the condition

$392 15/100

Meade I. T. July 8. 1903

Ninety days after date we promise to pay to the order of Green & Brown

Three hundred & ninety two 15/100 Dollars

at Rowe Co. State Bank Chicago Ill.

Value received

No. Due Oct. 6.

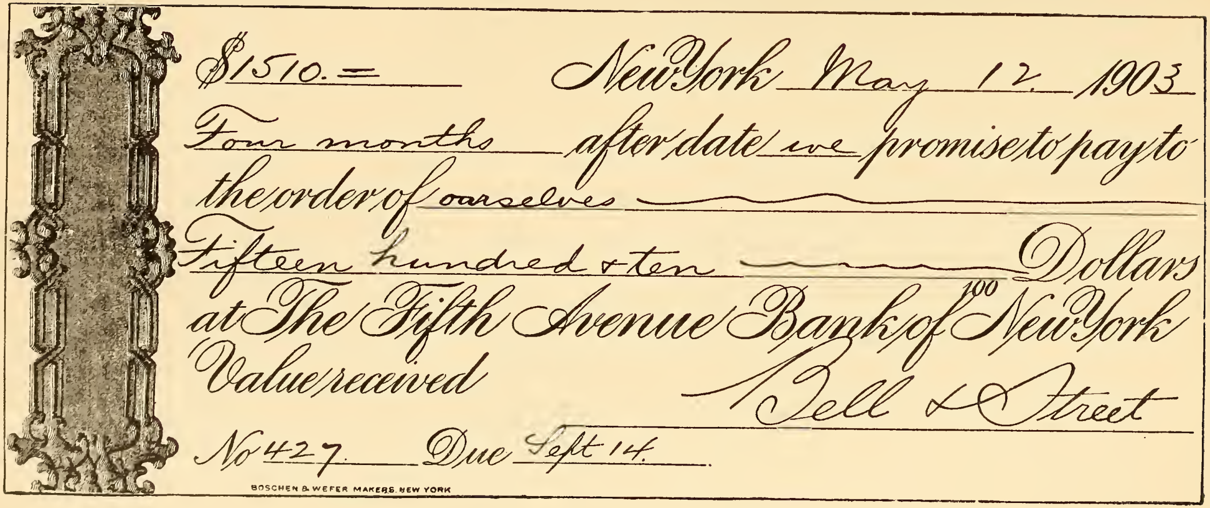
Gray & White

[illegible] MAKERS NEW YORK

FORM OF BILL RECEIVABLE.

of the bank's funds and the state of its loan account. A national bank is not permitted to loan more than ten per cent of the amount of its capital to any one borrower, and in a reserve city it must maintain a cash reserve equal to twenty-five per cent of deposits. Whether or not the applicant is a regular customer, and, if so, the value to the bank of his account, are considered. Preference is given to regular depositors, with discrimination according to their title to accommodation from a business point of view. If the application is from an outside person, the credit and standing of the applicant is closely scrutinized. We shall refer to this scrutiny more fully in treating of the credit department, but for the present will give attention only to the manner of negotiating discounts.

If the application is entertained at all it is entered in an "offering-book," with the name of the maker of the paper and that of the indorser, if any, the due date, the rate of discount, and the amount. The application is referred to the credit department, which makes a report containing certain items regarding the applicant's standing and credit and the state of his account. Then, if approved by the proper officer, the paper is taken in charge by the discount-clerk, the credit is entered to the customer's account, or, if it is a purchased note, the bank's check is given. The clerk keeps a "discount-register," in which all notes are recorded with consecutive numbers and under the date of discounting, with entries in separate columns of the names of makers and indorsers, interest rate, due date, and amount of loan. A "tickler," or book with pages consecutively dated, is also kept, in which they are entered under the date at which they become payable, so that the distribution of this class of outstanding loans may be readily ascertained and the time of making collection may be easily kept in mind from day to day. The notes themselves are carefully put away in large bank-wallets


$1510.00

New York May 12 1903

Four months after date we promise to pay to

the order of ourselves

Fifteen hundred & ten $\frac{00}{100}$ Dollars

at The Fifth Avenue Bank of New York

Value received

Bell & Street

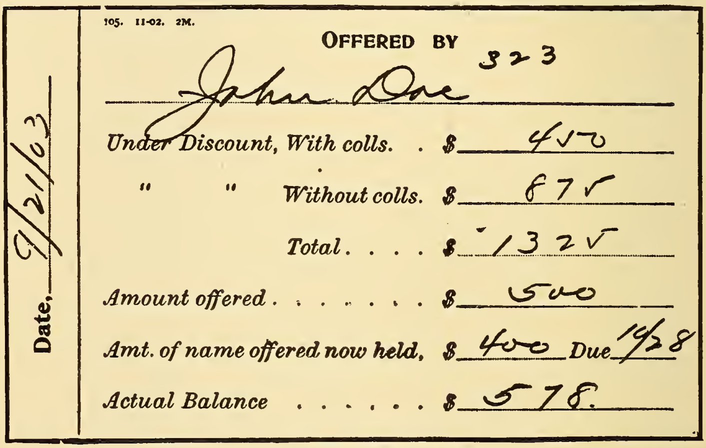
No 427 Due Sept 14.

BOSCHEN & WEFER MAKERS NEW YORK

Sample of Single-Name Paper.

with many compartments, arranged in the order of the "due dates." A transcript is made each day from the discount-register of the "bills discounted" for the use of the credit-clerk, who keeps a close account of all such transactions.

When the time of payment is at hand the notes are taken out and turned over to the note-teller for collection, with a proper exchange of memoranda. Notice may or



105. 11-02. 2M.

OFFERED BY 323

John Doe

Under Discount, With colls. . $ 450

" " Without colls. $ 875

Total . . . . $ 1325

Amount offered . . . . $ 500

Amt. of name offered now held, $ 400 Due 10/28

Actual Balance . . . . $ 578.

Date, 9/21/03

Report on Offering for Discount.

may not have been sent beforehand to the makers. The practise differs with different banks, but in any case the note-teller attends to the collection, if the payment is to be made in the city. If the discount has been made for a regular customer, he is presumed to have prepared for the payment by keeping up his deposit sufficiently to cover it, and he draws his check for the amount due, payable to the order of the bank, and it is charged to his account and credited to "bills discounted" on the ledgers. If the discount is on a purchased note, payment may be made with a check on some other bank or in any regular way. It is then credited to "bills discounted," and the payment is accounted for through the note-teller's work and charged in his regular debits, unless collection is to be made out of town, in which case a "charge" is made to "collections." The transaction is closed when all the bookkeeping entries have been duly made.

Discounts are made not only to customers and on the notes of persons, firms, and corporations in the city, but on notes of out-of-town concerns and "country banks." Where the collections are to be made out of town the notes are turned over to the corresponding clerk instead of the note-teller, to be sent out for collection, but all bills discounted should be made payable at some bank. With some discounting banks it is a requirement. It is only when remittances are made that the matter comes into the hands of the note-teller, or the mail-teller, who is his auxiliary in this branch of collecting, and the payments are duly recorded and accounted for as in other cases.

There is in some of the large New York banks much discounting for smaller banks in different parts of the country, some of them in remote sections of the West and South. Direct rediscounting of notes taken by other banks is a common practise with the great banking institutions of Europe, and it prevails to a restricted extent in this country between strong banks in large cities and their correspondents. In such cases the smaller banks discount for their customers at a high local rate, and indorse the notes and have them rediscounted at a lower rate by large city banks. But it is more common in New York, where many deposits of country banks are kept, to make the advances directly to the banks on their own "paper," taking the discounted notes that they hold as "collateral" and as evidence that the various sums represented thereby are due to them upon certain dates. For instance, a small bank in Texas may make advances to planters and dealers in its section upon their notes with all sorts of security, and upon the basis of these it may borrow from a New York bank to help carry its mass of small loans. The New York bank, if satisfied of its sound condition and credit, of which it requires abundant evidence, will discount its note for such amount as it requires, receiving payment in the regular way of such remote transactions when the note matures. The payment may be made by draft or check based upon New York exchange. By that time the customers of the distant bank are ready to take up their notes, and they are returned to it on the discharge of its own debt.

Many accounts of this kind are constantly running between New York banks and borrowing institutions all over the country. The latter make their profit on the difference between their local rates and those of the financial center, while the abundant funds that accumulate in New York find part of their employment in all manner of distant places. This diffuses their credit widely in assisting production, industry, and trade, and at the bottom of their credit are their resources in capital, their general deposits, their cash reserve, and their skilful management. The revenue from discounting commercial paper is derived from the excess of the repayments over the advances, less the cost of conducting this branch of the business.

The practise of buying notes on an option remains to be noticed. A note-broker or a banking firm offers paper to a bank upon representations of its credit that appear satisfactory on their face, and the bank may take it with the option of returning it on a subsequent date, usually within a day or two, if not satisfied with its own verification of the business credit of the parties. If so satisfied, the discount is confirmed and takes its course. If not, it is crossed off and the note is returned to the broker or banker who offered it, to be taken elsewhere.

Before leaving this subject a word should be said about what determines the rate of discount. In a general way it is the same principle that determines the price of anything else, the relation between supply and demand, for the interest on money loaned is the price paid for its use. It is sometimes spoken of as the "value of money," but that is a misnomer. When "money is plenty," which practically means when funds available for loans are abundant, and when, on account of dulness in business or for any other cause, the demand is light, rates will be low because banks are competing with each other for borrowers to keep their funds in use. When business is active and money is kept moving in large volume, there may be a heavy demand for discounts and loans in proportion to the supply of available funds, and then rates will be high. In these conditions much will also depend upon the general state of confidence, which is higher in active than in dull times, and leads to ready borrowing and the extension of credit. Though credit plays such a large part in all business and banking operations, a solid mass of standard money must be at the bottom of them, and the expansion can not go beyond a certain relation to its volume. Consequently the volume of money in circulation and in the reserves of banks is one factor in determining the rates of interest, or of discount, which is virtually the same thing. An ample volume of sound money will contribute to ease and low rates in the loan market, and a restricted amount will tend to curtail credits and make rates high.

But in the last analysis the general level of interest rates, or the price for the use of money, is determined by the general rate of profit to be derived from the use of capital in the business of the country. Competition in various employments for capital tends to bring this to a certain level. Where that level is high, owing to the conditions of industry and trade in the country, the rate that will be paid for the use of borrowed capital is correspondingly high. Where the profits to be derived from the employment of capital are moderate or small, interest rates are correspondingly low. Within the range of the influences determining what may be called the "general rate" or price for the use of money or of credit, differences will be caused by a variety of circumstances. Banks will charge more where there is any element of doubt as to the credit of the borrower or the value of his security. The extra charge is in the nature of an insurance against possible loss. The time for which the loan is to run will also be a factor in determining the rate to be paid for it, though that does not always work in the same way. When there is a prospect of a falling off in the demand and a decline in the general rate, banks will favor long-time paper and make some concession on the rate prevailing at the moment. If there is a prospect of an increased demand and an advance in the general rate, they will be averse to putting out credit for long terms and will charge more. It is a matter of constant and skilful calculating to adjust rates to the best advantage for the banks and for the community.

XVII

CREDIT DEPARTMENT

One of the most important developments in modern banking is the establishment of a thorough system of investigation and record of the credit of those to whom advances are made on negotiable paper. Where loans are made upon salable collateral securities with a fair margin of value above the amount loaned, this credit is a matter of less moment. Payment is assured by the power to appropriate and sell the securities, but in the case of the discount of commercial paper, or accommodation resting upon personal or corporate credit, the sole guarantee is the character, responsibility, and financial resources of the borrower, and of these a conservative and carefully managed bank requires the most conclusive evidence. In a small town, where business relations are simple, bank officers may have or may readily obtain sufficient knowledge of the affairs of their customers to need no elaborate system of inquiry, and the extent to which safeguards are adopted vary according to the volume and complexity of the operations in which the bank is engaged and the care with which it is managed.

What a bank lets out at a certain rate of compensation is virtually its own credit, not money, but the power to get money. Its credit it must be able to make good at all times by promptly meeting its obligations, and when it loans it out and only takes the credit of its customers in return, the latter must be based upon substantial resources which it can reach and appropriate in default of payment. Credit is nothing in itself but the power to command value, and the value must exist and be at its command. When a bank accepts a "promise to pay" for the use of its own resources, it has the right to assure itself in the most absolute manner of the ability and readiness of its creditor to make the promise good. If it is in the midst of a great commercial and financial community, intricately connected with the complex system of industry and trade of the whole country; if it has millions of deposits to care for and keep in profitable use; if it is subject to constant applications for advances on mere paper-credit from men engaged in all manner of enterprises and operations, it will find it necessary to take the utmost pains to assure itself that the credit it accepts has a sure foundation. Otherwise it will be liable to incur losses that will bring it to grief sooner or later. Some banks take more risks than others and find occasion to write off more losses. The strongest and most successful are those that have the most thorough and efficient credit departments, and we will assume that we are dealing with such a one in the city of New York.

It is equipped with a competent credit-clerk and a force of assistants, and it has a variety of forms and blanks and books of record for its use. It is kept in touch with all that is done in the discount department and keeps a record of it. It is prepared to furnish that department with all the information at its command, and its chief business is to accumulate information and have it so systematically arranged that it can be brought into instant requisition. It has a vault in which its accumulated information is stored, systematically arranged, and in which constant additions are made to it. This is lined with drawers arranged on the card-index principle. In one set of drawers cards are kept upon which is recorded the average monthly balance of every customer that has an account with the bank. These cards usually have a pocket in the back in which special memoranda may be put, and as they are alphabetically arranged it is but the work of a moment to ascertain in a general way the value of the account and the title of the depositor to accommodation. In another set of drawers is a series of "folders" of strong pasteboard so doubled as to form a compartment or receptacle in which a considerable volume of papers may be held apart from all others. There is one for each customer or borrower and every individual, firm, or corporation whose credit has been a subject of inquiry, and upon a projecting edge, sometimes a narrow bevel of wood, the name is inscribed or pasted. This set of drawers may be divided into two or even three separate sections, one for "active" records or those that have frequently to be consulted, one for those that are less used, and one for those that have passed out of use altogether and become only a matter of history. Still another set of drawers is used for banks with which the bank keeping these records has dealings and with whose credit it is concerned.

When an application for a discount, or an "offering" of paper, is made there are several questions to be considered. One is the state of the bank's funds and its outstanding loans and discounts, with their various dates of maturity. Another is the claim of the applicant to accommodation, preference being given to depositors and regular customers, with due regard for the value of their custom to the bank. Beyond that is the all-important question of credit. Statements are required from the applicants, and uniform blanks have been devised and agreed upon by the bank associations of several States, which are in common use by those banks that give careful attention to this subject. There are separate forms for individual borrowers, for firms, for corporations, and for banks. There are in fact two sets, one of short forms and one of long forms, the former being used where minute inquiry is not deemed necessary, and the latter when thorough detail is required. These blanks call for information regarding the business and resources of the applicants, the amount and distribution of their capital, the various items of their assets and liabilities, the investment and employment of their funds, the character and value of their property of various kinds, buildings, machinery, appliances, stocks of goods, cash on hand and in bank, etc., the amount and cost of business done, profits, etc.; in short, everything that will give a creditor full knowledge of the risk he is taking and full assurance of the capacity of the borrower to meet all his obligations.

When these statements have been filled out with such detail as may be required in the individual case, and have been duly signed and dated, they are relied upon only so far as they are verified and confirmed either by knowledge of the parties or by inquiry. It is the business of the credit-clerk to supplement them to the fullest extent practicable by reference to the commercial agencies, by personal inquiry or correspondence, and an alert use of all available sources of information, and to keep the record constantly up to date through all the fluctuations and vicissitudes of business. Important subjects of inquiry are the personal character and habits and the reputation for business ability and rectitude of those concerned and their business methods and practises. It is plain that the effect of this credit-system is not merely to insure safety for the banks in putting their resources widely and liberally at the command of the commercial community, not only where they are located, but over a much larger area, which will greatly enhance their usefulness, but to raise the standard of credit and improve the methods of those who rely upon the banks for financial accommodation. New statements are required from time to time as new discounts are applied for or paper is offered for purchase, and the credit-clerk keeps upon sheets headed and ruled for the purpose a comparison of the statements, which shows in a general way whether the business and resources of the borrowers, and consequently their claim to credit, are improving or declining. There are separate sheets for firms, corporations, and banks, with all the important items of the statements printed on the left-hand margin, opposite which is noted in successive columns any changes that may have occurred for the better or worse in the intervals of making them.

It is with the signed statements and reports, letters and memoranda resulting from inquiries, that the record is made up which is stored in the drawers of the credit-department vault. It is not to be assumed that this is complete in every case when a discount is made or a note is bought from a broker or taken from another bank. It is a gradual accumulation, but a conservative bank will not make the discount or buy the note until satisfied by such evidence as it has of the credit of the applicant. In a majority of cases it will know enough about its customer or the standing of the makers of the notes to act without delay upon the evidence the credit-clerk is prepared to afford. Every application is referred to him by the officer to whom it is made or by whom it is to be passed upon. The clerk has a variety of forms and blanks for use in the immediate performance of his duties. Upon these he has transcripts of those filled out when accounts are opened or closed, copies of the offerings of paper and of the records of paper taken, lists of bills receivable of different customers that are outstanding, of paper purchased and bills discounted, whereby he is kept informed of the actual state of the bank's discount transactions. When paper is offered for discount or purchase it is referred to him on a proper blank, which he returns after investigation with a condensed statement on a separate form showing the state of the applicant's account with the bank, including the accommodation already extended to him and the main facts affecting his credit.

Where paper is offered by a note-broker on behalf of some person or concern of whose credit the bank has not sufficient evidence, it is taken "on option," that is, with the privilege of returning it on a specified day, and separate forms are used for this, including one that instructs the note-teller to collect the paper listed upon it, "(not due) before the close of banking-hours this day." This is for such notes as are to be returned under the option, and the collection is made from the brokers or bankers that have offered it. Reputable note-brokers have their own means and methods of investigating credit, and in many cases they have purchased the paper that they offer to banks. It behooves them as well as the banks to establish a reputation for care and trustworthiness.

In case an out-of-town bank applies for a loan on its own paper, it makes and signs by its proper officers a statement on the special form provided for that purpose, and its credit is subject to investigation and careful record like that of any other borrower. It is a common practise for it to back its note with those of its customers upon which it has made advances, as collateral security, or more as an evidence of the assets they represent, and of its own good faith. Of these the credit-clerk makes a list as part of his record of transactions with the borrowing bank.

There is no more important or valuable part of a bank's business than making advances to the mercantile, manufacturing, and industrial community on commercial paper, and there is a vast volume of this afloat in times of business activity, by which the capital and credit concentrated in banks is distributed and diffused to vitalize

8-25-02-500 1139

Offered by Second National Bank Monmouth Ga Date Aug 31st, 1903.

	Single	Bills Rec.	Collat.		
Under Discount		$ 22.698	$ 25.000	Gross Profit Last Six Months	$ 233.87
Purchased				Av'ge Balance " "	$ 36.100
Loan Department				Present Balance	$ 26.471
				Amount of Offering	$ 25.000
				Time "	4 mos.
Total now held		$ 22.698	$ 25.000	Total, if accepted	$ 72.698
Due		18.764 Nov 3.934 Dec	Dec 1/03		

Resolution	Last Statement	Letters of Inquiry	Reports	Approved	Disapproved
OK	July 16/03 our form	✓	✓		

Credit Clerk's Report on Application of a Country Bank for Discount on its Own Note with Collateral.

the currents of production and interchange. While it suggests the vast scale upon which business is done on " borrowed money " or on credit, this is always presumed to rest upon actual property values in the possession and control of the borrowers, and it serves to facilitate a great volume of exchange at a moderate charge with a relatively small use of actual money. This is a profitable as well as a useful field for banking, but in the sharp competition of these days, with the intricate network of credit operations all the time going on, it calls for consummate ability in management, unwearying vigilance, and thoroughgoing system. Its mainstay is a well-organized and capably conducted credit department.

XVIII

LOANS ON COLLATERAL SECURITY

A BANK in a small city or town, or one that has a moderate volume of business, has a single department of "loans and discounts" under the same clerk, and in most cases no separate credit department. But the large city banks keep apart their business of loaning on collateral security in charge of a "loan-clerk," who devotes exclusive attention to it. There is a radical difference between loaning upon actual salable security and upon paper that represents only the credit of the borrower, or his credit fortified, or possibly weakened, by that of those with whom he has business or personal relations. If the security is adequate in the former case, credit is a minor consideration, for the bank has in its possession property that will satisfy the debt, and not merely an uncertain claim upon whatever the debtor may have available for his creditors in general.

Collateral loans may be made "on time," for thirty, sixty, or ninety days, or four or six months or longer, or they may be made payable on demand, or "on call," and the purpose of raising money in this way may be as varied as the interests of men who have use for money. But most commonly such loans are made either for short periods or subject to demand, and serve some temporary need of the borrower. They differ nominally from discounts in the fact that the full amount is advanced and the interest is added to the principal at the time of payment, when the security is surrendered, though exceptions are often made in case of time-loans in deducting the interest when the loan is made. The rate depends upon the time and the state of the money market, and may be affected by the character of the security accepted, though well-managed banks take little risk on the latter score, requiring a margin of "market value" 20 per cent or more above the amount of the loan.

There are loans on collateral that have a distinctly commercial character. A merchant may borrow upon his bills receivable, instead of having them discounted, by pledging them as collateral. In case they are accepted as security by a bank it has to record them in such a way as to keep watch of their maturing. If any become payable they must be taken up and replaced with other security unless the loan is correspondingly reduced. If this is not done, the note may be collected. Banks also loan to traders on the security of warehouse-receipts, and some having close connection with commercial exchanges and boards of trade do a large business in this line. Goods coming in bulk for distribution in local markets or for export are stored in warehouses and negotiable receipts are given, certifying to the quantity and kind—as so many bushels of grain, barrels of flour, bales of cotton, hogsheads of sugar, or what not—which will be delivered to the holders of the receipts when properly indorsed. These may be transferred by indorsement, which passes the title to the merchandise to the new holder. When pledged for a loan from a bank they are indorsed over to it, and that gives it a lien upon the goods. It can take possession and sell them to satisfy the debt, if the accompanying note is not paid with interest at maturity. Loans are often obtained on warehouse-receipts to take up the drafts held by the bank for collecting payment for the same goods, though additional security, or part payment, may be required.

A more common class of security for collateral loans consists of stocks and bonds, especially those of railroad and industrial corporations. A bank usually has its own printed form of collateral note which is filled out and signed by the borrower when the loan is made. After the customary promise to pay, it includes a list of the securities deposited and a form of contract. The note may be indorsed with a guarantee of payment by the indorser in case the maker should fail to meet it at the date of maturity or "on demand." By the contract in its usual form the borrower gives the bank a lien upon the collateral deposited, or any that may be added to it, for payment not only of the note, but of any other liability existing or that may be incurred. The lien also attaches to any balance he may have in the bank or any deposit that he may afterward make. To indicate more clearly the effect of one of these collateral contracts, it may be well to set it forth in full. The form given is one in actual use by a leading bank. The guarantor, who may be the owner of the securities, signs a consent printed on the back of the note.

Collateral loans on time are made to persons desiring to raise the money at once for an investment or a purchase, or to carry through any kind of a financial transaction, but loaning on call is largely done with Stock Exchange brokers. In case of time-loans the rate of interest is agreed upon and remains unchanged, but with call-loans it changes from time to time to conform to the market rate. This is made on the exchange and is determined by the demand and supply for loanable funds in the money market. It is the same on any particular day or at any particular time of day at all the banks, and may vary in the making of new loans on the same day. A borrower may notify a bank

12-5-'02-1 M.

$ 50.000 New York, Sept 16 1903

ON DEMAND, for value received, the undersigned promise to pay to

THE IRVING NATIONAL BANK OF THE CITY OF NEW YORK,

OR ORDER, at its banking office in New York City, in funds current at the New York Clearing House, with interest from the date ~~hereof at the~~ rate of 4 per cent. per annum (payahle quarterly March 31st. June 30th, Septemher 30th and December 31st)

Fifty thousand & 00/100 Dollars;

having deposited with the said Bank as collateral security for the payment of this note and of any other liability or liabilities of the undersigned or of the guarantors or indorsers hereof to the said Bank, due or to become due or which may hereafter be contracted or existing, the following property, viz.

Securities as per envelope of this date

of the estimated market value of $ 63 600, the undersigned also hereby giving to the said Bank a lien for the amount of all the aforesaid liabilities upon the title or interest of the undersigned in any other property or securities at any time given unto. or left in or in any way come into the possession or custody of, the said Bank for safe keeping or otherwise, and also upon the balance of the deposit account of the undersigned with the said Bank existing from time to time.

In case the securities at any time pledged for any of the aforesaid liahilities should decline in market value, the undersigned agree , without notice or demand, to deposit forthwith with the said Bank additional securities to its satisfaction; and in case of failure to do so, this note and all other liabilities of the undersigned to the said Bank shall at once become due and payahle without demand of payment thereof, and the said Bank may immediately sell and apply the said securities in manner and with the effect hereinafter provided.

The undersigned agree that in the event of the insolvency of the undersigned or of any guarantor or indorser of this note all the aforesaid liabilities shall, at the option of the said Bank, become immediately due without demand of payment thereof.

The undersigned hereby authorize the said Bank at its option at any time to appropriate and apply to the payment of any of the aforesaid liabilities, whether now existing or hereafter contracted, all moneys held by the said Bank on deposit or otherwise to the credit of or belonging to the undersigned, whether the said liabilities are then due or not due.

The said Bank is herehy authorized, upon the non-payment of any of the said liahilities when due or made due, to sell, assign and deliver the whole of the said securities, or any part thereof, or any suhstitutes therefor or additions thereto, or any other securities or property of the undersigned, or in which the undersigned ha any right or interest, given unto, or left in or in any way come into the possession or custody of, the said Bank, at any hrokers' board or at puhlic or private sale at the option of the said Bank, without either advertisement or notice, which are herehy expressly waived. If such securities or property are so sold at puhlic sale the said Bank may itself purchase the whole or any part thereof free from any right of redemption on the part of the undersigned, the same being hereby waived and released.

In case of sale made for any cause, after deducting all costs or expenses of collection, sale or delivery, the said Bank may apply the residue of the proceeds to pay either one or more or all of the aforesaid liabilities, whether then due or not, as it shall deem proper, making proper rebate for interest on liabilities not then due and returning the overplus if any to the undersigned, or at its option to any guarantor or indorser of this note who shall make payment thereof, the undersigned agreeing to be and remain liable to the said Bank for any deficiency arising upon such sale or sales.

A Bell & Street

FORM OF COLLATERAL LOAN NOTE EMBODYING CONTRACT OF BORROWER.

holding his collateral note and securities that the rate has fallen on the exchange, or the bank may notify him that the rate on his loan has been advanced, but in any case the prevailing rate is applied each day until the loan is paid or called in.

The funds available for call-loans constitute an elastic margin in the bank's resources, which is in a sense a regulator of its operations. When the demand for discounts and time-loans is slack, these loans afford an outlet for funds that would otherwise be idle, at a rate determined by the demand. If the rate is low, it will be an incentive to speculation, if other conditions are favorable, and that will increase the demand and tend to put up the rate. The loans can be called in whenever there is a better use for the funds or there is danger of the reserves running too low, and conservative banks may refuse to loan at the ruling rate if speculation seems too reckless or there is an undue expansion of credit. The bank may prefer to invest some part of its funds in the actual purchase of securities, but it will be averse to having any considerable amount in excess of the reserve lying actually idle, for then they are earning nothing. The borrower has the same privilege of paying at any time that the bank has of calling for payment. In some cases it is agreed that a certain notice will be given of calling in a demand-loan.

Whether a loan on collateral security is on time or at call, it has to be passed upon by an authorized officer of the bank, and, if the funds are available, the main consideration is the sufficiency of the security. A margin of 20 per cent of "market value" above the amount of the loan is usually required, but discrimination is exercised as to the character of the security and its liability to fluctuate in value, and it must be "approved." Once the transaction is authorized the details are taken in charge by the loan-clerk. The borrower or his agent presents at the loan department the evidence that his application and his collateral have been duly approved. The "collateral loan-note," duly signed, is taken by the clerk and the securities are verified and listed. The loan is entered in a "collateral loan" book, or "register," properly ruled with columns appropriately headed for the different entries. These include the name of the borrower, the list of collateral with value, date of note, rate of interest, time and due date, if it is a time-loan, amount and interest, date of payment, if on demand, and a space for signing a receipt when collateral is surrendered on payment. The securities are placed in a strong envelope, called the "inside envelope," upon which is printed the name of the bank and the character of the loan, with space for the number, page of record, name of borrower, amount of loan, and rate of interest, with a ruled space below for a list of the securities. A separate slip is filled out headed in much the same way, with a list of the collateral, and there is an "outside envelope," in which the other is to be placed with the slip, ruled to indicate the amount of loans made to the particular borrower, the amounts paid thereon from time to time, and a list again of the collateral.

When the loan has been entered in the register, if the borrower is a depositor in the bank the amount is placed to his credit at the bookkeeper's desk from a memorandum furnished by the loan-clerk, and he can draw his checks upon it. If he is engaged in stock dealings or other active operations, his checks will ordinarily be presented for certification before they are used, and sometimes they may be certified beyond the limit of his deposit, though technically that is illegal, but not beyond the limit of his security, and with the understanding that the deficiency will be speedily made good. The "overdraft" is in the nature of an additional temporary loan. If the borrower is not a depositor he receives the bank's check for the amount of his loan, which he may deposit in his own bank or use otherwise like any bank-check. The loan being duly recorded, the securities are carefully put away with the proper labels, the envelopes being placed in alphabetical

7-8-1903-250. 947

(INSIDE ENVELOPE.)

No. 489 Page 98

THE IRVING NATIONAL BANK

OF THE CITY OF NEW YORK.

New York, Sept. 16 1903

DEMAND LOAN TO

Bell & Street

$50.000.00 4 Per Cent.

COLLATERALS.

100	N.Y. Cent. & H. Riv. @	120	12	000
200	Western Union	82	16	400
300	Erie	28	8	400
300	Steel Pfd	68	20	400
100	Atchison	64	6	400
			63	600

Inside Envelope for Collateral Securities (on greatly Reduced Scale).

order in a case that is kept in the bank's strong vaults, though during banking hours they are accessible to the loan-clerk, for changes may be required from time to time. Payments may be made, additional amounts may be borrowed, securities may be added or withdrawn, or substitutions may be made, all these being duly recorded in the loan-book, or register, and upon the envelopes and slips, so that the condition of the account may be readily ascertained at any time. Changes in the rate of interest are also noted, with dates.

The substitution of one security or lot of securities for another is frequent in the loan accounts of active brokers. Stocks may be put up as collateral which the broker has paid for from the proceeds of the very loan for which they are in part the security, having bought them for a customer on margin. He may afterward have to deliver them on payment by his client, or he may sell them again for the client and have to turn them over to some one else. He sends an order for them, and unless the loan is to be proportionately reduced by payment, he sends other securities of equal value to be approved and to take their place. Many such changes may be made during the life of a collateral loan. The loan-clerk has to keep a careful record of these and to maintain a close watch over any fluctuation in the market value of the securities. In case of a material decline additional collateral will be called for without increase of the loan; or some withdrawal may be permitted without its reduction, if there has been a material advance in market values. Some banks have a thorough system of recording the quotations of the Stock Exchange and noting every change in the securities which they hold as collateral. They have a card for each loan upon which is inscribed the name of the borrower, the amount and terms of the loan and a list of the securities, with their value, and ruled spaces for noting changes. In a room reserved for this use there is a stock-ticker and a financial news-ticker, and the quotations of different stocks are written on a blackboard. When a change appears in the price of any security held as collateral, it is noted on the cards for the loans affected. If it carries the security below the required margin of value, the borrower is called upon to make the margin good by an addition or substitution of securities. There are times of excited speculation and violent fluctuations when this becomes important.

Payments of interest or any part of the principal, or of a loan in full, are made to the loan-clerk and he makes the proper record. The checks with which payment is made are turned over to the note-teller to be entered in his accounts, and from him they take the course of other checks through the Clearing-House exchanges. If there is a loan paid otherwise than with checks to be collected through the Clearing-House the collections are made in the ordinary way of other payments. From the loan-clerk and note-teller's records the proper transcriptions are made by the bookkeepers.

Every time any collateral security is withdrawn, the borrower, or an authorized messenger bringing his order, signs a receipt, and when the loan is closed and all the collateral given up, the full record is shown upon the slips and envelopes referred to above. These are filed away and kept, and if any question arises regarding a loan, even a year or more afterward, it can readily be looked up and its whole history ascertained. This is easier than tracing it in the books, but the system prevails only in banks with a large collateral loan business. The volume of this kind of loaning varies greatly and the methods of dealing with it vary correspondingly. The account here given applies to large banks with an active business in this particular line. This is the case with a number of institutions in New York having a considerable Stock Exchange clientele. Time-loans on collateral security, however, are common with most banks in important commercial and financial centers, the great volume of corporate securities being much used as the basis of borrowing for all manner of purposes. They furnish banks the means for a profitable lending of funds that accumulate in excess of other needs, and call-loans enable them to use these in a way to have them at easy command. The tendency of recent years has been for a great mass of surplus funds to drift to New York to be employed in this way. When speculation is rife call-loans command a high rate, and at other times it may be as low as one or two per cent. Their safety lies in the ready salability of the securities, and that is only assured where there is a large Stock Exchange business all the time going on, as in New York, or some other important financial center.

XIX

CERTIFICATES OF DEPOSIT, LETTERS OF CREDIT, AND BILLS OF EXCHANGE

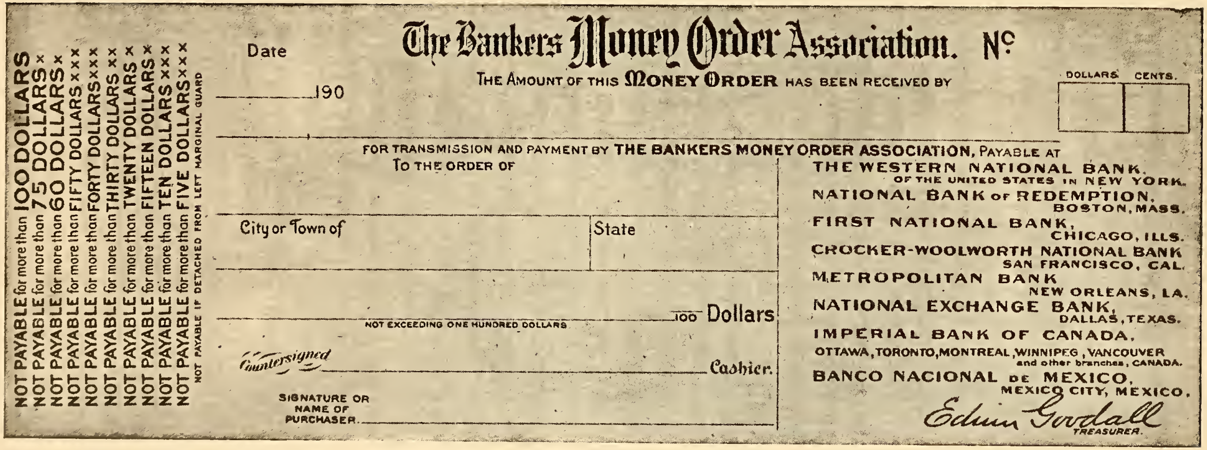
THE use of checks, individual drafts, and bank-drafts has perhaps been made sufficiently clear. Cashier's checks and certificates of deposit have been incidentally mentioned, but may need further explanation. The cashier's check is practically the bank's order upon itself for payment from its own funds. It may be cashed by the paying teller when indorsed by the payee, or it may be deposited in another bank. It is used in buying notes, bills of exchange or other securities, and in making loans to outside parties, also in paying various bills of the bank for expenses or supplies. A special form is used in paying dividends to shareholders. Cashier's checks are usually made up in books with stubs upon which to note date, amount, and name of payee, and are consecutively numbered. A register is kept of all such checks issued, a cashier's account being also kept in the general ledger of the bank. A separate record is kept of the dividend checks.

Certificates of deposit have been mentioned as used in making transfers of money to a distant place, but they are quite extensively used for other purposes. A person may deposit a sum of money in a bank merely for safekeeping or for the use of another person and receive a certificate signed by the cashier. This certifies not only that the sum has been deposited, but that it is payable to the order of the depositor himself, or that of another person whom he may designate as the payee. It may be made payable on return of the certificate properly indorsed, or on its return after a certain time. In the latter case interest may be allowed on the deposit, but in no case can it be drawn upon except by presenting the certificate, and no partial payments will be accepted, unless on cancellation of the certificate and the issue of a new one for the balance. It may be transferred by indorsement, and a common use of such certificates is to transfer funds to persons at a distance. A man in New York desiring to transmit money to another in Chicago, or any distant place, may deposit it in a New York bank and obtain a certificate of deposit payable to the order of his friend or creditor and send it to him wherever he may be. Any bank where he is identified and vouched for will cash it for him, for it is equivalent to so much "New York exchange" and will enable the bank to have the sum transferred to its credit in New York. A person starting on a journey may obtain a certificate of deposit, or more than one, for use in raising funds on his way. Banks do not hesitate to honor each other's certificates if assured of their genuineness, the rights of the holder, and the standing of the issuing bank. They stand for deposits of actual money which can be diverted to no use but their redemption on return to the bank that has received the funds, though the right to payment may be transferred on the way and applied to credits between banks. They may also be deposited and make their way through collections and clearings.

The bank keeps the same careful account of its issue of certificates of deposit as of its other obligations. While they are out they are among its liabilities and must be recorded and reported as such. They are numbered consecutively and entered in a register, with date, name of person to whom or in whose favor they are issued, and the amount. There is also a column for due-date when they are payable after a certain time, and for the date of actual payment, to be entered when payment is made. It is also usual to enter the same data upon a ticket, when application is made for a certificate, and this is marked by the teller when he receives the money, used by the clerk who fills out the certificate, and passed with it to the cashier when he signs it. Then it is filed away as a voucher. A ledger-account of all certificates of deposit is kept, from which the number and amount of those outstanding can always be ascertained.

A movement has been lately on foot for the issue of money-orders for small sums, a hundred dollars or less, similar in purpose to the postal money-orders of the Government, but in form more like a bank-draft, with a line of figures across the end, in multiples of five or ten, up to one hundred, to be punched out as denoting the limit within which the draft is made, the exact amount being written, as on check. It is intended that these may be bought at any bank for a small commission upon the sum and cashed at any other bank. A reason for adopting this plan of sending small sums of money is not only that it is a legitimate banking function, in which there may be some little profit, but that the practise has become common of depositing postal money-orders, leaving the bank to collect them at the post-office without charge. It may also be called upon to transfer post-office receipts to Washington without compensation. The proposal has been made in certain State bank associations to establish a charge for collecting express and postal money-orders, and to issue bank money-orders in competition with the express companies and the Post-Office Department. Many small banks find the present system something of a burden and see the chance for a little gain for themselves in the new plan. A form of money-order between certain banks having direct relations with each other has long been in use, a specimen of which is given on the next page.

Banks issue letters of credit, though those used by travelers in foreign countries are usually obtained from private banking-houses which have connections abroad. Domestic letters of credit are used to some extent in a similar way by persons traveling over long distances and absent from home for some time in this country, and many banks are prepared to furnish them. They are also sometimes used for commercial purposes. A man who goes to several cities to make purchases or payments may obtain a "commercial letter of credit," upon which he can raise money for his purposes at convenient points on his way. He buys it of his bank, and it is addressed either to certain banks in the places he is to visit or to banks in general, requesting them to honor his drafts upon the bank issuing the letter within the amount designated upon its face. If they are correspondents of the issuing bank, it is a part of their business, but in any case they are usually willing to cash drafts on account of a New York letter as they furnish them with "exchange on New York," which is always in demand. Each payment is indorsed upon the back of the letter with the date. The document always bears upon its face the signature of the person for whom it is issued, which serves as a means of verifying his signature to the drafts. If anything remains unpaid on the return by the holder of the letter of credit, the bank will redeem it. Whether a commission is charged for a letter of credit depends upon circumstances. If it is for a considerable amount and is likely to be outstanding some time, there may be no charge, as the bank will have the use of the money while it is undrawn and to the extent that it remains undrawn, until the return of the letter. It is hardly necessary to say that a careful record is kept in the cashier's account of all dealings in


NOT PAYABLE for more than 100 DOLLARS
NOT PAYABLE for more than 75 DOLLARS×
NOT PAYABLE for more than 60 DOLLARS×
NOT PAYABLE for more than FIFTY DOLLARS×××
NOT PAYABLE for more than FORTY DOLLARS×××
NOT PAYABLE for more than THIRTY DOLLARS××
NOT PAYABLE for more than TWENTY DOLLARS×
NOT PAYABLE for more than FIFTEEN DOLLARS×
NOT PAYABLE for more than TEN DOLLARS×××
NOT PAYABLE for more than FIVE DOLLARS×××
NOT PAYABLE IF DETACHED FROM LEFT MARGINAL GUARD

The Bankers Money Order Association. Nº

Date ______190

THE AMOUNT OF THIS MONEY ORDER HAS BEEN RECEIVED BY

DOLLARS. CENTS.

FOR TRANSMISSION AND PAYMENT BY THE BANKERS MONEY ORDER ASSOCIATION, PAYABLE AT

TO THE ORDER OF

City or Town of State

______100 Dollars

NOT EXCEEDING ONE HUNDRED DOLLARS

Countersigned ______ Cashier.

SIGNATURE OR NAME OF PURCHASER.______

THE WESTERN NATIONAL BANK, OF THE UNITED STATES IN NEW YORK.
NATIONAL BANK OF REDEMPTION, BOSTON, MASS.
FIRST NATIONAL BANK, CHICAGO, ILLS.
CROCKER-WOOLWORTH NATIONAL BANK SAN FRANCISCO, CAL.
METROPOLITAN BANK NEW ORLEANS, LA.
NATIONAL EXCHANGE BANK, DALLAS, TEXAS.
IMPERIAL BANK OF CANADA, OTTAWA, TORONTO, MONTREAL, WINNIPEG, VANCOUVER and other branches, CANADA.
BANCO NACIONAL DE MEXICO, MEXICO CITY, MEXICO.

Edwin Goodall
TREASURER.

SPECIMEN OF BANK MONEY-ORDER USED BY AN ASSOCIATION OF BANKS.

letters of credit. Those used by travelers abroad will be more fully treated in a chapter on Private Banking-Houses.

Foreign bills of exchange will also be more fully treated in another chapter, but some incorporated banks, especially in New York, have come to deal with them extensively since the financial relations between that city and European money centers have become so highly developed, and all banks have more or less to do with them. In their general character they are simply drafts, drawn by a person or bank in one country upon a person or bank in another country, and are used in making payments or transferring funds in foreign trade and international financial transactions. Only a few banking institutions engaged in a general domestic business draw foreign bills or trade in them, but any bank will take them from its own customers and "collect" by selling them to bankers at the current rate. The few that make a business of dealing in foreign exchange have a department in charge of a foreign exchange-clerk whose methods are practically the same as those that prevail in private banking-houses. He keeps a careful record of the transactions in buying and selling bills of exchange, and a "foreign exchange" account figures in the general ledger of the bank.

XX

MISCELLANEOUS SERVICE, CORRESPONDENCE, PROTESTS

There are various matters to which passing reference has been made that may be conveniently brought together at this point in a miscellaneous chapter. Banks perform a variety of services for their customers which are rather outside of the regular course of business, or only incidental to it. They not only sell bills of exchange for them and collect interest-coupons, but they sometimes receive dividends upon their shares of stock and credit these regularly to their account. This is done on orders to the corporations issuing the stock to pay the dividends to the bank for the account of the shareholder. Some banks that have a large number of depositors with merely personal accounts do a considerable business of this kind. They have a regular form of standing order to be filled out and signed by the customers requiring this service and kept on file by the corporations to which they are addressed. The dividend-checks are made payable to the order of the bank for account of So-and-so and sent to it. The bank credits the amount to the customer and collects the checks or sends them through its Clearing-House exchanges.

Such a bank usually keeps three card-indexes alphabetically arranged: one of the names of customers for whom it receives dividends, with a note on each card of the corporations whose shares the customer holds; another of the corporations, with a note of the dates on which their dividends are payable; and a third which contains upon each card the name of the corporation and a list of the shareholders whose dividends the bank receives from that corporation, with columns for ticking off under the several dates the receipt of the dividends. The clerk who has charge of this branch of business makes the entries on the cards and keeps watch of the coming due of dividends, and in case of delay in receiving them sends a letter of inquiry. He also sees that the credits are duly made in the ledgers and keeps a record of his own work, giving due notice to depositors of his receipt or failure to receive their dividends.

The stocks are not in possession of the bank, as it only acts as an agent to receive and account for the dividend payments, and at certain dates, when these are due, which is usually on the first of certain months, substantial additions are made to deposits from this source. The bank will also buy stocks or bonds for customers upon their order through a regular broker and charge to their account the cost plus the commission, or will sell securities for them and credit the proceeds. Some employ a regular stock and bond clerk and have a separate department for this work, while others have a "general clerk" who combines this with other duties, such as issuing letters of credit and keeping account of them, selling bills of exchange, etc. A bank may act as financial agent for customers in a variety of ways, such as making subscriptions to new stocks and attending to their registration or transfer, exercising options allowed to stock or bond holders and notifying them of their rights, and otherwise looking after interests which affect their accounts with the bank in the way of receipts or payments. Some incorporated banks establish foreign connections and deal regularly in exchange, issuing bills of their own, and buying and selling those of others, though this business is more generally done by private banking-houses.

The correspondence department has heretofore been referred to only in connection with making out-of-town collections of checks, drafts, notes, etc., but every large bank has a great volume of miscellaneous correspondence not relating directly to these. There are letters of advice and inquiry of various sorts received which may concern different departments of the bank's work, and nearly all require acknowledgment or reply, while the bank itself has letters of advice and inquiry to send out. Where there is a mail-teller the incoming mail is first received and opened by him for the purpose of obtaining remittances. Where there is none, this is attended to by the receiving teller, the primary purpose being to secure the early credits and the "additions" to the Clearing-House exchanges. But all letters are promptly turned over to the corresponding clerk, who is responsible for their care and must see that all requiring attention are duly attended to. A full synoptical list is made, upon which each letter is noted by date and a brief indication of its character.

There are different systems of disposing of the mail. In some banks it is the duty of the corresponding clerk and his assistants to attend to all acknowledgments and replies. For the former and many of the latter there are regular printed forms to be filled out, having the name of the cashier printed at the end, to which the clerk merely appends "per" and his initials. Those that are not of a mere routine character and require special replies, the clerks answer by obtaining the necessary information from the proper department. In important cases they are referred to officers for instructions and submitted to them for approval and sometimes for signature. In exceptional cases an officer may write or dictate letters himself instead of merely giving directions to a clerk, but whenever a letter leaves the hands of the corresponding clerk to be retained for consideration or possibly for reply by another, he takes a receipt for it, and he must follow the matter up and see that all necessary replies are made and the letters returned to him.

Under another practise, the letters that concern matters outside of his own immediate department and that of collections the corresponding clerk distributes among those in charge of the departments to which they relate, to be answered by them, and takes a receipt in all cases. The letters must come back to him, and all answers or separate letters of advice or inquiry or of any kind, which he is not instructed to write, must also come to him to be mailed. The correspondence incoming and outgoing centers in his department however the details may be disposed of, and he is responsible for seeing that nothing is neglected or unnecessarily delayed. It is cleared up as closely as possible every night, and the lists are run over the next morning to see what has been disposed of and what is still held back. The letters received on a particular date are kept together, with the synoptical list and receipts for such as may be held back, and these are all kept on file. Being kept in the order of dates and always accompanied by the list, they can be readily referred to, if necessary, but as a rule everything is finally disposed of before they are filed away. These letter-files are allowed to accumulate for years, and are never destroyed until everything they relate to is outlawed beyond question. All letters sent out are copied. Reference has been made to the press-copying machine, but most banks still prefer to have the copies made in books by the old form of press. As all letters are dated and are copied in chronological order, there is no need of indexing. The correspondence department of a bank is one involving a great variety of detail, and its work has to be kept up promptly and systematically to insure care and accuracy and thorough attention to everything that comes or goes by mail.

Another matter that has been referred to only in an incidental way and may require further explanation is that of protesting unpaid checks, drafts, or notes. The main purpose of making a formal and solemn protest under the seal and signature of a duly commissioned notary, when payment is refused, is to give notice to indorsers that they may be held responsible, and to have evidence of the fact that will be recognized by courts as conclusive. The check, draft, or note must be presented at the proper place, and failure to pay must occur before the matter is turned over to a notary, and he must personally make the demand again and get a refusal before making the protest. A time-draft may be protested for non-acceptance as well as non-payment, and a note must be presented on the day it is due to make the protest effectual as a notice to indorsers. The notary certifies that he has presented the document at such a place on such a date and that payment has been refused for such a reason, or for no reason, and makes his solemn protest. He must send notice of the facts to all indorsers if their addresses are known, and failing that, to the place where the payment should be made.

When a check or draft deposited by a customer and indorsed by him is returned as not good, it is not customary to protest it, as that involves fees and the matter can be arranged by returning the check or draft to the depositor and charging the amount to his account; but checks and drafts sent from a distance to be collected are protested unless there are instructions to the contrary. If they go through the Clearing-House and are returned unpaid, that constitutes the first presentation and refusal, and they are turned over to the notary to be presented again. Others are presented in due course by the bank messenger and then sent to the notary. His certificate is attached to the check or draft and it is returned to the correspondent from which it came, after the amount, with protest fees and postage, has been charged to the correspondent's account. The bank receiving a protested check or draft which it has sent out for collection charges it, with the fees and expenses, to the person depositing it or leaving it for collection and sends him the documents. The banks are then done with it, and the customer has recourse to the person whose payment to him has proved not to be good.

With a note the case is somewhat different. If it is payable at a bank and payment is refused by the bank the note and certificate of protest may be sent to it. A bank that has discounted or purchased a note that is dishonored may bring suit for recovery against either the maker or indorser, or both, and it is customary, for the sake of the notary's evidence, to make protest even when there is no indorsement or the maker and indorser are the same. Care is exercised in protesting lest non-payment be due to accident or inadvertence, and every reasonable effort is made to secure payment before resorting to what is regarded as an extreme measure. Usually a record is kept of all cases of protesting. A matter requiring mention is the fact that in some States the law still allows three days' grace for the payment of notes after they fall due, and notice must be taken of that fact in collecting notes in such a State.

XXI

THE CIRCULATION OF NATIONAL BANKS

In a subsequent chapter dealing with the national bank system, and in a previous one describing the organization of a bank under the law, the requirements for taking out notes and for increasing or reducing circulation are sufficiently explained, but there are matters connected with the part circulation plays in the business of the bank that need special reference. Notes are put in circulation by the simple process of paying them out like any other "cash" in the bank's transactions, and when they are once out no distinction is made between them and the notes of other banks. In the handling of money and the keeping of the teller's accounts bank-notes are kept distinct from legal-tender and coin certificates, for the reason that the latter are available for reserves, while in national banks the former are not. As all banks are required to receive the notes of other banks, and as they pay them out without reference to their origin, they all circulate together as a common currency and no attention is paid to the name of the bank that issues them. While every bank is bound to redeem its own notes on demand, it is seldom that any demand is made, because the Government has made itself responsible for their redemption, and any one can get "lawful money" for them by sending them in for the purpose in sums of not less than a thousand dollars. Little of this is done except by the banks themselves. They have two reasons for doing it. They may have occasion for more legal-tender notes or other forms of lawful money, and they can obtain them by sending an equivalent amount of bank-notes to the Redemption Bureau in the Treasurer's Office at Washington; or they may wish simply to get rid of an accumulation of worn or mutilated notes, and the process of redemption serves the purpose of keeping the circulation clear of these.

Notes are constantly coming in for redemption at the bureau from all over the country, being sent almost invariably by banks that have accumulated a mass of mutilated, worn, or soiled currency, or that desire a fresh supply of "legal tenders." They consist of a miscellaneous lot of "bills" of different banks and of various denominations. There is no direct charge for the cost of redemption, but the expense of the bureau is charged to the banks in proportion to the amount of circulation redeemed for each, and this charge is collected once a year. "Lawful money" is sent at once to the applicant out of the 5-per-cent redemption-fund of the banks whose notes are redeemed, and the cost of transmitting this is directly charged to the bank sending the notes in and receiving the legal-tender money. The redeemed notes are assorted and classified according to the banks issuing them; those that are in good condition are sent to those banks as still "fit for circulation," the worn and mutilated ones are destroyed and new ones are sent to replace them. This process is going on all the time, with practically no effect upon the volume of circulation. Each bank, any of whose notes have been thus redeemed by the Government, receives notice with the new notes or in advance of them, and is required to replenish its share of the redemption-fund. A circulation account is kept in the General Ledger of the bank in which these incidents are noted, circulation being charged with the amount sent to keep up the 5-per-cent fund and credited with the notes received, leaving the cash account unaffected.

A "circulation-book" is also kept which exhibits at all times the state of the outstanding circulation, of which a report must be made to the Comptroller of the Currency twice a year, stating the average for six months. Upon this the half-yearly tax is levied of $\frac{1}{4}$ of 1 per cent upon such as is secured by 2-per-cent bonds and $\frac{1}{2}$ of 1 per cent upon that secured by other Government bonds. The report has to be made within ten days of the end of June and December, and the tax is collected in July and January. In the circulation-book the total amount of the bank's circulation is entered in one column and is divided in consecutive columns into the amounts of each denomination, 5s, 10s, 20s, etc., so that the number of "bills" outstanding of each denomination may be readily ascertained. Not more than one-third of the circulation can consist of 5s, and it may be desirable to know what amount of each denomination keeps in circulation most readily. Changes are noted down the columns against successive dates, as notice of redemptions are received, and as notes come in to replace those redeemed. While the total circulation may be all the while the same, the amount actually outstanding and subject to tax varies over a narrow margin, those being deducted which are in hand for reissue or with the Treasurer at Washington for redemption. When there are actual additions or withdrawals the amounts enter of course into the book-accounts.

These latter changes are made at irregular intervals, and are determined by the state of the money market and the price of the bonds required for security. When there is a plenitude of funds and it is difficult to keep them placed at a reasonable profit there may be a saving in withdrawing circulation. Then lawful money is deposited with the Treasury or at a Sub-Treasury for the purpose, and when it reaches the Treasurer at Washington it is held for the retirement of an equivalent amount of the bank's notes as they come in from the bank or from any other source, and bonds to the same amount are surrendered and returned to the bank, which may then dispose of them or hold them in its own keeping. It is relieved of so much of its idle funds and of the tax upon so much of its circulation. If at a later period there comes such a demand for money and such an advance in interest-rates as to make it worth while, the bank may restore its circulation to the old volume, or increase it by making a new deposit of bonds and applying for new notes. The application will be similar to that made in originally taking out circulation, except that new plates will not be required. It will designate the number of sheets desired of different denominations making up the total asked for, and these will be printed and forwarded when all the formalities are completed. The profit on circulation is determined by the prevailing rate of interest for money. In calculating it one must take into account the interest on the bonds deposited, the interest to be derived from the circulation itself, with deductions for expenses connected with it, including the tax, and compare with this the interest that might be derived from the amount of capital invested in the bonds at their market price. If money is worth 6 per cent and the notes are in constant use, the profit will be about $\frac{3}{4}$ of 1 per cent with the 2-per-cent bond security and considerably less for the others. The determining factor, apart from the tax, is the premium on the bonds.

XXII

THE BANKING RESERVE

In European countries where there are great central banks, these institutions hold a large amount of coin and bullion to meet current demands. That fund is what is known in this country as a "reserve." As the demand is liable to come from other banks and bankers, who keep large deposits in the central institution and use its notes as cash, this is virtually the banking reserve of the whole country. The Bank of England usually maintains a reserve of 40 to 50 per cent of liabilities, but none of this is held against its notes, which are fully secured in the issue-department. The Reichsbank of Germany is required to keep a reserve against its notes, but it has a much larger amount than this requirement, because it practically holds the reserve for other banks. The Bank of France also maintains a large reserve in coin and bullion, though it is not required by law to hold any definite fund for the redemption of the notes or for any other purpose. This stands against all liabilities and is the basis of the whole banking system of the country. The result is that in the countries named, and in most countries of Europe, the central bank, which is associated more or less closely with the Government, contains the bulk of the gold and silver coin and bullion not in actual circulation.

In this country the condition is entirely different. The Government itself holds a large fund of coin and bullion, a part of which is for the redemption of its own legal-tender notes, and a much larger part is a trust fund upon which it issues gold and silver certificates for circulation. Under the national banking law each bank is required to keep its own reserve. This is not at all for the redemption or security of its notes, but for the prompt payment of all demand liabilities, and accordingly it is made a certain percentage of its deposits. It must be kept in "lawful money," which includes gold and silver coin and the certificates representing it, and the legal-tender notes of the United States. The banks are also allowed to count in their reserve the 5 per cent of circulation kept on deposit with the Treasurer of the United States for the redemption of their notes, and their own Clearing-House certificates issued upon actual deposit of coin and used for the settlement of balances. Provision is also made for the issue of United States note-certificates on deposit of "legal tenders" in sums of not less than $10,000. These must be in denominations of not less than $5,000, and may also be included in reserves.

Any bank outside of a "reserve city" is required to have "at all times on hand in lawful money" an amount equal to 15 per cent of its deposits, and those in reserve cities have to keep 25 per cent of deposits. The reserve cities named in the original act were Albany, Baltimore, Boston, Cincinnati, Chicago, Cleveland, Detroit, Louisville, Milwaukee, New Orleans, New York, Philadelphia, Pittsburg, St. Louis, San Francisco, and Washington. It was afterward provided (in 1887) that any city having a population of 50,000 or more might be made a reserve city on application of three-fourths of its national banks, which must thereafter keep 25 per cent reserves. Under this provision Brooklyn, Indianapolis, St. Paul, Minneapolis, Kansas City, St. Joseph, Omaha, Savannah, Houston, Des Moines, Lincoln, and Portland (Ore.) have been added to the list. National banks in other places are permitted to keep three-fifths of their reserves in the form of balances due from " associations approved by the Comptroller of the Currency " in one or more of the reserve cities, and banks in reserve cities are authorized to keep one-half of their " lawful money reserves in cash deposits in New York " as a central reserve city. Under the same act that provided for additional reserve cities, any city of 200,000 inhabitants might be made a central reserve city on application of three-fourths of its national banks to the Comptroller of the Currency, with the approval of that officer, and Chicago and St. Louis have been made such.

The reserve required by law was intended to be a minimum, and any bank whose reserve fell below the legal limit was forbidden to increase its liabilities by " making any new loans or discounts, otherwise than by discounting or purchasing bills of exchange payable at sight," or to " make any dividend of its profits," until the required proportion had been restored. The Comptroller may notify the bank to make good its deficiency, and, if it fails to do so for thirty days, he may put it in liquidation with the concurrence of the Secretary of the Treasury. The provision which allows banks in other places to keep three-fifths of their reserve as deposits in reserve cities and those of reserve cities to keep half their cash reserves in a central reserve city, has had the effect of concentrating these reserves largely in the New York Clearing-House banks, and somewhat weakening the aggregate as security against demand liabilities. The country banks are practically required to keep only 6 per cent of their own deposits in cash on hand, and they are liable to demand any part of the remainder of their reserve from the reserve banks in " lawful money," though their deposits with those banks may consist mainly of credits. The reserve cities may, on account of these demands or their own needs, withdraw their cash deposits from central reserve cities, of which New York contains at all times by far the largest amount. The effect of this upon the reserve supply, and consequently upon the amount of deposits to be held and the ability to make loans, is obvious.

State banks in New York, and in most States, are required to keep reserves of 15 per cent of deposits and are allowed to keep them in part in other banks. Trust companies are not required by law to keep cash reserves, but as a rule they have large deposits in banks against which reserves must be held. Banks of the New York Clearing-House bear the brunt of holding the banking reserve of the country on account of their facilities in effecting exchanges. The part of it which they hold for themselves and for other institutions is divided among fifty-six banks, nineteen of which do not belong to the national system, in substantial proportion to their resources. The reserves of these banks are ordinarily maintained above 25 per cent of deposits, and the strength of their condition is gauged by the surplus they hold in excess of the legal requirement. While the banks are separately responsible, they act more or less in association or in concurrence in maintaining the reserve. The method of strengthening it is by curtailing loans either by advancing rates or being strict in the matter of security, which results in a certain amount of liquidation that reduces deposits and increases cash. In ordinary times there is more or less conflict of interest between keeping funds employed as close to the limit as practicable for the sake of the profit and maintaining a reserve that will beget general confidence in the security of the banks.

When confidence is shaken and there is danger of panic, the conflict of interest may become acute. There may be a disposition, or even the necessity, on the part of some banks to curtail loans, refuse accommodation, and strengthen reserves, at just the time when that course would increase alarm and when it is desirable to inspire confidence by meeting all legitimate demands and making a display of strength. At such critical times the Clearing-House Association has virtually " pooled " the reserves of its members by issuing certificates on a deposit of securities and permitting the use of these in settling balances in the daily exchanges. This enables the individual banks to make fuller use of their cash in meeting the demands of customers and to extend accommodation as they otherwise could not. The association may go further and make actually a common fund of the aggregate reserves of all its members by assessing the stronger for the benefit of the weaker until the stress is over, when a readjustment will be made. The effect of this cooperation of banks in the use of their reserves is to allay panic and restore confidence, but there is in this emergency device a suggestion of weakness in the system of reserves, distributed as they are among many banks and yet in part concentrated upon one city as the financial center. The only safeguard is in a sagacious and conservative management and the practise of accumulating larger reserves in New York than the law requires.

In regard to reserves it is only fair to consider that cash on hand is not the only resource for meeting current demands. Strong banks keep a varying amount of their capital or surplus invested in " securities " that are readily marketable in case of an unusual demand. They may take advantage of low prices for such securities of a standard and paying character to increase their investment, and may dispose of some at a profit when high prices prevail, but a legitimate purpose of such a fund is to have an available resource when reserves run low. A considerable line of safe demand-loans is also a resource that fortifies the reserve, as the money is to be had on notice or " call." If calling in loans does not greatly increase "cash in hand," it will reduce demand liabilities in the form of deposits. Trust companies depend largely upon their "call-loans" and bank-deposits to take the place of cash reserves in their own vaults. Banks organized under State laws are not subject to the same requirements as national banks, but in most, if not all, States there is a prescribed percentage of cash reserves to deposit liabilities. As a rule, these are not limited to "lawful money," but may be made up to any extent of the notes of national banks. While national banks can not include bank-notes in their cash reserves, they may deduct them from the volume of deposits against which the reserves are held. These are "net deposits" and do not include uncollected items, and bank-notes represent sums due from the banks that issue them, while a bank's own notes in its own possession are not an outstanding liability.

XXIII

BOOKKEEPING OF THE BANK

Bookkeeping is not ordinarily considered a subject of thrilling interest, though it is admitted to be important. An understanding of its ways and methods is generally left to accountants and people who are fond of figures. But there are features in the bookkeeping of a bank that take it out of the ordinary category of keeping accounts. We have seen how the clerks in each department are required to keep a systematic and accurate record of all the transactions that pass through their hands, so that the least detail may be traced and verified. The tellers, who have to do with the receipt and payment of funds and the determining of the credits and debits of customers and those of the bank, besides keeping careful record of the various items with which they deal, are required to make "proofs" of their work each day and enter these in books. The purpose of this is to secure perfect accuracy and detect all possible errors by comparing one form of statement of the same details with another. A "settlement-book" is kept in which the aggregates of each day's transactions are brought together in such a way as to exhibit the condition of the bank's cash in the morning, the receipts and payments through their departments during the day, and the state of the cash at night.

With the details of making up these aggregates the bookkeeping department has nothing to do. It has charge of the ledgers that contain the final entries and permanent record of the day's business. Upon this department center all the lines of credit and debit reduced to their ultimate terms, but there are certain intermediate volumes in which the items are gathered from the various departments that deal with details, partly as a means of verification and of "proving" one against another in order to check errors, and partly as a reservoir from which the figures of the bookkeepers may be drawn or with which they may be compared. These are known as "credit" and "debit" books. There is one ledger, however, that is posted in advance of these from the original items. This is the "balance ledger," the purpose of which is to exhibit promptly and constantly the state of each depositor's account, not merely at the end of the day but at all times during the day.

In a large bank with many accounts one volume is not enough for the ledger in which the individual accounts are kept, and there may be several designated by the initial letters of the names covered by each, as the A–D ledger, the E–K ledger, the L–R ledger, and the S–Z ledger. The credit and debit books are divided to correspond to this classification, as the substance of their contents is to be embodied in the ledger volumes or used for comparison and verification of what they contain. Accounts are arranged in the alphabetical order of names, either strictly or on the vowel system, that is, according to the initial letter and first vowel, regardless of the consonants that may come between or after them. Some banks having a multitude of small accounts have separate ledgers for men and women depositors. The strict alphabetical arrangement is more convenient where the names are very numerous, as the exact page of an account is more readily found by the index-letters that are placed on the upper corner of each left-hand page as the book is opened. Some large commercial banks with many out-of-town customers have a separate ledger for these called the "foreign individual ledger," as distinguished from the "city individual ledger." There is also the ledger for accounts with other banks, and all of these are divided into two or more volumes according to the number of accounts to be contained in them, in order that a ledger may last as long as practicable before it is filled.

The balance ledger is quite independent of the other books, except that it may be referred to for verification of entries. In this the names of depositors are entered in a list down the left-hand margin of the left-hand leaf, as the book lies open, and dated columns run across the two pages, usually covering the twelve business days of two weeks. The right-hand margin of the second leaf may be cut off so that when the leaf is turned the entries may continue across two more pages without entering the names again, as they will not then be covered by the leaf. This may be carried along for several weeks, but if there is a large number of depositors the list of names will have to be continued on several pages, and the book must be divided so as to receive them. The names may have to be reentered a number of times before the ledger is filled. The columns are double and ruled through the middle to separate debits from credits, the former being entered to the left of the line and the latter to the right, the balance being kept on the credit side. Usually the debits from Clearing-House checks are entered in red ink to distinguish them from those that have a different source, as they constitute by far the larger part of the whole.

In the morning the balance from the previous day is entered in the credit column and shows how much each depositor has then to his credit. As deposits come in the deposit-slips are sent from time to time to the balance-bookkeepers, and from these the fresh credits are entered at once. As fast as paid checks are ready for entry they are similarly distributed and the debits are entered from them. These include such as are paid by the paying teller or drawn upon the bank and deposited with it, and those which come in much larger number from the Clearing-House after being deposited in other banks. The latter are taken in hand as speedily as they can be arranged for the different ledgers, and sometimes before the scrutiny of the check-clerks is completed. As collections from items not included in deposits come in from the note-teller they are entered as credits, and any payment or charge on account of depositors is entered as a debit. Credit-tickets for discounts or loans and other miscellaneous credits, and charge-tickets for interest or exchange or anything to be paid by the depositor, go to the balance-bookkeepers and the entries are completed daily, so that the state of the balance may be readily ascertained for the information of the paying teller or of any officer who may have occasion to ascertain it. The number of entries for any account will depend upon how "active" it is, and many of them may not change for days together. Spaces are left on the ledger pages for the insertion of new names as accounts are opened, and as one series of pages become filled another is begun, so that one thick volume may last for a considerable period.

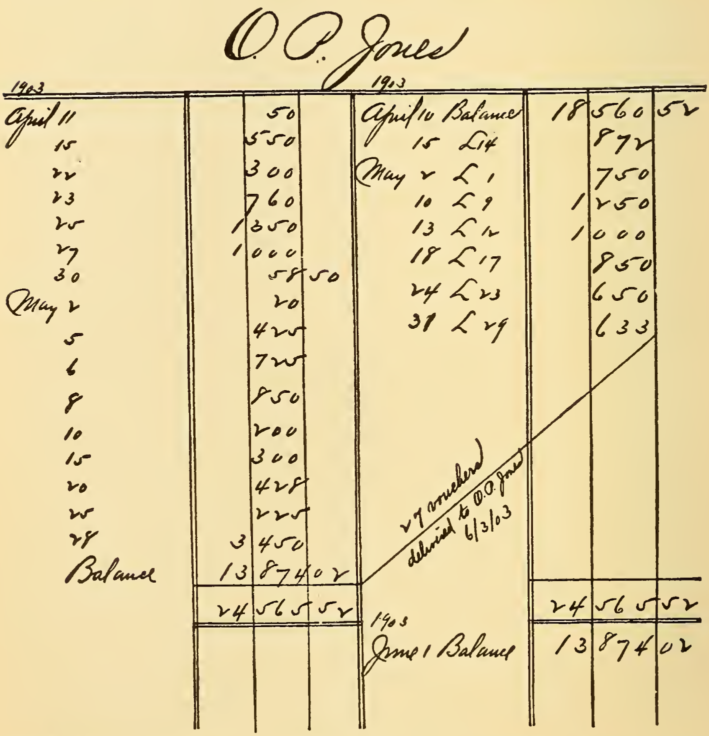
In the "regular" credit-books all the credits to depositors are written up each day from the deposit-slips, and in this case the name of the depositor as well as the amount deposited is written in each time. The names are divided according to the ledgers to which they belong and arranged alphabetically for the convenience of the bookkeepers. The main purpose is to get a correct total, and to furnish the material for final entries and the means of proving the work of clerks and bookkeepers. In the regular debit-books are entered the debits on account of checks upon the bank paid by the first teller or received by the second teller; but, on account of the number that come from the Clearing-House and the separate handling they are subject to, there is a separate "exchange debit" book. There are separate books also for "foreign" credits and debits, such as arise from collections out of town that have not been entered from deposits and regular charges.

There are "supplementary" credit and debit books in which are gathered additional items for each side of the account. In the supplementary credit-book is entered the total of the credits from regular sources, already entered in detail in the other books, and to this total is added separately those which come from whatever quarter through the note-teller, so as to make up a grand total of all the day's credits. In a similar manner the total of regular debits is entered in the "supplementary debit-book," and additional debits from whatever source are entered in detail and a grand total of debits for the day is thus obtained. As the supplementary credits and debits pass through the note-teller's department the results are exhibited in his proof, frequently made up twice a day. An example of his proof is given to illustrate what it includes. Some large banks have also what they call "general" credit and debit books, upon which all the items of the day are set forth in a systematic form, classified according to sources, so as to exhibit all transactions on both sides of the account on a single page or two contiguous pages. Others enter the general items and bring together the totals in "foreign and general" credit and debit books.

The final posting to the accounts of individual depositors is made in the "individual" or "deposit" ledger, which is divided, like the balance ledger and the credit and debit books, into two or more volumes according to the number of accounts, the divisions exactly corresponding for the different set of books. In this ledger the accounts are arranged alphabetically, either strictly or by the initial and vowel system as mentioned above. The pages are turned backward from the upper left-hand corner, upon which appears the names of the depositors whose accounts are on the two pages laid open at any particular place, so arranged as to indicate the position of each account. Thus with either the exact alphabetical or the vowel system it is easy to turn to any account. Each page may be divided down the middle by a double ruling, as the account does not require the full width, but some banks allow the full width of the page for the entries of a single account. The space allowed for an account is determined by an estimate of the number of entries likely to be required. While there may be several inactive accounts kept on one page, an "active account"—that is, one of a customer likely to make many deposits and draw many checks—may occupy several pages. Where there are many of the former a separate part of the ledger is reserved to them. In opening a new ledger a careful estimate is made of the number of pages to be allotted to each letter of the alphabet and the space to be given to each account, with a fair allowance of blank pages and spaces for new accounts to be inserted in their proper order and for those that may overrun the limits originally assigned to them. The purpose is to make the ledger last as long as possible without an unnecessary waste of space or derangement of the order of the accounts. It is considered desirable to have it cover at least a year. Some large banks make a point of opening new ledgers at the beginning of the year and closing them at the end, whether filled or not. Others open them at any time and run them as long as they will conveniently last.

The division being made and the space for each being determined, the accounts are opened by entering the name of each depositor in its proper place and order on the page or in the perpendicular half page to which it is assigned. Under this heading are two sufficiently wide columns, the first for the debit charges and the second for credits, and at the left of each of these a narrow ruling for the date as each debit or credit is entered. Here the credits for any day may be entered directly from deposit-slips and credit-tickets, and the debits from paid checks and charge-tickets, or they may be transcribed from separate books in which they have already been entered by assistant clerks or tellers. The practise varies in different banks. The essential point is to have all the credits and debits accurately entered against the date to which they belong. It will be understood that a credit is the sum which a depositor has paid into the bank or which is to be credited to him, and that a debit is the sum which the bank has paid to or for him, or which is to be charged to him, and a balance is the difference between what he is owing the bank and what the bank is owing him, or what remains to his credit when the former is deducted from the latter, or *vice versa*. In some accounts entries of credits or debits, or both, may have to be made every day, while in others entries of one or the other are made only at irregular intervals. It depends upon the activity of the account, and that of course depends upon the circumstances of the customer. He may be a business man, or firm or corporation, making frequent deposits, drawing many checks, and often having discounts or borrowing and paying on loans, or he may be a person that keeps a bank account only for convenience in paying occasional bills.

There is no separate column for a balance, but a balance is "struck" on the ledger whenever the depositor's pass-book comes in to be balanced. This is done in red ink, a line being drawn under the account, the debits and credits footed up, and the balance entered. It is at this point that the credit entries are made in the pass-book, corresponding to the debits of the ledger, unless they have been separately listed by the check-clerks or kept on a voucher-list, and in that case the aggregate is entered, with a reference to the list, which must accompany the vouchers to be returned. These include canceled checks


O. O. Jones

1903				1903			
April 11		50		April 10 Balance	18	560	52
15		550		15 L14		872	
22		300		May 2 L1		750	
23		760		10 L9	1	250	
25	1	350		13 L12	1	000	
27	1	000		18 L17		850	
30		58	50	24 L23		650	
May 2		20		31 L29		633	
5		425					
6		725					
8		850					
10		200					
15		300					
20		428					
25		225					
28	3	450					
Balance	13	874	02				
	24	565	52		24	565	52
				1903 June 1 Balance	13	874	02

27 vouchers delivered to O. O. Jones 6/3/03

Form of Account on Page of the Individual Ledger, as Balanced.

and charge-tickets. The entries in the pass-book and those in the ledger must be found to agree, and the pass-book and vouchers are left with the bookkeeper to be returned to the depositor on application, unless there is an information-clerk whose special duty it is to attend to the details

MORNING PROOF. August 17th 1903

General Debits,	0		General Credits,	0	
Foreign Debits,	0		Foreign Credits,	12 443	60
Debits, Men A–D,	174	48	Credits, Men A–D,	5 958	64
" " E–K,	118	10	" " E–K,	9 837	55
" " L–R,	220	80	" " L–R,	25 903	62
" " S–Z,	66	27	" " S–Z,	6 537	19
" Women A–C,	203	40	" Women A–C,	1 961	11
" " D–G,	45	13	" " D–G,	6 119	68
" " H–L,	454	61	" " H–L,	2 926	84
" " M–R,	42	35	" " M–R,	9 418	01
" " S–Z,	778	50	" " S–Z,	2 217	56
Addition,	46 586	95	Exchange, 1.60 .24	1	84
Cash,	0		City Office,	1 306	29
Checks,	0		Bills Discounted,	0	
Office,	25 182	13	Cash Items,	0	
Exchange,	11	07	Littles	7	25
Second Teller,	845	44		52	67
Cash Items,	0			550	
Foreign,	12 991	36		81	35
				1 172	45
				116	
				200	
				909	
	87 720	59		87 720	59

AFTERNOON PROOF. August 17th 1903

General Debits,	[illegible]	[illegible]	[illegible]	General Credits,	[illegible]	[illegible]	14
Foreign Debits,	37	110	25	Foreign Credits,	13	903	55
Debits, Men A–D,	30	999	83	Credits, Men A–D,	8	432	64
" " E–K,	33	243	88	" " E–K,	14	026	88
" " L–R,	70	943	05	" " L–R,	103	495	29
" " S–Z	50	293	95	" " S–Z,	9	653	17
" Women A–C,	19	926	87	" Women A–C,	2	794	74
" " D–G,	11	048	81	" " D–G,	7	181	40
" " H–L,	12	766	64	" " H–L,	12	016	40
" " M–R,	11	965	71	" " M–R,	13	379	26
" " S–Z,	8	461	64	" " S–Z,	4	740	68
Addition,	46	586	95	Foreign Office,	15	597	43
Cash,	5	959	26	City Office,	15	706	52
Exchanges,	25	391	87	First Teller,	2	952	53
City Office,	9	156	33	Second Teller,		0	
Foreign Office,		711	93	Exchanges from C. H.	213	062	06
Cashier Account,		0		Cash Items,	16	000	
Treasury U. S.	16	000		Treasury U. S.		0	
Second Teller,	250	092	53	Overs and Shorts, (previous day)		0	
Cash Items,		0					
difference			09				
	762	798	67		762	798	67

Exchanges looked over for Stopped Checks by

NOTE-TELLER'S PROOF AS MADE UP TWICE A DAY, SHOWING ALL SUPPLEMENTARY CREDITS AND DEBITS IN BANK HAVING NUMEROUS ACCOUNTS AND SEPARATE LEDGERS FOR MEN AND WOMEN.

of balancing the pass-book, as described in a previous chapter. Only a few large banks make this the business of a separate "information bureau."

Where there is a separate ledger for "foreign accounts," or those of individual customers out of town, of which some banks in New York have a large number, it is kept in substantially the same way, though credits may be entered from remittance-letters instead of deposit-slips, or from books of original entry in the correspondence department. Whatever the detailed method, the purpose is the same of recording each day the credits and debits of the account as they then appear. The same is the case with banks which act as correspondents and for which the bank we are describing may act as an agent in its city—in short, for all banks that keep an account with it. This is called the "bank ledger." While the method of keeping it is substantially the same as that of keeping the individual ledgers, the accounts are arranged alphabetically by the names of the cities and towns in which the depositing or correspondent banks are situated. Whatever is due to them is entered as a credit when it becomes due, and whatever is due from them is entered as a debit when it becomes due to the bank. The accounts are usually balanced at the end of each month, but this may be done at other times, according to circumstances. These accounts vary in size and importance according to the location of the correspondent and the character of its relations with the city bank, and are subject to a variety of agreements. Upon some of the deposits interest is allowed and credited to the account once a month on the average balance. When items are sent to a bank for collection the amounts are charged to it, and when remittances are received they are credited. Their charges for collection are also credited. The source of these entries is the books and remittance-letters of the correspondence department. It is customary to keep on a separate sheet an "account current," which is a duplicate of the running account in the ledger, to be sent at intervals to the correspondents or depositing banks. This exhibits the state of the account and the balance and corresponds to the pass-book of the individual depositor.

There are banks which keep a double set of ledgers—complete duplicates—merely for the purpose of having one as a check upon the other, and to afford greater assurance against error or collusion. In such cases a comparison of all the accounts is made once a month.

The ledgers thus far described pertain to the accounts of customers with the bank, including individual depositors in the city and out, of all grades and classes, and banks that act as correspondents or keep funds on deposit in the city. They establish and record each day the credit and debit relations of these customers with the bank. This brings us to what, from the bank's point of view, is the most important book of all, the "General Ledger." This is a single ponderous volume, and in it is centered a record of all the bank's business from day to day. It is made up by the general bookkeeper, so as to exhibit each morning the completed transactions of the day before, and from it can be drawn at any time a statement of the bank's condition in all its departments, showing the aggregate items of its resources and liabilities and their relation to each other. Most of its accounts contain no names of persons and no detailed items, but only aggregates of debits and credits and the balances on various accounts. These accounts differ somewhat in number and description with different banks, but they are so classified as to cover all its operations of whatever kind.

There would be neither interest nor instruction in an attempt to deal with these in detail, but their general purport and purpose and the method of keeping them can be

THE CENTRAL NATIONAL BANK
OF THE CITY OF NEW YORK.

$10000.⁰⁰⁄₁₀₀ NEW YORK, Sept 16 1903

CHARGE Planet Nat. Planetville Col.

For currency by express, as per letter Sept 11.

Ten thousand ——————————— Dollars,

CREDIT Paying Teller

For currency shipped as above

I. C. Yutaker
Cor. Clerk.

CHARGE AND CREDIT TICKET. FOR DIRECTION TO BOOKKEEPER.

indicated in a brief space. Among the accounts that pertain to liabilities are those of capital, surplus, undivided profits, circulation, individual deposits, bank deposits, certified checks or acceptances, etc. Among those that relate to resources are bills discounted, demand-loans, time-loans, cash, stock and bonds, or securities, United States bonds, real estate, and so on. Separate accounts are kept of dividends, discount, interest, cashier's checks, certificates of deposit, bills of exchange, overdrafts, expenses, etc. The division and classification of accounts may differ according to the volume and variety of the business, but they must include every kind of transaction in which the bank is engaged in such a manner as to show under each head the credits and charges that belong to it and afford the material for a general statement of resources and liabilities, or a daily trial balance. There is a profit-and-loss account into which is gathered the final balances in such a way as to exhibit gains and losses and the ultimate balance. This is closed at the end of the year or of periods of six months, but it is kept up so as to admit of a statement of condition with respect to profit and loss at any time.

Accounts in the general ledger differ widely in the number of entries that have to be made. A capital account, or surplus account, may be changed only at long intervals, when some increase or decrease is made by the authorized action of directors, while deposit accounts, loan accounts, and many others may require entries every day. The name of the account is written at the top of the page of the ledger and there is a narrow column for dates down the left-hand margin. The rest of the space is divided into two sides by a double ruling down the middle, that to the left being for debit entries, and that to the right for credits, though sometimes two opposite pages are used for an account, one being occupied exclusively for debits and debit balances and the other for credits and credit balances. Each space, whether a page or a perpendicular half page, is divided by a single ruling into two halves for the figures, the first for balances and the second for the debits or the credits, as the case may be, for the balance, whether of debit or of credit, is constantly kept up. The arrangement of the accounts in the book and the number of pages allotted to each is determined by convenience, and an index is kept at the beginning of the ledger.

It may be stated as a general principle that anything that goes to the assets or resources of the bank is charged to the proper account as a debit. It is due from the account to the bank. Whatever goes to its liabilities is credited to the account. It is due to the account from the bank. The sources of the items which the general bookkeeper posts in his ledger are various. He keeps a separate account for each of the individual deposit ledgers and each of the bank ledgers, and he has access to the credit and debit books for his items. It is he who brings together in the "general" credit and debit books the various aggregates that have been derived from original entries in the several departments. He ascertains the totals of credits and debits of each of the deposit ledgers, of the collections, of bills discounted, of loans, of cashier's transactions, and of all the rest that come within the purview of his duties in bringing into systematic order all the day's credits and debits as they are finally ascertained at the close of business. The clerks and tellers prepare each day the material for his postings and he deals only in aggregates. Upon a single line in each account to which anything is to be posted he enters against the date the aggregate of debits and credits belonging to it on that day's transactions, and the balance in its proper column. Thus he gathers into this receptacle of figures the results of each day's work so far as they are completed and made permanent.

The statement that general-ledger accounts deal only in aggregates to be entered in single sums for the day, without designation of persons or specific items, is subject to some qualification. It is true, for instance, of deposit-accounts and most others, but in the case of a loan-account it is common to charge each loan separately and designate it by the name of the borrower. So in the expense-account, the object of the expense or the bill for which it is charged may be indicated in the entry, and in crediting to the cashier-account the names of the persons for whom the bank's checks are drawn are designated. But where the totals come from the combination of many items only the aggregates are entered. The cash-account is an omnium-gatherum for all the actual receipts and payments of the bank for each day. All that is taken in is credited to "cash," and all that is paid out is charged to "cash." The balance is always a "credit balance"; otherwise the bank would be without funds available for use. There may be on a single day a deduction from the balance, but if the bank is in a flourishing condition there is about an even level of cash. It should be gaining in funds rather than losing, or should at least hold its own. On the other hand, the balances of deposit-accounts are constantly debit balances, or should be so; otherwise the bank is paying back to depositors more than it is getting in from them, and a credit balance to the account would indicate that it had no deposits left and was in default to its depositors, or owing the account.

Some banks that do a large business keep a separate "general balance ledger," in which is brought together on one broad page or two contiguous pages of the open book, an exhibit of the aggregate credits, debits, and balances of all the accounts of the general ledger. This is made up by a different hand from the various sources, and so serves as a check and a "proof" upon the work of the general bookkeeper. Finally, there is a daily statement-book in which the titles of the several accounts of the general ledger are printed on the left-hand margin of the pages, classified on opposite pages as resources and liabilities, or this may be done on the perpendicular halves of a single page divided down the middle. Here the aggregate balances as finally determined are entered in a way to show the condition of the bank. Upon the page or half page for assets, for instance, appear the amount of the bank's cash, with the reserve separately stated, of various kinds of loans and discounts outstanding, of securities owned, of sums due from other banks, and so on throughout the list. Upon the page or half page of liabilities is the amount of capital, of surplus, of undivided profits, of circulation outstanding, individual deposits, amount due to other banks, certificates of deposit, cashier's checks, etc. This book enables the officers to ascertain readily the condition of the various accounts, and serves as a guide in making loans and engaging in other new transactions. It also furnishes the material for making up the statements for the Clearing-House and the reports of condition to the Comptroller of the Currency or to the State Bank Commissioner or Superintendent. It is in the nature of a daily trial balance. A " general proof " is made up every night by the bookkeeper, giving the grand totals of cash and of the day's debits and credits. This is sometimes called a " teller's proof."

Clearing-House banks in New York keep a book of " daily averages " of those items that enter into the weekly statement required by the Clearing-House. These items being made up for each of the six days, it is an easy matter to obtain the daily average of each on Saturday morning.

In many banks which have a very large number of depositors and a great volume of business widely distributed a still further condensation is made of the statement of condition in a smaller book labeled "Teller's Proof," which exhibits each morning in small compass the essential items of resources and liabilities, showing the amount of the bank's cash and the state of its reserve, the volume of deposits, the amount of loans and discounts outstanding, including that which is subject to call separately stated, etc. This enables the chief officer, who will have to decide upon new applications for accommodation, to know approximately what resources he has at command. There is an element of estimate in this, and it may be subject to correction before noon. For instance, he can not tell until after the Clearing-House exchanges have been made whether the cash is to be drawn upon for the payment of a debit balance or will be increased by a credit balance. The result of the Clearing-House settlement may change his calculations. He must consider the question of maintaining the percentage of reserve, and may find it advisable to call in certain demand-loans to replenish his funds and keep up the reserve.

Apart from what may be regarded as the daily system or routine of the bank's work, an alert and careful president has a variety of statements prepared from time to time. One of these is a detailed statement of expenses. The general bookkeeper, as he posts from day to day the bills for expenses in his expense-account, keeps a classified statement of the several amounts and the purposes for which payments are made. At the end of the month he puts this in completed form, making a comparison with the corresponding month of the previous year. He makes a similar comparison for the part of the calendar that has elapsed, so that it is easy to see how the expenses for various purposes have been running, and whether they have increased or diminished as a whole or in any particular direction. Similar statements of earnings from various sources are kept up so that the course of the income can

	1st TELLER			2d TELLER					
C. H. Ctf. Dep. Gold Notes.	485	000					485	000	
Gold Coin.	54	585			225		54	810	
" Certificates.	618	800					618	800	
Legal Tender Notes.	112	305		21	337		133	642	
Nat'l Bank "	7	000		2	000		9	000	
Silver Coin.	20	817	47		87	61	20	905	08
" Certificates.	1033	845					1033	845	
1st Teller's Total.	2332	352	47						
Mixed Currency.	5	959	26				5	959	26
	2338	311	73	23	649	61	2361	961	34
2d Teller's Exchanges	328	164	47						
3d " "	25	391	87						
2d " City Office	12	695	97						
3d " "	9	156	33						
2d " Foreign Office.	13	850	22						
3d " " "		711	93						
Cash Items.	32	328	10				422	298	89
							2784	260	23
									15
							2784	260	38
CASH.							2577	097	92
General Credits.	309	856	14						
Foreign "	13	903	55						
Ind'l " Men, A-D.	30	079	98						
" " " E-K.	43	474	37						
" " " L-R.	119	548	79						

DIFFERENCES.	OVER.		SHORT.	
1st Teller				
2d "				.06
3d "				.09
Check Clerks				
Totals				.15
Final Difference				

"	"	" D-G.	11	102	78
"	"	" H-L.	18	873	43
"	"	" M-R.	25	252	12
"	"	" S-Z.	10	464	80
General Debits.			122	139	08
Foreign	"		37	110	25
Ind'l	"	Men, A-D.	32	663	66
"	"	" E-K.	40	806	70
"	"	" L-R.	74	070	33
"	"	" S-Z.	53	411	74
"	"	Women, A-C.	24	373	70
"	"	" D-G.	12	283	71
"	"	" H-L.	13	590	67
"	"	" M-R.	13	361	56
"	"	" S-Z.	9	749	99

640	723	85
3 217	821	77
433	561	39
2 784	260	38

1st Teller.
1st Teller's Assistant.
2d Teller.
2d " Women.
3d "
General Bookkeeper

Exchanges, Endorsement.
" Date.
" Filling.
" Signature { A-D, Men / E-K, " / L-R, " / S-Z, "

A-C, Women
D-G, "
H-L, "
M-R "
S-Z. "

REMARKS:

General Proof, showing the Cash and the Credits and Debits of a Day's Business, and the Agreement of Tellers' and Bookkeepers' Work within Fifteen Cents on nearly Three Million Dollars.

be readily traced. The value of such statements to the responsible officers is apparent. A watchful officer frequently has tables of statistics prepared under his own eye relating to a variety of matters that more or less concern the banking business, such as the course of the market prices of the principal stocks and bonds dealt in or used as security for loans, the volume of mercantile business and its variations, the earnings of railroads and large industrial interests, and so on. There is hardly a limit to the practical, industrial, commercial, and financial information which it is useful for a bank to have at its command in systematic form for the purpose of study and reference.

XXIV

EXAMINATIONS, STATEMENTS, AND REPORTS

Notwithstanding the thoroughness and care with which all records and accounts are kept in a well-managed bank, and the number of statements that are prepared to show the course and condition of its business, it is subject to a variety of examinations, as a precaution against inaccuracy, negligence, and possible collusion and dishonesty. In the first place, there is a system of internal examinations by committees made up by the officers from the clerical force. These are applied unexpectedly and simultaneously to all those departments in which funds are handled and debits and credits are determined and recorded, as those of the tellers and the collection, discount, and loan clerks, and the committees are made up of those who have no part or responsibility in the work to be scrutinized. At the close of banking hours on some day that can not be anticipated the head of each of these departments finds his work suddenly taken out of his hands by one of these committees, which goes carefully and thoroughly through the books and records of the department, its "proofs," and all the methods and details of its work, to ascertain how efficiently and faithfully it has been and is being done. Hours are spent in hunting for faults, errors, and defects, and a careful and confidential report is made upon the investigation. This may be done two or three times a year, or oftener if there is deemed to be occasion for it, and it naturally keeps the

Statement of the Associated Banks of the City of New York.

From Reports to the New York Clearing House, as required under Section 16, of the Constitution.

For Week ending Saturday, September 19th, 1903.

NOS.	BANKS.	*CAPITAL.	*NET PROFITS	LOANS.	SPECIE.	LEGALS.	†DEPOSITS.	CIRCULATION	NOS.
1	Bank of N. Y. Nat'l Bkg. Assoc'n	$2,000,000	$2,443,100	$17,341,000	$2,482,000	$1,618,000	$16,172,000	1,042,000	1
2	Bank of the Manhattan Company.	2,050,000	2,439,800	18,088,000	7,191,000	2,111,000	23,919,000		2
3	Merchants' National Bank........	2,000,000	1,347,000	12,050,700	2,296,700	1,137,500	13,417,300		3
4	Mechanics' National Bank........	2,000,000	2,747,800	12,754,000	1,745,000	1,391,000	12,418,000		4
6	Bank of America................	1,500,000	3,511,200	19,153,900	3,075,600	2,196,900	20,406,500		6
7	Phenix National Bank..........	1,000,000	310,900	4,045,000	607,000	259,000	3,574,000	48,700	7
8	National City Bank.............	25,000,000	16,852,200	140,532,700	28,421,200	7,031,800	129,475,200	5,450,400	8
12	Chemical National Bank........	300,000	7,461,200	23,940,800	4,499,400	1,930,700	23,141,500		12
13	Merchants' Exchange Nat'l Bank.	600,000	342,300	5,058,100	762,800	561,900	5,254,500	235,200	13
14	Gallatin National Bank.........	1,000,000	2,207,200	7,515,900	754,900	518,300	4,858,000	985,300	14
15	Nat'l Butchers' and Drovers' Bank	300,000	124,200	2,181,000	515,700	58,000	2,396,500	45,500	15
16	Mechanics' and Traders' Bank...	700,000	370,500	3,928,000	262,000	419,000	3,784,000		16
17	Greenwich Bank................	500,000	528,100	1,996,900	432,800	342,300	1,762,100		17
18	Leather Manufacturers' Nat'l Bank	600,000	520,900	4,535,400	663,900	455,200	4,368,700	485,300	18
21	American Exchange Nat'l Bank..	5,000,000	4,018,100	29,014,000	3,447,000	1,586,000	21,375,000	4,545,000	21
23	National Bank of Commerce.....	10,000,000	9,559,000	74,373,800	9,721,600	5,155,300	59,876,800	9,892,200	23
27	Mercantile National Bank.......	3,000,000	4,423,600	22,348,500	3,276,900	1,288,600	18,782,500	2,025,000	27
28	Pacific Bank...................	422,700	600,500	3,059,200	432,800	452,200	3,769,800		28
30	Chatham National Bank..........	450,000	1,087,400	5,865,600	738,900	865,500	5,864,300	49,200	30
31	People's Bank..................	200,000	394,000	2,236,100	98,200	473,300	2,342,700		31
32	National Bank of North America.	2,000,000	2,045,100	14,441,800	1,668,400	1,606,800	12,942,800	833,100	32
33	Hanover National Bank..........	3,000,000	6,307,800	44,049,300	10,048,500	6,292,600	53,815,200	2,317,800	33
34	Irving National Bank...........	1,000,000	1,050,500	6,160,000	867,900	416,300	5,338,000	242,900	34
36	National Citizen's Bank.........	1,550,000	662,600	7,163,900	1,510,800	439,700	7,820,200	634,900	36
40	Nassau Bank....................	500,000	313,000	2,561,900	305,100	311,000	2,998,500		40
42	Market and Fulton Nat'l Bank. .	1,000,000	1,248,500	6,479,200	1,100,200	671,700	6,432,000	50,000	42
44	National Shoe and Leather Bank.	1,000,000	346,800	5,821,000	1,591,800	206,500	6,923,000	49,200	44
45	Corn Exchange Bank............	2,000,000	3,286,800	24,940,000	4,701,000	3,145,000	30,152,000		45
49	Oriental Bank..................	750,000	1,026,900	5,593,900	355,600	563,800	4,740,300		49
53	Importers' and Traders' Nat. Bank	1,500,000	6,511,900	22,612,000	3,474,000	1,178,000	19,386,000	44,500	53
54	National Park Bank............	3,000,000	6,895,300	57,834,000	13,757,000	4,364,000	65,530,000	2,483,000	54
59	East River National Bank.......	250,000	143,100	1,054,200	100,000	153,900	1,095,100	49,500	59
61	Fourth National Bank..........	3,000,000	2,910,100	16,657,500	2,584,000	2,400,100	18,362,100	50,000	61
62	Central National Bank..........	1,000,000	602,200	8,990,000	2,264,000	564,000	10,432,000	935,000	62
63	Second National Bank	200,000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	65
67	New York Nat'l Exchange Bank.	1,000,000	800,300	6,563,000	1,018,300	467,100	[illegible]	[illegible]	67

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2,011,700	62,783,000	8,661,800	65
67	New York Nat'l Exchange Bank.	1,000,000	890,300	6,563,000	1,018,300	467,100	5,691,900	490,200	67
70	Bowery Bank..................	250,000	773,500	2,747,000	391,000	267,000	3,122,000		70
71	New York County National Bank	200,000	651,000	4,272,500	772,400	386,200	4,701,200	50,000	71
72	German-American Bank.........	750,000	492,300	3,465,600	661,800	212,600	3,385,500		72
74	Chase National Bank...........	1,000,000	3,762,900	37,075,100	9,578,100	2,116,600	43,981,200	50,000	74
76	Fifth Avenue Bank......	100,000	1,659,400	8,410,600	2,159,500	255,800	9,145,900		76
77	German Exchange Bank........	200,000	659,200	2,825,600	190,000	690,000	3,301,600		77
78	Germania Bank....	200,000	873,900	2,923,400	418,100	699,700	4,806,500		78
80	Lincoln National Bank..........	300,000	1,309,400	10,400,800	694,500	1,653,300	10,465,900	247,000	80
81	Garfield National Bank.........	1,000,000	1,289,200	7,094,500	1,648,000	303,500	7,202,200	49,000	81
82	Fifth National Bank.	250,000	370,600	2,380,300	456,100	164,800	2,398,300	239,800	82
83	Bank of the Metropolis.........	1,000,000	1,394,200	7,288,400	1,510,900	352,900	8,137,400		83
84	West Side Bank............ ...	200,000	518,700	3,265,000	553,000	341,000	3,611,000		84
85	Seaboard National Bank........	500,000	1,338,800	12,112,000	1,846,000	1,605,000	13,719,000	50,000	85
88	First National Bank, Brooklyn...	300,000	582,600	4,338,000	510,000	642,000	4,520,000	75,000	88
91	Liberty National Bank..........	1,000,000	1,901,100	9,464,000	1,626,400	240,000	7,612,000	796,300	91
92	N. Y. Produce Exchange Bank...	1,000,000	507,900	4,443,000	805,400	297,200	4,347,200		92
93	New Amsterdam National Bank..	500,000	578,800	6,117,100	794,200	451,800	6,207,100	100,000	93
94	Astor National Bank...........	350,000	523,200	4,887,000	941,000	273,000	4,955,000	350,000	94
95	Western Nat'l Bank of the U. S..	10,000,000	3,494,100	61,881,400	11,557,900	3,894,200	62,564,200	1,431,100	95
	TOTAL, NATIONAL BANKS.......	$98,250,000	$113,577,500						
	" STATE BANKS...........	12,322,700	19,349,900						
	Totals..........	110,572,700	132,927,400	922,055,800	169,391,900	71,152,300	†909,482,300	45,366,900	
	*As per official reports.—			Decrease	Decrease	Decrease	Decrease	Increase	
	39 National Banks, Sept. 9th, 1903. 17 State Banks, Aug. 25th, 1903.			4,527,000	2,676,300	1,700,600	8,713,300	568,100	

Reserve on Total Deposits, Decrease $2,198,575 Reserve on Deposits other than U. S., Decrease $2,180,300

†United States Deposits included, $37,359,000

Clearings for Week ending	September 19th, 1903, - - - - -	$1,023,487,271.37
" " "	September 12th, 1903, - - - -	*774,686,687.79
Balances " "	September 19th, 1903, - - - - -	47,476,781.80
" " "	September 12th, 1903, - - - -	*40,807,450.70
Clearings this Day	September 19th, 1903, - - - - -	167,786,246.91
Balances "	September 19th, 1903, - - - -	6,933,565.83

*5 Days.

STATEMENT OF NEW YORK CLEARING-HOUSE, FROM WEEKLY REPORTS OF ALL ITS MEMBERS.

tellers and clerks of these departments constantly on their guard and up to their work. Another practise is that of suddenly shifting the bookkeepers at irregular intervals from one division of the ledgers to another, instead of keeping the same men permanently at the same books.

Besides the internal examinations made under the direction of the officers by committees chosen from employees of the bank, there are occasional examinations of the work and methods of all departments and the general condition of affairs by an outside committee of experts selected by the directors, which even the officers can not anticipate. This committee makes its appearance upon the scene suddenly some day after banking hours and takes possession. Everything is put at its command, and everybody is subject to its orders for the time being. It is made up of experienced banking men who have no concern with the institution under examination, and it subjects the affairs of that institution to a rigid scrutiny in detail, and prepares a report to be laid before the Board of Directors, with such suggestions as it finds occasion to make. These unofficial examiners are paid by the bank, and the salaried clerks who serve on the committees previously mentioned receive extra pay for this service, which also gives them an opportunity to justify the confidence reposed in them.

Finally, there are the official examinations, which even the directors can not anticipate. They know that they are liable to come, but they never know when they are coming. The Comptroller of the Currency has a board of examiners for national banks, who are, or at all events should be, competent experts, and he assigns them from time to time to the task of examining certain designated banks, passing from one to another at irregular intervals. The Superintendent of Banking, or whatever officer may be vested with the supervision of banks under State laws, is provided with a similar force of examiners for State banks and other financial institutions under State control. The official examiner is liable to make his appearance at any time in any bank, and on showing his credentials he is entitled to every facility and cooperation in looking into its affairs. He can go over its books and accounts, inquire closely into its methods, count up its cash, examine into its discounts and loans, scrutinize its securities and its investments, and make himself acquainted with every detail of its business and its condition. The thoroughness with which this is done may depend upon the competence and fidelity of the examiner and the circumstances of each case, but the purpose is to ascertain whether the bank is properly managed and in a sound condition. The head of the banking department of the State or the National Comptroller of the Currency must depend mainly upon the reports of his examiners for making effective his supervision of the system under his charge.

The Clearing-House statement mentioned in the last chapter is required not only from members of the association, but from the institutions that clear their checks through any of the members. The statement must be sent in before eleven o'clock on Saturday for the six preceding business days, giving the daily average of loans and discounts, specie, legal tenders, deposits, and circulation. The aggregate for all the associated banks is immediately made up at the Clearing-House and given out for publication in the newspapers, and is always looked for with interest as indicating the relation of the reserves to deposits. This, taken with the volume of loans outstanding, is an index of the condition of the money market. If the reserves are close to the legal limit, or below it, this is regarded as a sign of actual or impending stringency and a probable advance of rates for money, whereas if there is a liberal margin of surplus it is a token of ease and possible dulness. As the statement is for daily averages it is not an exact indication

NEW YORK CLEARING HOUSE.

Weekly Statement of Non-Member Banks, for Week ending Saturday, September 19. 1903

BANKS	*CAPITAL.	*NET PROFITS	AVERAGE AMOUNT OF LOANS AND DISCOUNTS AND INVESTMENTS	AVERAGE AMOUNT OF SPECIE	AVERAGE AMOUNT OF LEGAL TENDER NOTES AND BANK NOTES	AVERAGE AMOUNT ON DEPOSIT WITH CLEARING HOUSE AGENT.	Average Amount on Deposit with other New York City Banks and Trust Co's.	AVERAGE AMOUNT OF NET DEPOSITS.	AVERAGE AMOUNT OF CIRCULATION
NEW YORK CITY.									
BOROUGHS OF MANHATTAN AND THE BRONX.									
Colonial Bank	$100,000	$209,200	$2,257,700	$43,800	$206,800	$248,900	$82,800	$2,525,500	
Columbia Bank	300,000	270,000	3,400,000	157,000	105,000	270,000	3,000	3,515,000	
Fourteenth Street Bank	100,000	110,500	1,491,600	88,800	74,600	292,200		1,792,800	
Gansevoort Bank	200,000	64,000	1,799,200	29,100	111,300	104,900	35,200	1,891,100	
Hamilton Bank	200,000	114,000	2,344,400	126,300	104,400	110,400	75,000	2,520,900	
Mount Morris Bank	250,000	109,800	2,017,700	117,600	84,700	307,500	54,300	2,678,400	
Mutual Bank	200,000	209,500	2,280,200	23,700	248,900	210,900		2,508,600	
Nineteenth Ward Bank	200,000	197,700	1,290,100	27,000	137,000	280,600	281,400	1,703,000	
Plaza Bank	100,000	243,800	2,669,000	165,000	147,000	241,000		3,014,000	
Riverside Bank	100,000	103,300	1,097,200	10,200	70,700	53,100	36,300	1,123,400	
State Bank	100,000	498,600	6,884,000	425,000	241,000	67,000	303,000	7,249,000	
Twelfth Ward Bank	200,000	100,500	1,483,000	43,000	192,000	146,000	50,000	1,954,000	
Twenty-third Ward Bank (Bronx)	100,000	93,100	1,252,400	44,800	141,900	95,600	108,400	1,555,000	
Yorkville Bank	100,000	271,000	1,833,400	40,200	189,000	243,400	1,800	2,005,000	
Fidelity Bank	200,000	116,400	637,000	11,000	41,500	38,500		562,300	
Varick Bank	100,000	64,300	758,000	3,200	59,400	86,300	32,700	800,000	
Jefferson Bank	400,000	256,200	1,772,700	9,400	67,500	236,000	500	1,505,800	
Century Bank	100,000	53,200	397,300	5,800	17,600	27,700	17,000	330,700	
Bank of Washington Heights	100,000	121,400	550,200	10,400	21,700	74,600		438,000	
United National Bank	1,000,000	206,500	1,957,800	205,200	55,100	95,500		1,152,800	$98,900
BOROUGH OF BROOKLYN.									
Broadway Bank	150,000	317,300	2,017,700	11,300	155,400	267,200		2,111,800	
Brooklyn Bank	300,000	162,200	1,438,000	101,400	54,300	253,300	25,300	1,560,000	
[illegible]	[illegible]	[illegible]	2,940,500	324,100	83,400	351,600		3,256,000	241,700
Mechanics' Bank	500,000	348,600	5,497,800	158,700	428,700	278,300	40,000	6,291,900	

Eighth Ward Bank	[illegible]	[illegible]	[illegible]	[illegible]	63,400	351,000		3,250,000	241,700
Mechanics' Bank	500,000	348,600	5,497,800	158,700	428,700	278,300	40,000	6,291,900	
Merchants' Bank	100,000	51,000	875,900	9,700	50,900	124,400	10,000	973,900	
Nassau National Bank	300,000	649,600	3,701,000	200,000	391,000	596,000	21,000	4,180,000	66,400
National City Bank	300,000	589,500	2,900,000	99,000	219,000	219,000	103,000	2,978,000	99,400
North Side Bank	100,000	167,800	894,000	10,300	62,000	47,300	172,000	937,900	
People's Bank	100,000	166,200	1,205,900	51,600	83,400	156,600	63,100	1,365,600	
Seventeenth Ward Bank	100,000	80,400	622,700	8,500	51,700	77,900	31,900	614,100	
Sprague National Bank	200,000	268,400	970,200	112,800		203,200	78,000	1,006,000	98,300
Union Bank	200,000	120,200	1,301,400	40,000	80,000	112,200	165,100	1,383,600	
Wallabout Bank	100,000	72,100	769,000	43,500	24,800	59,700	67,700	791,800	
Borough Bank	200,000	77,800	1,031,900	6,900	45,400	66,300	26,500	922,000	
BOROUGH OF RICHMOND.									
Bank of Staten Island	25,000	75,500	545,300	23,300	15,000	90,500	25,800	617,600	
First National Bank, Staten Island	100,000	110,300	725,000	33,300	10,000	201,500		766,000	24,500
JERSEY CITY.									
First National Bank, Jersey City	400,000	1,031,400	4,128,900	200,400	220,300	1,490,500	567,000	5,483,900	397,800
Hudson Co. Nat. Bank, Jersey City	250,000	640,700	2,329,000	67,100	56,500	87,800	34,300	1,778,400	96,700
Second Nat'l Bank, Jersey City	250,000	288,900	1,165,600	59,600	12,100	156,900	10,300	1,006,300	61,000
Third Nat'l Bank, Jersey City	200,000	278,800	1,079,600	40,300	71,000	321,900	26,300	1,298,900	200,000
HOBOKEN.									
First National Bank, Hoboken	110,000	522,900	2,651,600	128,800	38,100	179,200	11,500	2,479,900	94,200
Second National Bank, Hoboken	125,000	143,700	1,085,400	33,800	44,000	77,900	36,300	1,121,300	46,500
TOTAL NATIONAL BANKS	$3,487,000	$5,263,300							
" STATE BANKS	5,125,000	4,850,400							
Totals	8,612,000	10,113,700	78,400,100	3,353,800	4,541,700	8,691,100	2,604,200	84,173,200	1,525,400
*As per official reports.—			Increase	Decrease	Decrease	Decrease	Increase	Increase	Decrease
12 National Banks, Sept. 9th, 1903.									
31 State Banks, Aug. 25th, 1903.									
Reserve, $295,000 Decrease.			354,100	70,600	181,400	411,100	405,700	150,400	13,400

Statement of New York Clearing-House, from Weekly Reports of Non-Member Banks.

of condition at the end of the week, since the amounts may have been rising or falling during the week. In the general

182443

COPY OF STATEMENT

OF THE

Cosmopolitan Bank for week ending the 19th day of September 1903 as required by Section 16 of the Constitution of the New York Clearing House Association.

Average amount of Loans and Discounts, . .	11	493	636
Average amount of Specie, ...	2	629	814
Average amount of Legal Tender Notes, . . .		469	329
Average amount of Deposits, other than U. S., .	12	163	920
Average amount of United States Deposits, . .		0	
Average amount of Circulation, ...		0	

New York Clearing House

Please send a copy of the Weekly Statement of your Bank to the Clearing House *before 11 o'clock A. M. on each and every Saturday.*

WILLIAM SHERER, MANAGER.

Correct ....

FORM OF STATEMENT OF CLEARING-HOUSE BANK AS FILLED OUT.

Clearing-House statement the increase or decrease for the various items and for the total reserve is noted. A statement for all the banks in detail, as well as the aggregate for the association, is published every week, in which the capital and surplus, as well as the other items, are given and the percentage of reserve is noted for each bank. To this is added the volume of clearings and the amount of balances settled for the week, as compared with the previous week. A separate statement is published for the non-member banks of the city. Examples of these statements for a recent date are here presented by way of illustration; these are for the associated banks of New York and the non-member banks, but similar statements are required by clearing-houses in other cities.

National banks are not only subject to examination by an official examiner appointed by the Comptroller, whenever the latter may see fit to direct it to be made, but the Comptroller is required by law to call for a report of condition at least five times a year. He issues his call from Washington, fixing a date for which all reports are to be made of the condition of the bank " at the close of business " on that day, and requiring them to be forwarded to his office " immediately." There is a penalty of $100 for every day's delay beyond five days from the receipt of the notice. Two copies of a blank form are furnished to each bank to fill out, one of which it may file for its own use. This consists of two pages of a broad sheet, one for a statement of resources and the other for liabilities. There are twenty items in each of these lists. Those on the side of resources are " loans and discounts," subdivided into those on which officers and directors are liable as payers or indorsers and those on which they are not so liable; " overdrafts," secured and unsecured separately stated; " United States bonds to secure circulation " (par value), the amount of each class being stated; " United States bonds to secure United States deposits "; " United States bonds on hand "; " premium on bonds," stated separately for those to secure circulation and others; " stocks, securities, etc., including premium on same"; "banking-house furniture and fixtures," value separately stated; "other real estate owned"; "due from national banks (not approved reserve agents)"; "due from State and private banks and bankers, trust companies, and savings-banks"; "due from approved reserve agents"; "internal-revenue stamps"; "checks and other cash items"; "exchanges for Clearing-House"; "bills of other national banks"; "fractional paper currency, nickels, and cents"; "lawful money reserve in bank," classified in gold coin and certificates, silver coin and certificates, fractional silver coin, and legal-tender notes; "redemption fund with United States Treasurer (not more than 5 per cent on circulation)"; and "due from United States Treasurer." The amount of each of these items is to be entered, no spaces being left vacant, but the word "none" being written in where there is no such amount, and the total footed up.

The items in the list of liabilities are: Capital stock paid in"; "surplus fund"; "undivided profits," including amounts, if any, set aside for special purposes, less current expenses and taxes paid; "circulating notes secured by United States bonds, less amount on hand and in Treasury for redemption or in transit" (the latter amount being separately stated); "due to national banks (not approved reserve agents)"; "due to State banks and private bankers"; "due to trust companies and savings-banks"; "due to approved reserve agents"; "dividends unpaid"; "individual deposits subject to check"; "demand certificates of deposit"; "time certificates of deposits"; "certified checks"; "cashier's checks outstanding"; "United States deposits"; "deposits of United States disbursing officers"; "notes and bills rediscounted"; "bills payable, including certificates of deposit representing money borrowed"; and "liabilities other than those stated above." As in the case of resources, an entry must be made for each item and the total footed up. The two sides of the statement should balance, as showing the exact condition of the bank on the prescribed date.

On the back of the statement are a number of blank schedules in which details of some of the items must be set forth. These include, on the side of resources, loans and discounts, presenting the different classes of discounted paper and loans on security; overdrafts, the secured and unsecured separately, classified as "standing twelve months or over," "standing six months or over," "temporary," and "officers and directors"; stocks, securities, etc., entered by name and value, with amount at which carried on books and estimated market value; "other real estate owned," with details of property and value, date of acquiring, and whether taken for debts previously contracted; checks and cash items other than exchange for Clearing-House, stating separately checks and drafts on city banks not members and those on other banks. Other schedules are for average percentage of reserve to deposits for thirty days and rate of interest paid on deposits and on bills rediscounted and bills payable, certificates of deposit representing money borrowed; loans exceeding the prescribed limit, including amounts due from banks and bankers and overdrafts; balances due from or to approved reserve agents with name and location of each bank and the amount in each case, and liabilities of different officers and directors, as payers, as indorsers, and for overdrafts, with number of shares in the bank owned by each.

This report of condition has to be sworn to by the president or cashier and attested by three directors before a notary public or other officer commissioned to administer oaths. The substance of each report, containing all the items of resources and liabilities in condensed form, must be published in a newspaper in the place where the bank is located, or, if there is none in that place, in the nearest one in the same county. A copy of this, cut from the newspaper, must be sent to the Comptroller's office pasted upon the form furnished for this published report and accompanied by a statement of the fact of publication sworn to by the publisher. A compilation from these reports for the whole country is made in the Comptroller's office and furnished to any newspaper correspondent who may desire it, that the utmost publicity may be given to the condition of the national banks. Five times a year it is possible to know accurately how many of these banks there are, not only in the country but in each State and each city and town where there is any, the amount of their capital, and their resources and liabilities in their various forms. Apart from the occasional publication of the important facts in the newspapers, full and detailed information is given every year in the Comptroller's official report to Congress.

Besides the report on condition, every national bank has to make a semiannual report to the Comptroller of its earnings and dividends. A form is supplied for this, divided into three sections. In the first is entered on one side the gross earnings of the period and any losses recovered since the previous reports, and on the other premiums on United States bonds charged off, losses from bad debts, decrease of values or otherwise, expenses and taxes, and net earnings for the six months. These two sides should balance. In the second section must be entered on one side the net earnings brought down from the first section, undivided profits or loss, brought forward from the previous report, any amount withdrawn from surplus since the previous report, any authorized reduction of capital to meet loss or add to profit, any assessment paid on capital, and any amount subscribed and paid by shareholders as surplus or profits; and on the other side any sum carried to surplus fund during the half year, amount of dividends paid, with rate, and net profits undivided, or loss, as the case may be. This is complete for the six months' period, but a third section must be filled out showing on one side the total profits since organization as a national bank, profits and surplus of old organization at time of conversion, if any, and total paid in by shareholders and reductions of capital to meet losses and passed to profits; and on the other side total surplus at date of the report, total dividends paid since organization, and amount of present undivided profits, or of loss, to be carried forward to the next report. If no dividend has been paid, the report must be made to show earnings and the disposition made of them. The report must be sworn to by the cashier as a true statement to the best of his knowledge and belief.

The semiannual report on circulation outstanding is made to the Treasurer of the United States for the purpose of having the "duty," or tax, levied thereon. A blank is furnished by the Treasurer with full instructions as to the manner of computing the average circulation for the six months. The amount for each day is to be recorded, and when the report is made these sums are added together and the aggregate is divided by the number of days, the tax not being levied upon the authorized or issued circulation, but the "average outstanding." The bank is entitled to deduct the amounts with the Treasurer for redemption and reissue, or in its own hands for reissue, but sometimes the return is made for the full issue. The form of report is simple, the amount of notes received from the Comptroller of the Currency being entered, the amount in circulation based upon 2-per-cent consols of 1900, with the amount of tax at $\frac{1}{4}$ of 1 per cent, and the amount based on "any or all other United States bonds," with the tax at $\frac{1}{2}$ of 1 per cent. It must be sworn to as a true statement by the cashier, and the payment of the tax is usually made to the Treasurer on the return of the report. A bank having circulation outstanding less than half a year at the time of the report, which must be made within ten days of the 1st day of July and January, divides the aggregate for the time the notes are outstanding by the number of days in the half-year to ascertain the "average" subject to the tax.

Where there are State banks, reports of condition somewhat similar to those of the national banks, but usually with less detail, are required, to be called for by the authority entrusted with the execution of the banking laws of the State. In New York the call is made four times a year. It is intended in both cases that there shall be no opportunity to make preparation for these reports. In New York and some other States the official supervision of banks includes trust companies and savings-banks.

While it may not be easy to grasp all these details as to examinations, statements, and reports, they are given here, like those relating to the work of tellers, clerks, and bookkeepers, in the hope of producing an adequate impression of the care and thoroughness required in the operation of a bank.

XXV

CLERICAL FORCE AND LINES OF ADVANCEMENT

After having gone over the ground of the work of a large and active bank in an important financial center, it will be easy to understand that the service requires a considerable clerical force in which there will naturally be gradations and lines of advancement. It is unnecessary to dwell upon the qualities desirable in this kind of work. There can not be too much intelligence and general mental training, but special taste and aptitude and a readiness to study the business are eminently desirable. Nowhere does more depend upon confidence; and the commonplace virtues of honesty, industry, fidelity, and loyalty are indispensable to success. In no business is there likely to be stricter inquiry into the character and qualifications of those employed or a more vigilant supervision over their habits. At the same time every one who holds a position of any degree of trust or responsibility will be put under bonds. In these days there are corporations that make a business of giving bonds, which are generally acceptable, though first-class personal bonds of men of standing and known integrity are preferred.

There are in most banks a number of employees, like janitors, porters, and watchmen, who are hardly the material for advancement to higher places, and may spend the better part of their lives in these humbler places. It is not common nowadays in the larger city banks to call those messengers who are sent out to make collections or exercise discretion in carrying out instructions in dealing with customers or with other banks. Messengers, rather, are trusty men who are sent on ordinary errands or to accompany clerks upon duties that require incidental help, though the term is still applied in many banks to the young men who act as collectors.

These latter present notes and drafts and make collections, and here is the first step in learning the practical work of banking, and the beginning is usually made in the collection department or that of the note-teller. The collector gradually becomes familiar with the details of that department, and his next step is likely to be that of an assistant to the clerk; or if there is need of an assistant to the mail-teller, the corresponding clerk, or the exchange-teller, he may be chosen to fill the vacancy. The advancement is likely to be through the lower grades of those departments in the order named. As a variety of experience is desirable, there is more likely to be such transfers than a waiting for promotion in the same department. There may, however, be more than one assistant in a department, and if a first assistant is transferred his place will be taken by the next in line. Much will depend upon where vacancies happen and upon the special aptitude displayed by persons selected to fill them, as well as experience or seniority in service. Next to the assistants to clerks come those to the regular tellers and the bookkeepers. The line of advancement for assistant tellers is likely to be first to that of the note-teller, then the receiving teller, and finally the paying teller. A young man who once enters the bookkeeper's department is less likely to be transferred on account of the peculiar character of the duties, requiring a special kind of expertness; but there are exceptions, for a good bookkeeper may be highly qualified for a teller's place just when a competent man is wanted.

When it gets beyond the grade of assistants the service becomes more stable, but changes will come in the best-regulated banks. A vacancy may be filled by an experienced and highly recommended person seeking a place from the outside, but the rule is one of promotion from the ranks of the most trusted subordinates. The first head of a department likely to be reached is that of collection-clerk or coupon-clerk, and the next step in promotion will be to the position of corresponding-clerk. After him come in order the discount-clerk and loan-clerk. The distinction between clerks and tellers is largely one of name, but some remnant of the etymological significance of the words remains. A clerk is a writer and a teller is a counter, and the latter has more direct responsibility in handling funds. The mail-teller receives and accounts for those that come through the post-office, but his duties are subsidiary to those of the note-teller, who has immediate charge of the proceeds of all collections. The relation of the exchange-teller who takes charge of the checks that are settled through the Clearing-House is rather with the bookkeepers than with those who handle the cash, and he ranks below the note-teller. The three principal tellers are the note-teller, the receiving teller, and the paying teller, and the line of promotion above the clerkships is through these.

It has been mentioned that the cashier is the chief executive officer in command of this force, but with the increase of his duties and the necessity of one or more assistant cashiers, he now has in the largest banks a representative in immediate charge of the clerical force in the person of the chief clerk. The latter is usually a man who has risen through the ranks and passed the various important grades of the service, and is therefore familiar with all the duties. He is able to relieve the cashier of a multitude of details in the supervision of the routine work, assigning subordinates to duty here and there where they are needed, seeing that every point is covered, answering questions, giving directions, and supplementing the work by his own hand wherever necessary. He is the real superintendent of the work of clerks and tellers and the connecting link between the rank and file of the force and the officers of the bank. It is assumed here that the institution is systematically managed with sole reference to its efficiency as a great business agency, having well-defined obligations and responsibilities, and that in the employments and promotions "merit and fitness," and not favoritism or "pull," are determining factors. This is doubtless the case with the largest and most successful institutions, but this does not imply that personal choice or influence are without effect. The purpose has been merely to give an idea of the gradations of the service and the normal lines of advancement. In smaller banks the system is naturally simpler and more flexible, and the relations between officers and employees are closer. There are fewer clerks and may be no assistants, and departments may be blended together, but from the complex it is easy to infer the methods of the simpler.

The plan of gradation and promotion described above is not that of all banks, and there is no uniform system. Variation may be determined by the character and extent of the bank's business, which affects the relative importance of departments. It is the custom of some banks to admit new men to their service only at the bottom, taking them in young as messengers or collectors, who after their morning work act as assistants to the check-clerks. They are liable to be assigned to minor duties in any department where additional assistance is needed, until they become familiar with a variety of work and have a chance to display their aptitudes and qualities. Their advancement will then depend upon the openings that are made by an increase of business or the dropping out of old employees, leading to promotion or a shifting of the force.

XXVI

BANKS THAT FAIL

The National Bank Act makes provision for both voluntary and involuntary liquidation of banks belonging to the system, and more than 400 have been placed in the hands of receivers and had their affairs wound up since the act took effect. If a bank proves to be unprofitable and its continuance is considered undesirable, it may go into voluntary liquidation on a vote of the owners of two-thirds of the shares, notice of the fact being certified under its seal by the president or cashier to the Comptroller of the Currency. Notice must then be published for two months in a newspaper in New York and in one where the bank is situated, calling upon noteholders and creditors to present their claims for payment. Within six months of the time of the vote "lawful money" must be deposited with the Treasurer of the United States for the redemption of all notes outstanding, and the bonds deposited for security will be reassigned to the association. In case of failure to make the deposit the bonds will be sold to redeem the notes and cover the expense of the proceeding, and any balance will be turned over to the legal representatives of the bank. If a bank fails to renew its certificate of association under a provision for extending charters when the limit has expired, it is required to wind up its affairs and settle the claims of creditors in the same manner.

The Comptroller may put a bank in the hands of a receiver and have its affairs wound up for any one of several reasons. One is the very exceptional case of refusing to redeem its circulating notes on demand. In such a case there must be a formal protest of the notes by a notary and notice to the Comptroller, who, with the concurrence of the Secretary of the Treasury, may appoint a special agent to ascertain whether the bank persists in refusing to pay its notes. If so, he shall within thirty days declare its bonds forfeited, suspend its right to prosecute its business, and call upon holders of its notes to present them at the Treasury of the United States for payment in lawful money. As they are paid, the bonds held for security may be canceled, or they may be sold at auction or private sale, and if not enough is realized to redeem all the notes the Government will have a paramount lien upon assets to reimburse it for the rest. A receiver will be appointed to take possession of the books and records and all the assets of the association, collect all debts and claims, and upon order of a competent court to compound bad or doubtful debts, sell property, and, if necessary in order to pay all debts of the association, enforce the individual liability of stockholders. The moneys collected are paid over to the Treasurer of the United States subject to the order of the Comptroller of the Currency, to whom a report of the proceedings must be made.

A receiver may in like manner be appointed, the franchise of the bank forfeited and its affairs wound up, whenever a creditor shall obtain judgment against it in any court of record and shall make application for the appointment, accompanied by a certificate of the clerk of the court that such judgment has been rendered and has remained unsatisfied for thirty days, or when the Comptroller shall become satisfied of its insolvency after due examination of its condition. Proceedings for the same purpose may be taken for certain violations of law, viz., failure to have the capital stock fully paid up or to make good any deficiency in legal reserve after a notice of thirty days; purchase by the bank of its own stock, except to prevent loss upon a debt contracted in good faith, and failure to dispose of the same within six months when so purchased; failure to make good any impairment of capital and refusal to go into liquidation within three months after notice; and false certification of checks. Suit may be brought by the Comptroller for forfeiture of charter if the directors of any national banking association "shall knowingly violate, or knowingly permit any of the officers, agents, or servants of the association" to violate, any provisions of the law. In such cases the directors participating in or assenting to the violation are held personally and individually responsible for any loss or damage to the association, its shareholders, or any other person, in consequence of the illegal act.

Provision is made for notice to creditors, in case of a receivership, to present their claims, and for a ratable distribution of assets. If all claims of creditors are satisfied and expenses paid, the residue is to be distributed among shareholders in proportion to the stock held by them. After the redemption of notes has been provided for, the claims of creditors satisfied, and the expense of the receivership met, the Comptroller of the Currency is required to call a meeting of the shareholders, giving thirty days' notice by publication in a newspaper where the bank is situated, at which they may decide by a majority vote that the receiver shall continue and wind up their affairs, or may choose an agent of their own to complete the process. In the latter case, on the execution of a bond to the Comptroller for the faithful performance of all the duties of the trust, that officer and his receiver will make an assignment and transfer of the undivided or uncollected assets and be discharged from all liabilities, but the powers and duties of the agent are fully prescribed in the law. The aggregate liabilities of 406 national banks placed in the hands of receivers from the first case, April 6, 1865, to October 31, 1902, amounted to $186,731,459, and the amount of claims settled was $144,272,471. There has never been any loss on the circulating notes.

The method of winding up the affairs of a State bank are not materially different, but the causes of forfeiture of charter and manner of determining insolvency vary in different States. Proceedings are usually instituted under State laws by some officer having supervision of banking, after an examination and by application to a court of competent jurisdiction.

XXVII

CLEARING-HOUSE AND OTHER ASSOCIATIONS [1]

Under the provisions of the National Bank Act no "banking association" can have more than one place of business, and as a consequence no branches or outside agencies can be established. The result is a large number of independent banks, and no provision is made for their association together for any common purpose. This has led to voluntary associations in different cities under constitutions and by-laws of their own, and to a number of State Bankers' Associations and an American Bankers' Association, which comprise national and State banks and hold annual conventions for the consideration of subjects of common interest. A few States permit the establishment of branches by institutions organized under their own laws, and in New York the privilege is given to State banks in New York city alone, but what is known as branch banking is practised to only a limited extent in this country, and there has been no concentration of resources in a few great central institutions.

The first associations were formed for the one purpose of maintaining clearing-houses for the exchange of checks and other items deposited at one bank and payable at another. This process has been sufficiently described in a previous chapter, but clearing-house associations have come

[1] For a history of clearing-houses and a full account of their methods in this and other countries, the reader is referred to Mr. James G. Cannon's excellent work on Clearing-Houses, published by D. Appleton & Co.

to have other purposes, and that in New York has become an important agency in the banking business of the chief financial center of the United States. It was first formed in 1853, for the primary purpose of effecting the exchanges above referred to, and occupied rented premises in Wall Street. At first there were about fifty of the old State banks in the association and the daily volume of exchanges was little more than $20,000,000. A constitution was adopted in 1854, and in 1858 more commodious quarters were occupied in the building of the Bank of New York in Wall Street. During the civil war the banks in this association were of essential service to the Government in floating its loans and in cooperating in the establishment of the national bank system, although they did not all reorganize under it. The Bank of Commerce of New York was then the only banking institution in the United States having a capital of $5,000,000, and it was induced to enter the system by being relieved of the double liability of stockholders imposed upon all others.

Later the association raised a building fund and acquired a bank building at the corner of Pine and Nassau Streets which it adapted to its use. This it occupied from 1875 to 1896, when it took possession of the fine building especially constructed for it in Cedar Street at a cost of over a million dollars. The membership has changed in the course of years, as old members have dropped out and new ones have been taken in. Each new member took a number at the foot of the list and the places vacated were not filled, so that now, though the numbers run up to ninety-five, there are only fifty-six members, of which thirty-seven are national and nineteen State banks. The daily exchanges frequently exceed $250,000,000, being largely in excess of those of all the other clearing-houses in the country. The organization has meanwhile undergone various changes and its functions have been extended. It holds an annual meeting in October, at which a president, vice-president, secretary, and treasurer are elected and a number of committees are constituted.

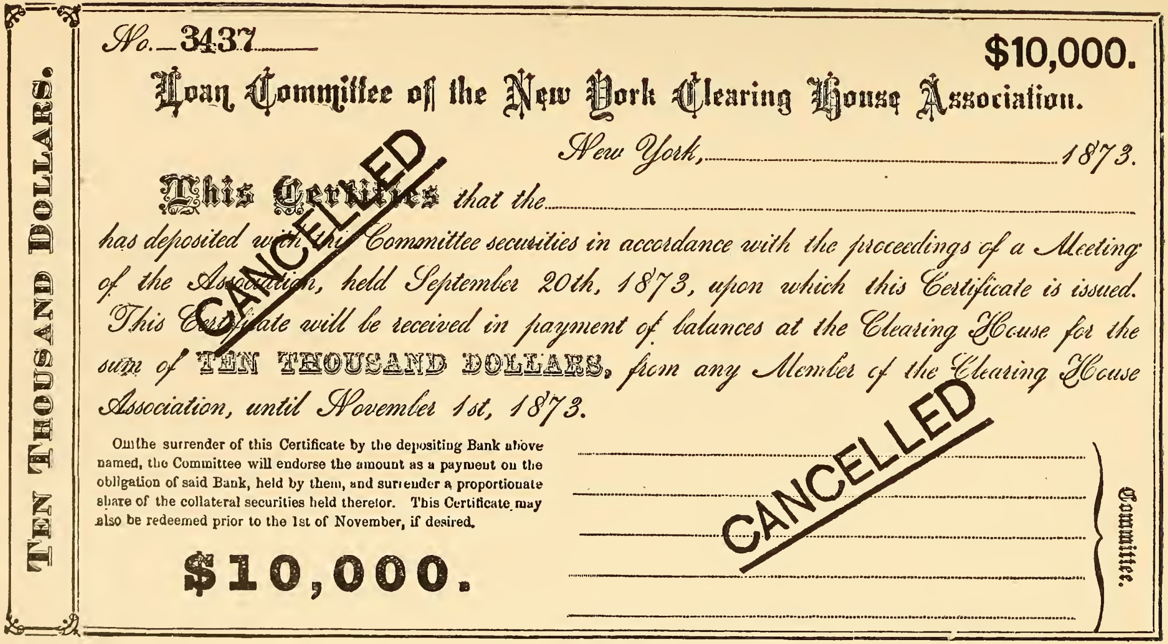
The officers have the duties implied in their titles, and the most important committee is known as the Clearing-House Committee. It has under the constitution the practical direction of the affairs of the association, and holds regular monthly meetings and special meetings from time to time. There is a Conference Committee, chosen to cooperate with the Clearing-House Committee in emergencies or on special occasions; an Arbitration Committee for the adjustment of any differences that may arise between members; a Nominating Committee to propose candidates for office to be voted upon at the annual meeting; and a Committee on Admissions to which applications for membership are referred by the Clearing-House Committee, to which such applications must be made in the first instance. New members may be admitted by a vote of three-fourths of the existing members at any annual meeting.

There is an initiation fee of $5,000 for any bank not having a capital of $5,000,000 or more, and for any such bank it is $7,500. The annual expenses are apportioned among the members according to the average amount of their exchanges. The practical management of the Clearing-House is in the hands of a paid manager under the direction of the Clearing-House Committee, and he has an assistant and a force of clerks. There is a regular system of records and bookkeeping. The manager is charged with the enforcement of the rules applying to the internal administration of the Clearing-House, and has the power to impose fines for their violation, which are charged to the banks whose employees are delinquent in any of the duties connected with the daily process of clearing.

There are in New York and the immediate vicinity forty-one banks and a number of trust companies that are allowed the privilege of clearing through members of the association. This privilege of "non-members" began to be allowed early in the history of the Clearing-House, but gradually restrictions and requirements have been laid down including an annual charge of $200. Now those desiring the privilege have to make application, to be approved by the Clearing-House Committee, and all exercising it must submit to an examination of their condition and make a weekly statement, which is published like that of the member banks. This applies only to banks, but trust companies are required to make statements of their condition, which are not published. This must include capital, net profits, average of loans and investments, and of deposits, amount of specie, legal tenders and bank-notes held, and the amount on deposit in banks and other trust companies. A new rule requires them to hold a certain percentage of lawful money reserve.

Among the purposes served by clearing-house associations, apart from that of effecting the daily exchange of checks and settlement of balances, are cooperating together in support of Government loans or Treasury requirements, and for mutual aid in time of financial difficulty and establishing uniform rates of interest on deposits and charges for collection. It is not considered good banking to pay interest upon daily balances of depositors unless under special regulations as to the minimum balance to be maintained and the rate to be paid, as the competition for deposits by offering to pay interest involves disturbing risks. The deposits upon which interest is allowed are large, and mostly those of outside banks or of trust companies. There is a clearing-house rule in some cities, though not in New York, establishing the minimum balance to be kept and the rate of interest which its members may allow. Another practise that has been instituted is that of making a regular charge for out-of-town collections. This also precludes a more or less demoralizing competition for deposits by the offer to make collections gratuitously or by underbidding the established rates. To prevent this, a regular schedule is prescribed for various sections of the country, determined by distance from the collecting centers, with a minimum charge for small sums and a certain small percentage on amounts above that limit. Here again the practise is not uniform, but most clearing-houses at important centers have an established rule.

The most important service of the Clearing-House for the mutual support of its members in time of financial trouble is that of issuing loan certificates to be used in the settlement of balances instead of cash. On such occasions a special loan committee is appointed to issue the certificate and pass upon the securities offered, which may include good bills receivable as well as approved stocks and bonds. A careful record is kept and interest is charged upon the certificates, to be paid by the banks taking them out and turned over to those receiving them in payment of Clearing-House balances, which is the sole use that can be made of them. This is to insure their withdrawal when no longer needed. Their purpose is to relieve the strain upon banking resources and reserves in time of severe money stringency, and in effect they add so much to the currency in circulation by diminishing the amount in use by the banks for the settlement of balances between themselves. They practically make of the aggregate reserves of all the Clearing-House banks a common fund for the protection of their deposits, and in extreme cases there may be an actual apportionment of this fund for the temporary support of the weaker banks. The most important effect consists in supporting public confidence in the banks and allaying panic until the situation is relieved by liquida-



TEN THOUSAND DOLLARS.

No. 3437

$10,000.

Loan Committee of the New York Clearing House Association.

New York, ... 1873.

This Certifies that the ....

has deposited with the Committee securities in accordance with the proceedings of a Meeting of the Association, held September 20th, 1873, upon which this Certificate is issued. This Certificate will be received in payment of balances at the Clearing House for the sum of TEN THOUSAND DOLLARS, from any Member of the Clearing House Association, until November 1st, 1873.

CANCELLED

On the surrender of this Certificate by the depositing Bank above named, the Committee will endorse the amount as a payment on the obligation of said Bank, held by them, and surrender a proportionate share of the collateral securities held therefor. This Certificate may also be redeemed prior to the 1st of November, if desired.

$10,000.

CANCELLED

Committee.

FORM OF CLEARING-HOUSE LOAN CERTIFICATE USED BY THE NEW YORK CLEARING-HOUSE IN 1873. LATER ISSUES DIFFER FROM THIS ONLY IN THE OMISSION OF THE RESTRICTIVE DATE.

tions and adjustments of resources and liabilities in the commercial community.

Taking out the loan certificates is not made obligatory, and banks obtain and use them in the daily settlement only to the extent of their needs to enable them to meet other demands. It is a temporary resource, which is abandoned as soon as the occasion for it is fairly passed. It was first resorted to by the New York Clearing-House in 1860, and the occasion rose two or three times during the civil war. During the severe panic of 1873 loan certificates were again issued not only in New York but in several other cities. In New York the issue began in September and continued about two months, the aggregate being $26,565,000, of which $22,410,000 were outstanding at one time. This expedient for relieving a local strain was resorted to several times in different cities between 1873 and 1893, but in the latter year it was more extensively employed than ever before.

In time of financial panic the strain is felt with special severity in New York, on account of the dependence of the whole system of credit upon its banks. Deposits and reserves of country banks are largely withdrawn and the local demand upon deposits and for loans becomes extremely pressing. The trouble is intensified by the disposition of the timid to draw out cash and hoard it, and there is no doubt that the action of the Clearing-House in 1893 prevented the breaking down of some of the banks and many disastrous failures that would have followed. The issue of loan certificates began June 21st and ceased September 6th, the last of them being retired November 1st. The total issue was $41,490,000, the maximum outstanding being $38,280,000 on August 20th. The resort of clearing-houses to this device for tiding over a period of financial stress has been sometimes criticized as having no legal authority, but it is in its essence merely a process of the banks loaning to each other on ample security through a voluntary association that insures payment. The association acts as in other cases as the agent of its members for their mutual benefit and not as an independent organization. The high rate of interest, which has ranged from 6 to 9 per cent, insures the issue of certificates only so far and so long as they are imperatively needed.

The clearing-house system has developed until there are one hundred associations in the United States outside of New York. Of these, eleven are in New England, all but three (New Haven, Providence, and Portland) in Massachusetts, eighteen in the Middle States (New York, New Jersey, Pennsylvania, Delaware, and Maryland), twenty-seven in the Middle West (east of the Mississippi and north of the Ohio), thirteen in the West (east of the Rocky Mountains), ten in the Pacific States, and twenty-one in the South. They differ in the details of their organization and methods, as well as the extent of their activity, but their general character and purpose are everywhere the same, and their functions are determined by the needs of the communities which they serve. In a week when the total clearings for the United States have amounted to nearly $2,500,000,000, about $1,500,000,000 of these have taken place in New York.

Canada has the clearing-house system, but its operation is simplified by the fact that there are only a small number of banks, which maintain branches all over the Dominion. There are now only thirty-five incorporated banks in all, and of these, four are in Halifax, three in Quebec, six in Montreal, and nine in Toronto. Private banking-houses, however, participate in the exchanges. The London Clearing-House is an important institution, and there are several others in Great Britain, but they are hardly known on the Continent of Europe. Their necessity and utility is reduced where there are a few great banks with branches, and one central institution, and where circulating notes are largely used and the check system is not highly developed. In this country they are of growing importance and exert a strongly conservative influence upon banking methods. Their functions are not unlikely to be considerably extended. It has been suggested that they may establish systematic means of collecting out-of-town checks, have agencies for investigating credit and disseminating information, and even that they be authorized by national law to apply the principle of loan certificates to the issue of an emergency currency for circulation in times of stringency in the money market.

Bank associations in the broader sense are voluntary organizations formed for the discussion of banking questions and methods, and the general promotion of the interests with which banks are concerned. Associations have been formed in many of the States, and usually include both State and national banks, and sometimes private bankers, trust companies, and savings-banks. The National Association includes all these and has now about 7,000 members. Among the objects promoted by these associations are better safeguards against crimes and casualties, safer and more uniform methods of banking, better means of investigating credits, the training of efficient clerks, and the improvement of laws relating to banking and the currency.

XXVIII

STATE BANKS AND TRUST COMPANIES

Notwithstanding the development of the national banking system and the prohibitive tax upon circulating notes of State and private banks, State banks have continued to exist, and still outnumber the national banks in the United States. In a few States, including Massachusetts and Texas, there are none, and the laws in regard to their organization and regulation vary in different States. In some the minimum capital required is as low as $5,000, which accounts for their number in sparsely peopled sections, where there is not sufficient inducement for establishing national banks, which are not permitted to supply the need by maintaining branches or agencies away from the one place of business authorized by law or to organize with less than $25,000 capital. In some States banks are permitted to have branches, and in others not. Under the New York law those in a city of 1,000,000 inhabitants or more may establish branches within such a city, but not elsewhere. This applies only to the city of New York.

In many States the banking laws are modeled upon the United States Bank Act, and in general the manner of organizing, methods of examination and supervision and character of business are substantially the same as those of national banks. There is usually some public officer or commission having charge of the execution of the laws relating to banks and other incorporated financial institutions. In New York there is a Superintendent of Banking, whose authority is similar to that of the Comptroller of the Currency except as the latter relates to note circulation. He may direct examinations to be made and call for reports from time to time, at least four times a year, and in case of insolvency may have a bank placed in the hands of a receiver and wind up its affairs. Apart from the lack of circulation the business of a State bank differs in no respect from that of a national bank, and the methods and details are essentially the same in institutions of the same grade. In New York all are required to keep a cash reserve equal to 15 per cent of deposits, and that is the usual rule in other States, there being no provision for "reserve cities." They belong to clearing-house associations along with national banks and make exchanges with them, and the general description of methods apply to the two classes of institutions alike. In New York city those which have joined the Clearing-House Association in recent years are required as a condition of membership to keep a 25-per-cent reserve, and those which were members before the rule was adopted aim to do so as a matter of policy.

Trust companies are a class of State corporations which do more or less of a banking business, the tendency in recent years being toward a development on that side. Their original function was to act as incorporated trustees, and the law relating to their organization and supervision seems to contemplate no other. They have no authority to discount commercial paper, but in the execution of their various trusts they receive money on deposit, and may loan it on either real or personal security and purchase, invest in and sell stocks, bonds, mortgages, bills of exchange, and "other securities." Under this authority it has become customary with them to take other deposits than trust funds, and according to the latest reports of those of New York to the Superintendent of Banking these "general deposits" far exceeded in amount the "trust deposits." Some of them pay interest upon balances of only a few hundred dollars, and at the same time hold them subject to demand-checks. They also use the funds in almost every way that banks employ theirs, and though they can not discount notes without transcending their corporate powers, they are accustomed to buy them, which amounts to much the same thing. They may loan upon a greater variety of securities than banks, including real-estate mortgages, and are not restricted to any proportion of their capital in making loans to a single borrower. They have the advantage of not being required to keep a cash reserve on hand, which would diminish their resources available for lending and investment.

When these institutions were confined in practise to a strictly trust business cash reserves were not regarded as necessary, as their deposits were not liable to be drawn upon except on notice, and they had time to realize from loans and investments to meet all demands, and they were accustomed to keep deposits in banks upon which they could draw at need. These, with what cash they might see fit to keep in their own vaults, served all the purposes of a reserve. Such checks as were drawn upon them and deposited elsewhere, or drawn upon other institutions and deposited with them, they were allowed to exchange through some member of the Clearing-House without making reports of their business to that institution or being in any way subject to its rules. But as the banking operations of those in the city of New York increased, as their deposits and the use made of them took on more of a commercial character, and their checks multiplied, the competition with the banks in their own field began to cause dissatisfaction. To this was added a conviction that some of these companies needed the same safeguards for the security of their depositors that were by law required of banks.

The first move made by the Clearing-House was to adopt a rule that no trust company should have the privilege of clearing its checks through a member of the association until it had been in business one year, and that all exercising that privilege should be required to make a weekly statement of its affairs similar to that made by banks, so far as amount of loans and deposits and holding of lawful money was concerned. This latter requirement being objected to, the Clearing-House Committee consented to treat their weekly statements as confidential and not give them out for publication. The next move was to require those using the Clearing-House facilities to hold a specified percentage of their deposits in a cash reserve in their own vaults. This was fixed at 5 per cent beginning with June 1, 1903, to be increased to $7\frac{1}{2}$ per cent February 1, 1904, and 10 per cent June 1, 1904, authority being reserved to the Clearing-House Committee to raise the requirement to 15 per cent in its discretion. This resulted in a number of the largest trust companies withdrawing from their clearing-house connection with banks, though they continued to keep accounts with them and to have large sums on deposit upon which interest was allowed. This made it necessary for them to pay their debit balances to various banks, on account of their own checks, every day over the counter on presentation of the vouchers from the banks. This they do in checks drawn upon banks in which they keep their deposits, and most of them have found it necessary to employ an additional teller to attend to these payments. The checks of other institutions deposited with them they dispose of by the simple process of including them in their deposits with the banks and leaving the banks to exchange them through the Clearing-House or make the collections. They find it necessary to keep more cash on hand and have more of their resources at immediate command than before.

The extent to which trust companies have departed from their original functions or have extended those functions and taken on others of a strictly banking character differs widely. Some are still confined mainly to a trust business, taking deposits subject to demand-checks and making loans for commercial accommodation to only a limited extent and chiefly for those for whom they are acting in a trust capacity and as an incident to their regular business. With others, banking is their main business and acting as trustees is incidental. There is every gradation between these. Among the proper functions of trust companies is having custody of funds from various sources for safe-keeping or investment, managing estates and properties, collecting the income and paying the expenses for the owners and receiving a commission for the service. They may act as executors and administrators in settling the estates of deceased persons and as guardians for minor heirs, and have charge of funds the right to which is in litigation, or which are in the custody of courts. Their deposits of money are ordinarily of a more permanent and stable character than those of banks, and they regularly allow interest upon them.

Their use of the money is less restricted than that of banks. They usually loan it out for longer terms and upon a wider range of securities, being allowed to hold mortgages upon real estate as well as a variety of stocks and bonds, and they may invest it in the actual purchase of properties of various kinds. But the most important function of the larger trust companies, from a financial point of view, arises out of their relation to other corporations and the part they take in the process of promoting, organizing, and reorganizing corporate enterprises, in which they act as both trustees and fiscal agents. When a new corporation is to be formed, it is common for a trust company to receive the capital as it is paid in and attend to the issuing and registration of stocks and bonds, and to become the trustee of whatever mortgage may be given to secure its indebtedness. It may continue as an agent to receive the earnings of the corporation on deposit, or such part of them as may be entrusted to it, and make the payments of interest on bonds and dividends on stock. It may be the trustee or agent for individual security-holders, as well as the corporation itself, to take care of their interests.

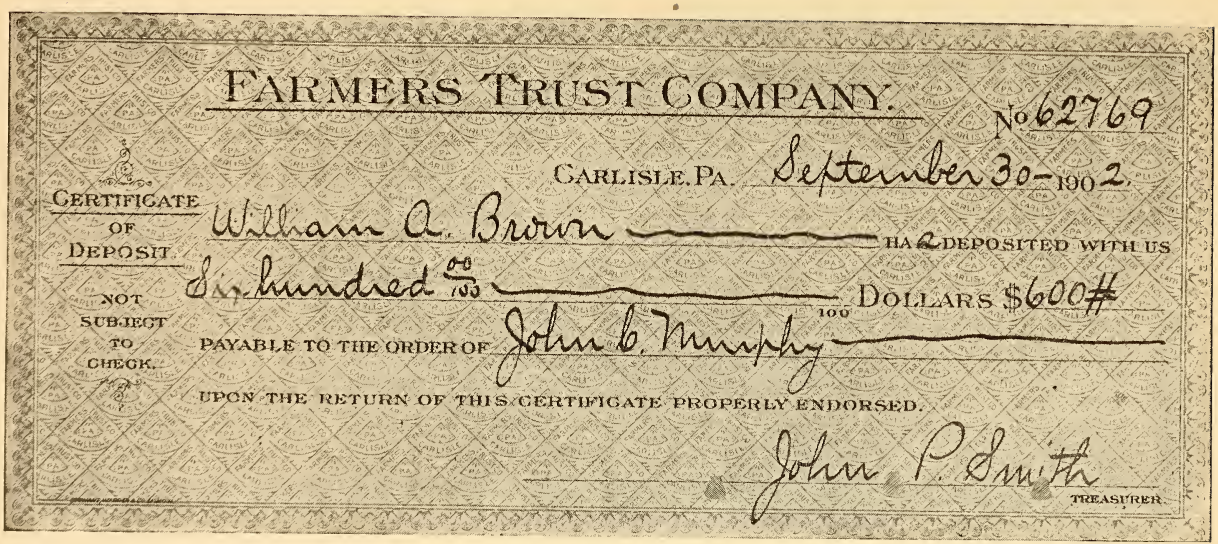
When a railroad company or other large corporation becomes bankrupt and has to be reorganized or have its affairs wound up, it is a common thing for a trust company to be appointed as a receiver of its assets, or to act as a committee of reorganization, or, more often, to act as the fiscal agent for such receiver or committee in the execution of their functions. In case of reorganization and the conversion of securities, it receives the old bonds and certificates of shares, attends to the issue of new ones, makes the transfers, keeps a registration of the holdings, and, in short, manages the details of the whole operation. In effecting the consolidations and combinations that produce what are known as "trusts," trust companies have performed a conspicuous part as agents of the various parties primarily concerned and as custodians of capital and securities involved in the operations. They are not presumed to take risks or assume liabilities of their own in such proceedings, but only to perform services for which they are paid in commissions; but they do sometimes advance capital and even promote organizations and reorganizations, and hold stocks and bonds in the resulting corporations as their own property. Some have been formed mainly for that purpose, and are known as "corporation trust companies," acting not only as registrars and agents, but as controlling stockholders. The promoting, however, is usually done by syndicates, made up of individual capitalists and banking-houses, which often jointly or severally underwrite the securities of the new organizations.

A trust company that does both a trust and a banking business, which is coming to be the common practise, keeps the two branches quite apart and has a full set of books and of clerks and tellers for each. The trust department, in fact, keeps a regular account with the banking department, appearing upon its ledgers as a depositor. It has immediate charge of receiving, investing, and handling the trust funds, and an account is kept upon the books with each person or corporation for which it acts as trustee or agent. There are certain prescribed investments for what are strictly trust funds, but, unless there is an order of court, anything may be done with them within the limits of the company's corporate powers, with the formal consent or agreement of those for whom they are held. They may be loaned upon mortgages and other securities, or invested in bonds, stocks, and other kinds of property. They draw interest, and usually it requires more or less time to realize upon them to advantage, but they can not be suddenly withdrawn from the company's custody. That is a matter of notice and a reasonable opportunity for preparation.

On the banking side the business is conducted much the same as in a commercial bank. The deposits are made by regular customers from day to day and are subject to demand-checks, but as a rule they are fewer in number, larger in individual amounts, and less subject to small drafts and the necessity of many collections, than those of a bank of the same grade. The method of dealing with receipts and payments and of keeping records and accounts is not essentially different from that of a bank. The individual ledger accounts are kept in substantially the same way, but the general ledger of the company covers all branches of its business. The use of the commercial and personal deposits is kept apart from that of the trust funds. Trust companies have no legal authority to discount commercial paper, but there is nothing to prevent them from buying notes, and some of them do it to a considerable extent. They loan their funds on time and upon a variety of securities, and also make considerable use of them in demand or "call" loans.

The practise of loaning on call with collateral security has increased with the development of the banking side of the business, as a resource for meeting current demands without keeping a large cash reserve on hand. Some special features of banking have become enlarged in the hands of trust companies, as, for instance, that of issuing certificates of deposit. Persons engaged in changing their investments or those receiving large sums from sales of property, inheritance, or otherwise, deposit funds with a trust company and take a certificate of deposit, pending their decision to make some other use of them. This may be a time or a demand certificate, but the deposit can not be drawn upon at will. This can only be done by presenting the certificate itself. Provision may be made for partial payments, payments on notice, or upon or after a certain date. Interest is paid upon the deposits, unless they are small and temporary, and such are rarely taken, but the business is peculiarly safe for the company, as it deals with actual funds deposited, involving little or no risk or trouble in making collections.

In allowing interest upon general deposits above a moderate limit, usually not less than $500, trust companies calculate this upon the daily balances. At the end of the month the average daily balance is computed and the rate, commonly 2 per cent, is applied to that average for the number of days in the month. While trust companies have a certain advantage in the uncontrolled practise of allowing interest on deposits, in a wide range of investment and use of their funds, and in freedom from any absolute requirement of cash reserves, which is a restraint upon the exercise of discretion in the matter of keeping their resources


FARMERS TRUST COMPANY. No 62769

CARLISLE, PA. September 30 – 1902.

CERTIFICATE OF DEPOSIT. William A. Brown HAS DEPOSITED WITH US

Six hundred 00/100 DOLLARS $600#

NOT SUBJECT TO CHECK. PAYABLE TO THE ORDER OF John C. Murphy

UPON THE RETURN OF THIS CERTIFICATE PROPERLY ENDORSED.

John P. Smith

TREASURER.

CERTIFICATE OF DEPOSIT.

employed, they have for the most part been conservatively and safely managed. Where it is otherwise, they are apt to come to grief without inflicting so much injury as would come from bank failures, and this danger itself operates as a restraint. A few have lost credit by becoming involved in speculative ventures.

XXIX

PRIVATE BANKING-HOUSES

The private banker has by no means been superseded by the corporate banks of the present day, though the character of his business has been somewhat changed by modern conditions. In fact, private banking-houses hold a very important place in the financial community, though their relation to the commercial community is comparatively insignificant. In a general way they may be said to deal with investments, and they may be broadly divided into two classes, one doing a domestic business and the other dealing with foreign exchange, though many do both, and some do both on a large scale, while others are devoted to special lines, such as dealing in municipal bonds or some other particular class of securities. Private banking is a business in which there is a good deal of latitude and little restriction, and hence a great variety of employment with funds of different kinds. It depends mainly upon command of capital and confidence, and upon sound judgment and financial skill, and not upon public regulation or supervision.

Banking-houses may receive deposits subject to check, but they do little of this except for customers who are at the same time investors and who desire this kind of accommodation, and they keep no special reserve of cash to meet demand liabilities. This is a matter that rests in their own discretion. They do not as a rule discount commercial paper or make what are called " business loans," advancing money on personal notes or on the security of merchandise in transit or on sale. They do, however, buy and sell commercial paper and loan their balances, or funds not tied up in securities in their own hands, on "collateral," and some do a large business of this kind. Mostly these loans are payable on demand or on "call," though some houses make a practise of lending on time. The fact remains that their main business consists in buying and selling securities, stocks and bonds of governments and of public and private corporations, and dealing in foreign exchange and foreign loans. They may buy on their own account to sell again, or they may buy and sell for their customers, thereby acting as brokers. The business of private banking and brokerage is closely associated, and some banking-houses carry securities on margins for their clients.

An important function of the private banker is "placing" securities for corporations issuing them—that is, undertaking to dispose of an entire issue, or a specific amount of an issue, in the market upon certain terms agreed upon. Ordinarily the price is fixed by agreement with the officers of the corporation issuing its shares or bonds, either on its first organization or a reorganization, or on an increase of capital, and the banking-house receives a commission on the amount disposed of. Sometimes the issue, or a certain portion of it, is underwritten by the banking-house, which means that it obligates itself to dispose of the entire amount on the terms agreed upon, and what it fails to sell on those terms it is bound to take and pay for itself. In case of a large transaction of this kind a syndicate may be formed consisting of a number of bankers and banking-houses, who agree together and with the other party concerned to carry the operation through. Each member of the syndicate binds himself to take a certain portion of the securities and to furnish his proportion of any cash that may be required in financing the operation, and for this service a certain percentage of the amount is to be paid as a commission.

A syndicate manager is appointed from the number, who receives a special compensation for his service in attending to the receipt and distribution of the securities and accounting for the proceeds. It is usually a part of the agreement that none of the bonds or stocks shall be sold until a certain date, that all may be on the same footing and that everything may be ready for placing them on the market to advantage. When the issue or any part of it is made each subscriber receives his *pro rata* share. If it is an underwriting syndicate, which is usually the case, a time is set within which the securities are to be disposed of and the proceeds accounted for, and each syndicate member must pay over his share and receive his commission at that time. If any of the securities are left on his hands, they are his and he can dispose of them at his leisure as best he may. There are obvious risks in operations of this kind. When successfully carried out they are apt to be profitable, but if unsuccessful they may involve losses that devour the commissions. When cash is pledged in advance to carry out a syndicate operation a percentage is paid on the amount pledged, all of which may or may not be called for. When the operation is completed the manager makes a report upon the result, the affairs of the syndicate are wound up, and it is dissolved. This device has been resorted to largely in the consolidation of industrial concerns in those combinations known as "trusts" and in floating new issues of railroad stocks or bonds. It transfers the risk from the corporations to the syndicates and concentrates and facilitates financial operations that are too large for one concern to handle.

Sometimes a single banking-house will undertake to place an issue of corporate stocks or bonds or a public loan, but frequently there is competition for the privilege. In the case of State or municipal bonds it is a common practise to invite bids and to allot the securities, when issued, to the houses offering the best terms. In this case they purchase them outright and rely for their profit upon selling them in smaller lots at an advance upon the price paid. The same plan is often pursued in placing Government loans, though an arrangement may be made with a certain banking-house, or with more than one, to take the entire issue on certain terms. It has occasionally happened that a syndicate or combination of bankers has been formed to loan money in the market at an agreed rate, to relieve stringency caused by a scarcity of funds or an unusual demand and to allay apprehension which might become intensified to a panic. Banks as well as private bankers have taken part in such movements, and it is one of the services that clearing-houses have rendered thus to combine banking resources and preserve confidence when it is endangered.

Banking-houses, like incorporated banks, act as the agents of corporations, not only in placing their securities on the market, but in keeping a register of their ownership and making transfers when they are bought and sold by others, but trust companies are more commonly employed for this service, which is not of a banking character. Buying and selling or transferring gold or other forms of cash is strictly a banking function, and it is done by private banking-houses as well as by incorporated banks. The latter do not act as brokers for their customers, and yet they often render services that relieve these customers from all occasion of dealing with brokers directly. Not only do they take their coupons and collect interest upon bonds, and collect the principal of the bonds when they have matured, but they will buy or sell securities for them through a broker. In New York a good deal of business of this kind is done by some of the banks, which have a regular connection with a stock-exchange broker. Such business is done by regular banks to accommodate customers who have no relations with banking or brokerage concerns and do not desire to form any. They do not or should not take part in speculative dealings of any kind, except in making loans on ample security, but private concerns are under no such restraint.

Foreign banks have agencies and conduct business in various parts of the United States, but the laws of the different States vary in regard to the privileges allowed to them. In some they may receive commercial deposits subject to check, discount commercial paper, and perform all the regular functions of banking. This is not the case in New York. They can not take deposits or discount notes, but may transact the business usually done by private banking-houses, dealing in securities, buying and selling commercial paper, and most of them make a specialty of foreign exchange. Four Canada banks have agencies in New York city, where their funds are sometimes extensively loaned; these are the Bank of Montreal, the Bank of British North America (of Montreal), the Canadian Bank of Commerce (of Toronto), and the Royal Bank of Canada (of Halifax). The London and Brazilian, London and River Plate, the Colonial of London, the African Banking Corporation (of London), the Chartered Bank of India, Australia and China, the Hong-Kong and Shanghai Banking Company, and the Yokohama Specie Bank also have offices in New York. The International Banking Company, recently organized, mainly for business in the Philippines, China, and other parts of the East, has its headquarters in that city. The banking connected with foreign trade and international exchange is mostly done by these agencies and the private banking-houses, and the greater part of this for the United States is carried on through New York.

XXX

FOREIGN EXCHANGE AND INTERNATIONAL BANKING

Next to facilitating domestic commercial transactions the most important function of banking is dealing in foreign exchange, for that facilitates international transactions. This branch of the business is mostly in the hands of private banking-houses, which either have branches or establish intimate relations with other houses of a similar character in the principal financial centers abroad, though a few national banks take a considerable part in it. As New York is the chief center of domestic exchange for the United States, so London is the chief center of international exchange.

For a clear understanding of this subject some preliminary consideration must be given to the principle of foreign exchange and the use of bills of exchange, though the principle does not differ essentially from that of domestic exchange, and the use of "bills" is analogous to that of domestic drafts. In the commercial and financial dealings between two countries, as the United States and Great Britain, for example, there are constantly many payments to be made in both directions. For the most part these are effected by transfers of credit from one side to the other, and only balances are finally paid in money, which in this case means gold, not gold dollars or pounds sterling, but the metal gold by weight, whether in the form of coin or bullion. Exporters send American products, say from New York to Liverpool, or any English port, for consignees in different parts of the United Kingdom. A certain amount is due for these commodities, to be paid on this side of the Atlantic. At the same time importers are buying merchandise in England for which they must pay on the other side of the Atlantic. Instead of sending money back and forth these payments are set off against each other. In effect, the York importer pays over to the New York exporter what he owes to the exporter of his merchandise in England, and that exporter collects from the English importer of American produce the amount due to him, instead of leaving the latter to pay his creditor in New York, who has already got his money. That is the essence of the operation, assuming for illustration of the principle that the values exchanged are equal, and that the parties to it on each side of the ocean come together in this way. In practise, of course, that is far from the case, and there is a multiplicity of unequal transactions going on all the time, and there is an intermediary between the parties in bringing about the settlements.

To come down to practical facts, the New York exporter, when he sends a cargo of wheat or cotton to England, draws a bill of exchange, which is in effect a draft payable to himself for the amount due, upon his consignee or upon a banker with whom that consignee has the necessary credit and upon whom the American exporter is instructed to draw for his payment. The bill may be payable at sight, or thirty, sixty, or ninety days after sight; but, instead of sending it abroad for collection to get his money, the exporter sells the bill of exchange, after indorsing it, to a banker and gets his money at once. The banker having thus paid the exporter, sends the bill to his correspondent abroad and gets credit with him for the amount, the latter having the draft paid, if at sight, and accepted, if on time, in the latter case making the collection at maturity. The proceeding of the British merchant or manufacturer from whom the American importer has bought is similar. He draws his bill upon the American importer for the amount due for the goods and sells it to a banker, who sends it to a banking-house in New York for payment or for acceptance and collection, receiving credit for the amount. The process may not be so direct as this, for the first buyer of the bill may indorse and sell it to another banker who has larger or more direct connections for effecting the exchange, but so far as the exporters and importers are concerned, they get their pay by selling their bills of exchange, and the bankers, taking due precautions as to the credit of the parties, their right to make the drafts, and the assurance of acceptance and payment, attend to the rest. Their dealings are with each other and are effected by transfers of credit until there is occasion for paying some balance in money.

The profit of the bankers, or their compensation for the service rendered, is involved in the rates of exchange or the price at which the bills are bought and sold. What determines that price? In a general way it is the same that determines the price of anything else, the law of supply and demand. It would be a simple matter to explain if there were a common money standard, but for the sake of conciseness we will take matters as they stand and deal with English and American money on the basis of $4.866 as the equivalent of a pound sterling at par. The American exporter draws his bill for so many pounds sterling on his English customer, but whether he will get $4.866 per pound for it, in case it is a sight bill, or more or less, depends upon circumstances. Suppose there is more exporting than importing going on, more payments to come from England than to go there, more sterling bills in the market than there is a demand for at par, on account of the state of the bankers' credits; he will then have to take less than par. How much less will depend upon how much it would cost him, or a banker acting for him, to have the gold sent over from the other side for payment. That cost is determined by the charges for freight and insurance, interest on the amount for the time it is in transit, and the possible loss by abrasion, which with the present care in shipping is very slight.

Gold shipments are made by bankers because they have facilities for doing it at the lowest cost and connections for making the transfers to advantage. The present cost is something less than two cents per pound sterling, and when sight bills go much below 4.85 they will not be sold, but arrangements will be made for importing gold. Bankers, however, will buy the bills at a rate which will give them a profit in importing gold to pay themselves, and draw bills on their own credits in London to pay for it, remitting these to their correspondents, for at such a time, when London is owing a balance to New York, they are likely to have large credits abroad. These are reduced by the purchase of gold while cash is increased at the New York end of the line. At a time of heavy exporting and large dues to New York from London, making exchange low at the former place, rates for money are apt to be high there and low at the latter place, and this facilitates the transfer of gold, since money tends to go from the place where it is in less demand to the place where it is in greater demand. This process of collecting payment by importing gold through the banking-houses will go on until the equilibrium is sufficiently restored to raise the rate of exchange, so that it will be more advantageous to sell bills at the prevailing price than to incur the expense of collecting in gold.

While the essence of the transaction is paying the cost of actual collection in preference to selling bills below what is called the " importing point," it will be seen that the trader does not actually import gold on his own account or require his foreign debtor to remit it at his expense, but the whole process is a matter of banking and is attended to by the bankers, who buy the bills at the minimum price to which they will go and import the gold on their own account, diminishing their credits abroad and increasing their funds at home and making their profit in the process. Suppose now that the conditions are reversed, and, on account of heavy importing and relatively light exporting of commodities, New York has more to pay to London than London has to pay to New York, taking these as the centers at which settlements are made: then bills drawn upon traders on the other side will be relatively scarce, foreign bankers will have larger credits on this side and American bankers smaller credits in London, which they will desire to increase, money rates will be likely to be relatively low in New York and high in London and the rates for sterling exchange will go up. They will rise until it becomes cheaper to ship gold abroad than to pay the price for bills, and that will be when sterling exchange is somewhat above 4.88. Bankers will pay for bills of exchange up to the shipping-point; then, in response to the demand on the other side, where American exchange will be correspondingly low, they will find a profit in exporting gold. They will be drawn upon for it by their foreign correspondents in the banking business, and will honor the bills and reduce the foreign credits which they hold. These transactions have attained such dimensions that a profit of $\frac{1}{32}$ per cent in shipping gold is enough to start the movement.

What has been said about sterling exchange in New York applies equally to American exchange in London, but at any particular time the conditions will be exactly reversed. At either end of the line payments from the other end are obtained by drawing bills and selling them to bankers. The bankers send these over to their correspondents who attend to their collection, and there is constant communication back and forth in regard to their transactions with each other and constant transfers of credits. It is through these bankers' credits, based upon the buying and selling of bills of exchange, that the mass of international business transactions is carried on. It is only accumulated balances on one side or the other that are paid in money—that is, by the shipment of gold, and these bear a very small proportion to the bulk of the trade operations. It is another illustration of the extent to which credit is used to effect an exchange of commodities, which is in substance a barter of the products of labor, extending on a large scale to interchange between distant countries.

This process of economizing the use of money, which in international trade means gold only, is carried to the highest practicable degree by various devices dependent upon credit and confidence. Even the fluctuations between periods of heavy and light exporting are minimized as much as possible. In advance of the heavy exporting season arrangements are sometimes made for drawing in anticipation of shipments of commodities, so as to extend the period to be covered by the supply of bills, and a corresponding extension may be made at the end of the season by deferring the drafts. The purpose is to prevent concentrating the supply of commercial bills and depressing exchange so as to force an unnecessary transfer of gold from the other side. Corresponding arrangements may be made when importing is relatively heavy, to avoid concentrating the demand for bills and forcing the rate to the exporting point unnecessarily. These arrangements are effected by bankers to bring the shipping back and forth of gold to a minimum, and they find a profit in thus equalizing so far as practicable the demand and supply for exchange, while it is also a gain for those who draw bills and those upon whom they are drawn. There is economy for all concerned in reducing to the utmost the balances which have to be actually paid, at the expense of transporting gold from one country to another.

The practical form which this controlling of the rate of exchange within certain limits usually takes is, that bankers draw their own time-bills for sixty or ninety days in advance of the heavy exporting season, intending to cover them with commercial bills later when rates are lower. Their correspondents accept these bills and give them credit for the amount at the prevailing rate of exchange. When the commercial bills come into the market, payable perhaps at sight, the bankers buy these and remit them to cover their own maturing bills, and the foreign bankers collect them to satisfy the credits they have given, or if the commercial bills are not payable at sight they have them accepted and get them discounted, or hold them for collection, as best suits their purpose. It is a question of rates and of profit in the transaction. The commercial bills may be drawn upon consignees of merchandise or upon bankers, according to agreement between the parties.

When the exporting movement is under way it is a common practise for the American banker to buy commercial bills drawn for sixty or ninety days, which is the more usual form, and with these create credit with his foreign correspondent, against which he can later draw his own sight bills for sale in the exchange market. The bills, being sent abroad, may be accepted there and immediately discounted, the proceeds being credited by the foreign to the American banker. Many of these are what are called "documentary acceptances." The "documents" consist of bills of lading, and sometimes certificates of insurance, and of inspection in the case of grain or cotton, testifying to the value of the merchandise shipped. There may also be an invoice of the goods.

These are attached to the bill of exchange when it is sold to the banker and give him a lien upon the merchandise as security. Ordinarily he instructs his correspondent to surrender the documents on acceptance of the bills. Then the goods can be delivered and the bills can be discounted at the prevailing London rate. It is a matter of confidence and fine calculation on the part of the bankers, who make their profit out of the rates of exchange and at the same time serve to distribute the demand and supply of bills in a way to give stability to the rates and minimize the occasion for settling balances by transfers of gold.

What has been said about trade between the United States and Great Britain and payments between New York and London applies in principle and in practise to any two countries dealing with each other, but the matter of foreign exchange is complicated by the fact that the banking feature involves transactions that may include several countries which make settlements through the same financial center. While payments may be made between New York and Paris, or Berlin, or St. Petersburg, they may be and often are made between New York and London on account of transactions in France, Germany, Russia, and other parts of Europe. Most of those with Oriental and South American countries and other parts of the world with meager banking facilities are made through London. A China merchant selling tea in New York will not draw upon his American consignee, but upon a London banker with whom the New York buyer keeps a credit or with whom the latter's American banker keeps a credit, because he can always dispose of a sterling bill on London, while he might not be able to sell an American bill on New York, no American banker with New York connections being accessible. It is not necessary for our present purpose to go into these intricacies, but they suggest why London has become the "clearing-house of the world's commerce" as the result of the wide extension of British trade and English banking.

It is desirable to go somewhat more into the distinction between commercial bills of exchange and bankers' bills, and the difference between sight and time bills. Time-bills sell at a lower rate than sight-bills and are less uniform and stable in quotation, allowance having to be made for loss of interest on the amount to be paid and the risks attending a difference of credit in the drawers. As a general principle it may be said that the difference in price between a sight and time bill is the interest on the money for the period of maturing, but the bills of first-class houses in high credit will command a better price than others. Fluctuations in the value of money before maturity are also taken into account. Hence there is considerable variation from the "posted" rate in actual sales. The price of time-bills is affected by the rates for money at the place of payment, because they are remitted for acceptance and usually discounted at the prevailing rate there. If the discount rate is high, the price the bills will command when drawn will be correspondingly low, and *vice versa.*

Commercial bills of exchange are not ordinarily drawn payable to a third person, though if the drawer is owing money abroad at the same time that he is collecting there he may order the payment to be made to his creditor or to a banking concern with which he has established a credit. He may sell his own bill to another who has payments to make abroad, or the banker who buys it may sell to such a person with proper indorsement, and much of that is done; but the usual course is simply to draw bills payable to one's own order and indorse and sell them to a banking-house, which remits them to the foreign house with which it has connection, for acceptance, discount, and collection. The real exchange business is done by the bankers. If a man has payments to make abroad or desires to establish a credit there that may be drawn upon, he buys bankers' bills. These are drawn by bankers in one country upon bankers in another country and sold to those who have remittances to make. They are drawn to the order of the persons to whom payments are to be made, and those persons receive payment or credit from the foreign bankers. International bankers keep credits with each other for carrying on this kind of business and notify each other of the bills drawn.

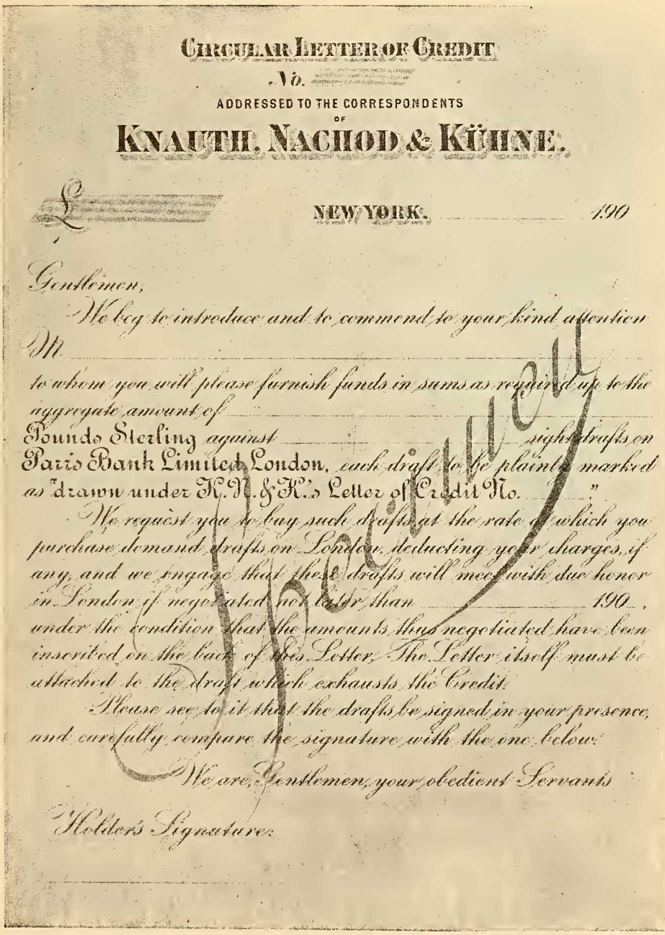
The settlement of trade operations is by no means the only use of bankers' bills. They are used for establishing credits and drawing upon credits for a great variety of purposes, in the purchase and sale of all manner of loans and securities, and in borrowing and lending operations that take advantage of different rates of interest in different countries. The balances which are finally paid in gold are the net outcome of a complicated network of transactions which may involve movements to and from several money centers and reach pretty well over the world. There are two common forms of loan in the money market which should be understood in connection with dealings in foreign exchange. Again we will confine our attention, for the sake of simplicity, to New York and London, remembering that what applies in their case applies generally, though American dealings with Europe, and indeed with all the world, are largely through those two financial centers.

Suppose there is a strong demand for money in New York and the rates are high there, while funds are plentiful in London and rates are low. Then many "foreign loans" are made in New York, which means in effect the same as borrowing in London. The process is for the New York banker to establish credit with a London house by drawing his bills upon it to an amount which it agrees to accept. The proceeds of these he loans in the market at the prevailing rate. He may have an understanding in advance with those who desire the loans, being assured of a demand for the money when the bills are drawn. His profit is the difference between the local interest rate and the rate of discount for his bills in London, less other expenses involved. Such loans may accumulate to a large amount, if there is sufficient demand, and have a material effect upon the relation of credits between the two countries, and consequently upon rates of exchange and the chance of a transfer of gold. The tendency will be to supply the demand for loans and depress the rate for money here, and to deplete the supply and raise the rate in London, and it may go so far as to turn the scale and lead to paying off the foreign loans and doing the borrowing at home. It will be readily seen how this may enter into the course of the exchange market and affect the movement of gold.

There is quite a different class of loans, known in New York as "sterling loans," as distinguished from "foreign loans," because they are based upon bills on London, and never, or rarely, upon bills on any other financial center. A man desires to borrow a considerable sum which he can not obtain to advantage from the banks. He goes to a prominent banker with a London connection, who may not have the money to lend him on collateral security but will loan him his bill of exchange drawn upon London for, say, ninety days, taking his collateral, on an agreement that before the bill matures the borrower will provide for taking it up with sight exchange. The borrower raises the money by selling the banker's "finance-bill" wherever he can find a purchaser, and in due time it is accepted in London under instructions from New York, with the corresponding credit. As it is maturing the borrower must furnish the banker with a sight-bill sufficient to cover it, or settle with him by a direct payment of the amount, in which case the banker will himself provide for extinguishing the credit in London. The bills do not go out of the hands of the bankers effecting the loan, or affect the money market otherwise than as a domestic loan. It is merely a device for loaning the credit of the American banker by the use of his bills of exchange drawn upon a London banker. In fact, it is a form of loaning on collateral security, but its cost will depend upon the state of the exchange market. If exchange is high when the borrower sells the banker's time-bill, and low when he has to buy a sight-bill to cover it, it will cost him less for the loan than if the conditions are reversed, and this chance enters into his calculations. Sometimes, to make certain of the cost, he will buy the sight-bill, to be delivered and paid for at a future date, at the same time that he sells the ninety-days' bill, allowance being made for the time required for remitting it. In these cases the bankers are paid a commission for their accommodation, and the collateral security is surrendered when the settlement has been made. If the obligation is not met on time the securities may be sold, as in the case of regular bank loans.

There is one other use of bills of exchange that ought to be mentioned. Time-bills are sometimes bought for "investment," or for speculation. At a time when there is a prospect of advance in the rates, which may sometimes amount to a certainty, a bill for sixty or ninety days may be bought at a low rate, held till it matures, and sold as a sight-bill at the advanced rate. Even if there is no advance the higher rate for sight exchange will be equivalent to interest on the sum invested in the bill, and if there is an advance it will be equivalent to so much more interest. If there should be a decline in exchange there may be a loss from what the same amount of money would have brought if loaned out. Hence the process has something of the character of temporary investment and something of that of speculating upon the fluctuations of exchange. The variety of uses of foreign exchange above described give to international bankers a large part of their business. For the most part, this kind of business is carried on by private banking-houses, but some national banks establish connections abroad for the purpose of taking part in it, particularly in dealing in foreign loans.

Another feature of the business of private bankers with foreign connections, which has already been mentioned, is that of issuing letters of credit, mainly for the use of tourists and travelers. A letter of credit is obtained by paying to the banker the amount of money it is desired to draw from time to time on one's journey, and it introduces the holder to the foreign correspondents of the banking-house, certifies that he is authorized to draw upon its London, Paris, or Berlin agent, as the case may be, to the amount stated, and requests that his drafts be honored. The signature of the holder is written at the foot of the letter and sometimes a personal description is given. A list of the correspondents is contained on a separate leaf. Whenever a draft is made abroad it must be signed in the presence of a representative of the correspondent by whom it is to be paid, and an indorsement is made on the back of the first leaf of the letter, with date, name of the house making payment, the place of payment and the amount, both in writing and in figures. These drafts will generally be honored wherever the house issuing the letter and the branch or agent upon which they are drawn are well known, even by banking concerns which are not included in the list, and corresponding transfers of credit will be made. Whatever may remain of the amount authorized to be drawn when the traveler returns will be redeemed by the banking-house issuing the letter. Ordinarily a commission is charged for the use of the letter, but if the amount is large and the contem-



CIRCULAR LETTER OF CREDIT

No.

ADDRESSED TO THE CORRESPONDENTS

OF

KNAUTH, NACHOD & KÜHNE.

£ NEW YORK, 190

Gentlemen;

We beg to introduce and to commend to your kind attention Mr

to whom you will please furnish funds in sums as required up to the aggregate amount of

Pounds Sterling against sight drafts on Paris Bank Limited, London, each draft to be plainly marked as "drawn under K. N. & K.'s Letter of Credit No. ."

We request you to buy such drafts at the rate at which you purchase demand drafts on London, deducting your charges, if any, and we engage that these drafts will meet with due honor in London if negotiated not later than 190 , under the condition that the amounts thus negotiated have been inscribed on the back of this Letter. The Letter itself must be attached to the draft which exhausts the Credit.

Please see to it that the drafts be signed in your presence, and carefully compare the signature with the one below.

We are, Gentlemen, your obedient Servants

Holder's Signature:

FORM OF LETTER OF CREDIT FOR USE OF TRAVELERS.

plated period of absence considerable, the use of the funds while undrawn is considered sufficient compensation and there is no charge. Interest may even be paid in some cases.

Traveler's Check.

A device of international checks has been coming into use of late. These are in the form of drafts or orders to pay for small amounts, usually four or five pounds sterling, or the equivalent in different currencies, issued by the home banker upon his foreign correspondents and sold for a small commission upon the sums they represent, which have also to be paid, of course. The buyer of the checks has to write his name on the face of each, and there is a space below it for his signature again when he has them cashed, which affords evidence of genuineness. These checks, usually drawn upon a London banking-house, are readily cashed all over Europe by bankers and even by hotel-keepers, either at par or for a small commission, for they furnish exchange upon London, which is always and everywhere in demand. Drafts can be made on the London house with the checks attached and turned over for collection.

When credits abroad are required immediately they may be made by "cable orders" from the domestic to the foreign banking-house. These command a slightly higher rate than those for sight-bills, as there is no loss of interest for the time of transmission and a small expense is incurred in cabling. It is a matter of immediate transfer of credits between the bankers for the benefit of customers who pay for the service in the rate charged for "cable orders." Their use is not different from that of bills of exchange except in the saving of time.

XXXI

SAVINGS-BANKS

Properly speaking, savings-banks do not conduct a banking business, and such institutions are not banks in the strict sense of the word, but in some States commercial banks are permitted to have a savings department, and separate savings-banks may be closely associated with them. Sometimes the savings funds, instead of being carefully invested, are kept in the banks of deposit and used by them in their ordinary business. This is a bad system, and subjects the savings deposits to risks inconsistent with the legitimate purpose of such institutions. When a man makes a deposit in a commercial bank he intrusts the funds to it for its own use. It makes him its creditor. He is entitled to no increment from the use of the funds unless the bank has agreed to pay him interest, and has only a claim upon it for the amount due him. A savings-bank takes deposits not for its own use, but for safe keeping and the sole use and benefit of the depositors. The prime consideration is safety, not profit or income. Under proper regulations the bank is in charge of a Board of Trustees, who are precluded from making a profit out of it for themselves. They are authorized to employ the necessary officers and clerks for conducting it and to make all requisite disbursements for expenses, but the funds belong not to them or to the bank, but to the depositors collectively, and are held in trust. They are to be invested safely in a prescribed manner, and the revenue derived from them is to be credited to the depositors and distributed to them in dividends, or "interest," determined at intervals, it may be semiannually or quarterly. The entire increment over and above the expenses of management belongs to them. There may be a surplus fund accumulated as a security against the depreciation of investments or other contingencies, but this remains the property of the depositors and is for their security. It is in no sense "undivided profits" of the bank.

The deposits of savings-banks are not loaned on personal security, but invested. Even what are called real-estate loans are more properly investments in the bond and mortgage security, which should be a first lien upon the property and not exceed a certain percentage of its value, allowing such a margin as will be a safeguard against loss by shrinkage. Under the laws of New York savings-bank deposits can only be loaned upon first mortgages on real estate to not more than 60 per cent of its market value, or invested in bonds of the United States, or of States which have not defaulted in the payment of interest or principal on their obligations, and those of counties, cities, towns, and school districts in the State and certain specified cities in other States, and of certain railroad corporations named in the law. The tendency has been to extend the range of these investments on account of the large increase of deposits and a relative diminution in the volume of available securities of the first class, but the consideration of absolute safety is kept in view, though it may result in a reduction of the dividends that might be paid. Only funds awaiting investment or liable to be needed to meet demands for withdrawal or other payments are kept on deposit with regular banks.

Laws relating to savings-banks differ in different States and in different countries, and few are so strict as those of New York. In what follows we shall only deal with the savings-bank as strictly an institution for savings under rigid regulation and supervision. The control is placed in a board of trustees consisting of men who are presumed to be responsible and of high character, and they are permitted to fill vacancies in their own number, making it a self-perpetuating body. Its members serve gratuitously and are assumed to have no personal interest in the use of the funds. They choose the officers, who are paid to manage the affairs of the bank under their direction, decide upon all investments, and declare the dividends or rate of interest to be paid upon deposits, usually semi-annually but in some cases quarterly. They hold frequent meetings to receive reports from the officers, pass upon real-estate loans, authorize investments, and otherwise exercise the duties of direction, for in them all final responsibility is lodged. Usually the officers are chosen from their number, and they authorize the employment of the tellers, bookkeepers, clerks, and other employees, and fix their salaries.

A large savings-bank in a city has an active president, treasurer, and secretary, and these officers may have any necessary assistants, but in a small institution the president may take no active part in management, and the executive duties may be concentrated in a single officer called the secretary and treasurer. In the former case the president is the direct representative of the trustees and exercises general supervision over the affairs of the institution. The secretary keeps the minutes and records of the Board of Trustees, attends to the correspondence, acts as general auditor and accountant of all the departments, looks after the filing and custody of documents, and has charge of the bookkeeping of the bank in its outside dealings, as distinguished from the bookkeeping for the accounts of depositors, which is a department by itself in charge of a head bookkeeper. The treasurer has the custody and management of investments, controls the cash, deposits funds in other banks, draws checks upon them, which usually have also to be signed by the secretary and countersigned by the president, collects interest on investments, including mortgage-loans, receives payment of principal of matured obligations and for securities sold, receives applications for loans and refers them to the Board of Trustees, makes payments for the bank and otherwise performs the duties of its financial officer. The important subordinate employees are a receiving teller, paying teller, and bookkeeper, with such clerks as may be necessary to assist them. The janitor is also an employee of consequence, for, besides having charge of the premises, he keeps watch over the depositors as they come and go and acts as messenger and general factotum.

When a depositor opens an account his name is entered in a book, with his residence, his place of birth, the names of his parents, and other facts useful in establishing identity, and his signature is added, if he can write; if not, he makes his mark. Sometimes these entries are made upon cards to be filed or pasted in books. He receives a pass-book, which bears a number as well as his name. As this is to contain the account of the bank with him, whatever he deposits is entered upon a debit page as being due to him, and whatever is drawn out is credited to the bank on the opposite page. The balance is always a debit balance in the pass-book, being due to the depositor, and there can be no overdraft to produce a credit balance, which could be made in no other way. He states the amount he desires to deposit and signs a slip or ticket upon which it is entered and presents the book with the money to the receiving teller. Sometimes the teller does the entering upon the slip and no signature is required in making a deposit. The amount of the deposit is entered in the pass-book on the debit side and also in the teller's deposit-book. In a large bank this is done by a separate clerk, who hands back the book at another window; and in a small bank the teller not only enters the amount in the pass-book and in his deposit-book but sees it posted at once in the bookkeeper's ledger, where it is credited to the depositor.

Where there are many depositors their names and the facts relating to them are kept in an alphabetical index of cards after the manner of a library catalogue. Many deposits are made by persons as trustees for others, especially minor children or persons unable to attend to it for themselves. As the amount that will be received from the same person is usually limited to a certain sum, this depositing as trustee is often resorted to as a means of dividing one person's money into more than one deposit. Checks and drafts in proper form will be received at most savings-banks and credited at once, but no drafts against the proceeds will be allowed until after these have been collected.

The receiving teller's duty is to receive and duly enter all deposits, and he must account each day for his work. He may keep up the entries in his deposit-book during the banking hours or complete them from the deposit-tickets at the close. All bank-checks and drafts taken pass to the treasurer to be indorsed and deposited in a regular bank and a separate account is kept of them. The cash goes to the paying teller, either from time to time during the day on requisitions from him or after business with depositors is over. The receiving teller makes up a proof of his work and reports the day's transactions at his desk to the secretary. The proof consists in noting any balance with which he began the day and the amount received as indicated in the footing of his deposit-book, and setting against this the amount turned over to the treasurer, that charged to the paying teller and any balance left on hand. Obviously these amounts should exactly balance.

In one large savings-bank in New York an ingenious machine, specially invented for it, is used to list the day's deposits, which dispenses with the use of the teller's deposit-book. It is based upon the principle of the arithmometer and cash-register, with a new application. The date is set for the day and the machine enters that and the amount of the deposit in the pass-book, which is placed in a proper position, and when the right keys have been pressed is pushed in with a movement that sets the mechanism in operation under the impulse of a small motor. By a single movement the entry of date and amount is made in the book, and the amount is also impressed upon a paper ribbon which is to receive the list of one deposit after another. At the same time the aggregate of successive deposits is kept up within the machine, to be taken off at the close of the day, and it is also continued day after day, so that the total of all deposits from the time the machine began to be used can be ascertained at a glance. The list of deposits for the day is taken off at the end of banking hours and pasted in a book, where it can be compared with the deposit-tickets and with the ledger entries. The machine not only saves labor but contributes to accuracy. When the teller reports his receipts to the secretary, the latter enters the aggregate in his book, but if there is any discrepancy between the actual receipts and the teller's entries which can not be reconciled, his account is either "over" or "short" and there is a charge to "excess" or "deficiency" account. If this is not traced and rectified, the teller has to make up the deficiency, but he never gets the excess.

When a depositor wishes to draw out money he presents his pass-book at the paying teller's window and names the sum desired. This is written upon a draft which he is asked to sign, and he is usually asked some question which will serve to identify him. In some savings-banks there are blank forms of drafts which the depositor himself fills out. Unless he is well known to the teller, reference is made to the bank's book in which his application was originally entered to verify the identity of the person and the signature. Then the date and amount drawn is entered upon the credit page of the pass-book, which is handed back to the depositor, who is called by name and asked to state the amount asked for. Sometimes paying the money and returning the book is done by a different person from the one who receives the application. The paying teller begins the day with a certain amount of money in his drawer and may replenish it by requisitions on the receiving teller. When depositing exceeds the drawing out, there will be a surplus each day to be turned over to the treasurer, and if the drafts at any time exceed the depositing, requisitions may be made upon the treasurer for funds to be taken from the vault, or, if necessary, drawn from a bank. Such periods can usually be foreseen and provided for, but occasionally there may be a " run " on the bank. It is good policy to meet this by promptly paying every demand, but the bank has the right to require notice of a certain number of days, usually thirty, of the intention to withdraw deposits. Payments will be made by check on a regular bank if desired, but this must be signed by the officers, and the teller receipts for it on the stub of the check-book, and the secretary makes a record in his books, as he does of the checks received on deposit.

The paying teller keeps a " draft-book " in which he enters the drafts paid against the number of the account in each case, not the name of the depositor, and he makes up a " proof " of his day's work. This he does by footing up all payments from the drafts themselves or from his draft-book, adding the balance he has on hand and setting against this the balance he had in the morning and what he has received during the day from the receiving teller and the treasurer. The two totals will balance if there is no error, and a report of the day's transactions at his desk goes to the secretary.

The bookkeeping of a savings-bank is important but not complicated, as it relates only to the deposits received, the payments made to depositors, and the interest on their accounts at the rate declared by the Board of Trustees near the end of each half-year or quarter, as the case may be. The bookkeeping of one day is done for the operations of the day before. All the deposit-tickets and drafts bear the numbers of the several accounts to which they belong and have been stamped with the date. The accounts are kept in a ledger ruled with columns for the date, for the credits or amount of deposits, debits or amount of drafts, and the balance. They are arranged consecutively by the numbers of the accounts and not alphabetically by names of depositors, but the name of the depositor is written above each. Usually several are kept upon each page of the large ledgers. Methods differ in different banks, but there are two principal ones. By one of these the credits are entered from the deposit-tickets and the debits from the drafts, and a new balance is entered by adding the credit or deducting the debit, as the case may be, thus keeping up the actual balance with each new entry. By the other method the balance only is entered by mentally adding the credit or deducting the debit, and another clerk, or assistant bookkeeper, enters the credit or debit by noting the difference between the two balances and comparing it with the lists of deposits and drafts, or with the entries in a journal of credits and debits when these lists are not used. The entries in this journal are made from the deposit and draft books and it becomes in effect a detailed "proof-book." The deposit-tickets and drafts, the teller's books or lists, and the journal contain repetitions of the same items, with which the ledger entries must agree, if all are correct. The aggregates are transferred to a daily proof-book and compared with the tellers' reports to the secretary. If there are discrepancies they must be hunted down and rectified. In most savings-banks a monthly proof-book is made up for the transactions of the month, and there may be others for longer intervals.

After the trustees have declared the dividend rate for the half-year the amount is computed for each account by the bookkeepers. It is a simple matter, as interest is allowed only on a complete balance running through the period, whether a quarter or half-year. Any deposit made after the beginning of the period is not included, and any draft made before its close is excluded. This always affords a considerable margin of investment funds upon which no interest is drawn and helps to keep up the rate for the rest. The interest is entered in the ledgers at the end of the period in red ink, and if not drawn out is added to the balance at that time. A separate interest and balance book is usually kept in which the items of interest and balance are separately entered, also in red ink. There is one of these for each ledger, covering the same accounts, and the aggregates of the interest items from the two sets of books should agree and furnish a "proof" exhibit of the total dividends. A record of this goes to the secretary, to be entered with other aggregate items to show the condition of the deposit-accounts.

A word should be said about the closing of accounts. When an entire deposit is drawn out the account is closed at once and the pass-book is surrendered to the paying teller, who includes a statement of all such in his daily report. An appropriate entry of the closing of the account is made in the ledger, and the index-card for that account is taken from its place and filed with others of the same kind in another drawer, with the date of closing noted upon it. Closed accounts are not included in the "interest and balance book," as the right to dividends is forfeited for any remnant of the dividend period.

The business of managing the investment of the funds is quite apart from that of the deposit department and is in immediate charge of the officers. The trustees decide upon the securities to be purchased within the limits allowed by law, and upon the loans to be made on bond and mortgage, but the treasurer has the active management of this branch of the business. In some savings-banks he has an assistant who investigates the property offered as security with reference to its value, present and prospective, and the possibility of any existing lien upon it or any flaw in the title. An attorney is entrusted with the actual negotiation, the drawing of papers and the searching of titles, and when the treasurer draws the bank's check for the amount of the loan he takes a formal receipt with the mortgage bond, an abstract of title, and a policy of insurance, if there are buildings on the property. These documents are filed away in envelopes serially numbered, the application for the loan and the abstract of title being usually enclosed separately. The treasurer collects the interest semiannually, sending notice some days in advance in a form that may be signed as a letter of remittance, and gives the bank's receipt when payment is made. If this is made by check he includes it in his bank-deposit; if in money, he may pass it over to one of the tellers, who gives a voucher for it and includes it in his daily statement, credited to the treasurer.

Other investments are dealt with in a similar way, so far as collections and accounts are concerned, and the secretary has charge of the bookkeeping for this side of the bank's transactions, which do not differ essentially from those of any financial concern. The secretary keeps a daily cash-book, accounting separately for money passing through the hands of the tellers, that in the custody of the treasurer, and that deposited in a regular bank. It also contains a record of transfers from one account to another, as such transfers may be made, a special ticket being sometimes used, consisting of two parts, one representing a draft by one depositor and the other a deposit by the other. This is divided in making the credits and charges, and of course the funds in the bank are not affected, except to transfer a certain sum from one account to another. A general ledger is kept recording all the business of the institution, but in form and method it does not differ essentially from that of any business concern, crediting receipts to different accounts such as deposits, interest, and other payments to the bank, and debiting payments from the bank for different disbursements and expenditures. A daily "balance-sheet" is usually kept at the bottom of the page of each day's entries, showing the exact condition of the bank on that date. The secretary not only has charge of this general bookkeeping, but keeps a file of all letters received and has copies made of all sent out.

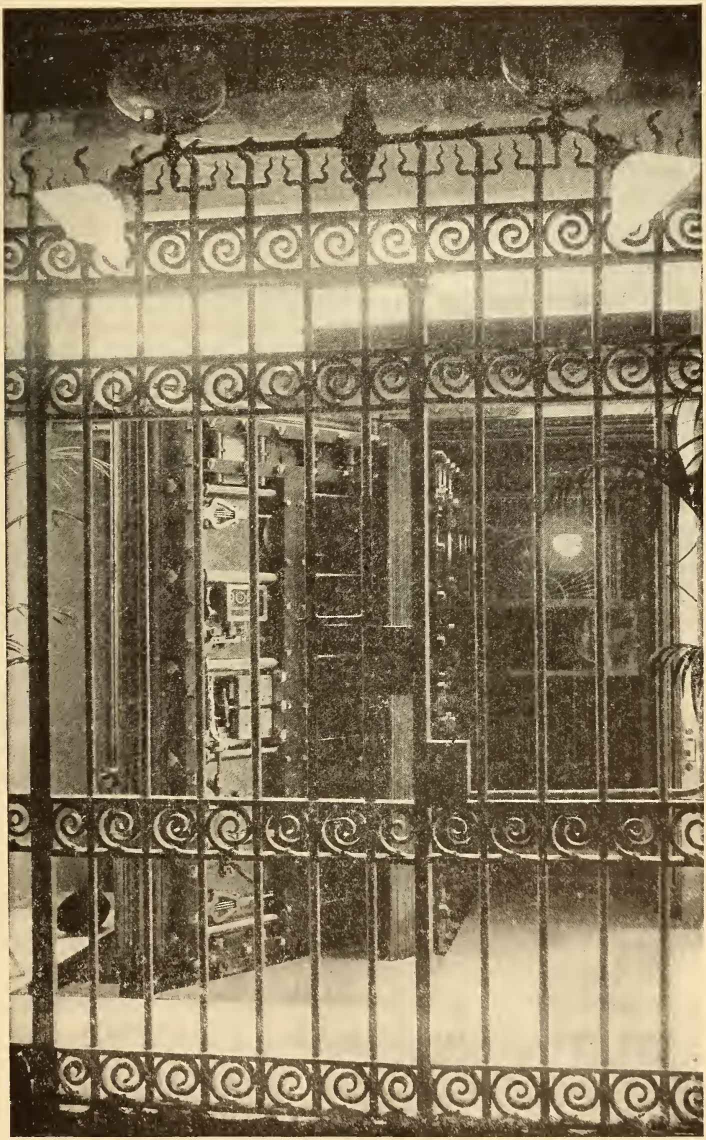
A savings-bank may only own real estate used for its business, except that it may acquire it by foreclosure of mortgage or by purchase to secure a payment and hold it until it can be advantageously disposed of. In the meantime it may be rented out and the care of such property and income and expense on account of it become an incident of the business. Any part of the bank's premises not required for its use may also be rented.

XXXII

SAFE-DEPOSIT VAULTS

The mere safe-keeping of money or other valuables is no longer a part of the business of banking, though it was chiefly that for which banks were first instituted. But there has been in recent times such a multiplication of the forms in which value is represented, especially in stocks, bonds, mortgages, and other titles to property and evidences of debt, that a new need has arisen for places of absolute safe-keeping against the chance of loss by fire, theft, or other casualty. In a highly developed commercial community banks can not afford space in their safes and vaults for such valuables, merely to accommodate their customers and keep guard over their possessions, and furnishing places of safe deposit has become a separate business. It may be regarded as incidental to banking so far as it concerns securities used in connection with loans or in transit for purchase or sale or for registration and transfer, but not for the care of individual property upon which the bank has no claim or lien and with which it is not dealing. Under the laws of some States, of which New York is one, no corporation can exercise any powers not specifically granted or not incidental to the exercise of those that are so granted. The National Bank Act confers no powers except "such as shall be necessary to carry on the business of banking," which is defined as discounting and negotiating promissory notes, drafts, bills of exchange, and other evidences of debt, receiving deposits, buying and selling exchange, coin, and bullion, loaning money on personal security, obtaining, issuing, and circulating notes according to the provisions of the act. This definition is generally followed in State bank laws, but there are banks which maintain safe-deposit vaults, and the legal right has not been questioned. It may be that it would be judicially held to be properly incidental to the business of banking, as it affords to customers a place of safe-keeping for valuables which constantly enter into banking operations. This may also be incidental to the business of a trust company.

The need of systematic provision for the safe-keeping of securities, documents, and other valuable property has, however, led to establishing and managing safe-deposit vaults as an independent business, and corporations are organized to conduct it on a large scale. The premises are usually in the basement or lower part of a fireproof and well-protected building, and are especially equipped and fitted for their purpose. There is always one large vault, and there may be more than one. This is usually so constructed as to be entirely separate from the walls, floor, and ceiling of the building. The structure is of steel, sometimes heavily incased with brick, and has thick double doors with complicated locks. The outer door has a combination lock of which only one person knows the secret—or the secret may be divided between two or more persons, no one having the entire combination. The inner one is set on a different combination known only to another person or set of persons, and this will only work on the running down of a clockwork mechanism, a certain number of hours from the closing of the vault, when the mechanism is wound up and set for the hour of opening. Thus it requires at least two responsible persons to open the vault, and they can not do it between the time of closing and that set for opening. Within these heavy double doors is another door or gate of light grilled construction for going in and out during busi-



Entrance to Safe-Deposit Vault, showing the Two Doors Open Behind the Outer Grill.

ness hours. Some of the newest vaults have a single door, circular in form and provided with a specially complex locking mechanism.

The inner walls of the vault are lined with steel compartments of various sizes, each with its separate door and lock, the rents for their use varying with the space occupied. Here it requires two keys and two persons to gain access to one of the boxes kept in these strong compartments. The superintendent or custodian has a single key which must be turned in the lock before the key of the tenant will open it. Each lock is different from every other, and the key of the tenant will open only his own; and whenever a box is newly rented a new lock is fitted to the door with a key unlike any other. No tenant, however well known, can enter the vault or gain access to his own rented compartment without being accompanied by the person in charge, but no representative of the company knows or has a right to know what the box contains. The exact legal responsibility of such a corporation has never been defined, but it is of the essence of the business that it shall have no control over the valuables deposited and shall put no restriction upon the control of the owner, except so far as is necessary to insure safe-keeping.

Within the locked compartment is a separate box, usually of tin, with a lock of its own, and this can be taken out for examination or change of the contents. Rooms are provided outside of the vault itself, but convenient to it, to one of which the owner of a box can retire and do what he will with his own in entire safety, for a strict guard is kept at all times. Nobody is admitted who is not known to the superintendent or does not bring satisfactory credentials, and every tenant must be personally known. When any person rents a box his name and address are registered, with a personal description and particulars of parentage that will make his identification certain, and his signature

INTERIOR OF LARGE SAFE-DEPOSIT VAULT LINED WITH STEEL COMPARTMENTS OF VARIOUS SIZES.

is also taken. A compartment may be taken by two persons, or special arrangement may be made for access to it by a properly accredited agent, who must himself be known. In the absence of such an arrangement, if a tenant dies, his box can only be opened by the legal representative of the estate on a certificate of the surrogate or probate judge, which shall assure the company of the right of such representative to the control of the property of the deceased. In addition to all other precautions, at least two trustworthy watchmen are kept on duty day and night. Sometimes such vaults are an adjunct of a bank and intended for the keeping of money, securities, and documents or valuables in small compass, and sometimes they are appurtenant to storage warehouses and used for more bulky articles as well.

The records and bookkeeping of a safe-deposit company are simple, and its relation to its customers is in effect that of landlord and tenant. The latter is bound only to pay his rent and submit to such restrictions as are necessary for the safety of his own property and that of his fellow tenants, for which the company makes itself responsible only on the conditions which it imposes. Apart from the books containing the signatures, addresses, terms of rental, etc., of those renting compartments in the vaults, there is usually a card-index alphabetically arranged in a case of drawers for ready reference.

XXXIII

DEVELOPMENT OF MODERN BANKING

The modern bank is a development of the last two or three centuries, but the evolution has had a rapid culmination within a comparatively few years and is not yet complete. The vast extension and complexity of industrial, commercial, and financial relations have compelled the use of credit upon a scale never before imagined, and has wrought wonderful changes in the manner of applying it with effect and safety. Trading and borrowing and lending come down from primitive times, and bills of exchange for making transfers between distant places are of ancient date. For ages they were simple orders upon one person to pay to another, or drafts upon a debtor which could be made over to a creditor, and were negotiated through intermediaries, who bought and sold them to serve the convenience of traders. Collections and the settlement of balances were subject to uncertainty and loss, but the range of traffic and exchange was narrow, and "money-dealers" established fairly safe relations with each other at the few trading centers.

The first banks were hardly more than agencies for concentrating and managing the loans of governments, and as such had their origin in Italy as early as the twelfth century. The word "bank" originally signified a "pile" or "mass" of funds, like the Italian "monte" and the French "mont," and was applied to the massing together of various government obligations, or their consolidation in sets of negotiable securities, which were issued, transferred, and paid through "bankers," who sometimes collected the public revenues and made payments in connection with the handling of public debts. It was for such functions as these that the first banks were established at Venice, Florence, and Genoa. But when a large and lucrative trade was developed by the enterprising merchants of those cities with the Levant and the Orient, and later by those of Antwerp and Amsterdam with distant parts of the world, as the result of the discoveries and adventures of the navigators of the fifteenth and sixteenth centuries, the necessity arose for some means of effecting commercial exchanges on a scale never before known, at least not since the dim ages of Phenician, Babylonian, and Egyptian traffic.

At that time the supplies of money in Europe were inadequate to meet the new demands, and there was a multiplicity of coinages, based first upon silver and afterward upon both gold and silver, without any stable or uniform ratio between them, or any clear understanding of their relation. In the bringing of merchandise from different parts and distributing it in Europe in exchange for other commodities there was a tendency to draw money of different coinages, more or less impaired in weight, to the trading centers and to produce an increasing volume of bills of exchange. There was need of more effectual means than the irresponsible private money brokers and dealers in exchange to accomplish the transfer and settlement of accounts in the miscellaneous money of the time, on some reasonable basis of equivalence. This gave rise to the precursors of the modern banks of deposit, of which the best example for the purpose of illustration was the Bank of Amsterdam, rather than the kindred institutions of Venice, Florence, and Genoa.

This was established by the city to meet the needs of commerce and suppress the disorders of private banking, and lasted for nearly two centuries. Its chief characteristic, like that of the early Italian banks, was receiving all kinds of specie and bullion on deposit and crediting to the depositor its value in "gulden," according to the standard of the time, of which the silver riksdaler was the unit. These deposits could be withdrawn at will or could be assigned or transferred, and all bills of exchange of considerable amount were paid through the bank by the transfer of deposits. It also bought and sold specie, but did not make loans, and its income was derived from a commission upon all transactions. Discounts in the modern sense were unknown. These transferable credits for actual coin or bullion deposited, representing the standard money of account, came to be known as "bank-money," as distinguished from the varied and fluctuating currency in circulation, and served as a stable medium in commercial transactions. The premium upon it indicated the depreciation of the moneys rated in it.

In the early history of the Bank of Amsterdam any one credited with a deposit was entitled to draw specie on demand according to its value in "bank-money," which made the evidences of that money virtually redeemable in coin, giving it the character of a stable currency representing the full value of standard coin of the Netherlands. The system was modified in the latter part of the seventeenth century by the plan of making advances by a credit in "bank-money" upon deposits of specie of certain specific kinds to substantially the amount of its value, the depositor receiving a "recipisse" entitling him to withdraw it within six months upon returning the bank-money with which he was credited and paying $\frac{1}{8}$ of 1 per cent interest. The deposit might be renewed at the end of six-month periods indefinitely, but in case of failure to redeem or renew it was forfeited to the bank. Meantime the practise of redeeming bank-money in specie on demand fell into desuetude and was no longer regarded as a right, and the method was adopted of buying and selling specie at fixed rates in "bank-money."

The plan was to buy bank-money with specie when the premium was low and buy specie with bank-money when the premium was high, and so keep the fluctuation within certain narrow limits. This was done through outside agents, and the extent and rates were determined by the bank and not by the demands of the community for either form of currency, which made it a departure from the principle of convertibility. In its early days the bank was required to hold in its vaults the kind of specie that it was bound to pay, and to the full value of the payments that could be called for, but its later advances and purchases produced a dislocation that made its supply in a measure unavailable to meet the demand. Bank-money gradually lost its stability, and in the course of time, through the secrecy of its management, which led to irregularities, and to loans to the city and to the East India Company, the Bank of Amsterdam fell from its high estate and was found at last to be insolvent.

The Banks of Antwerp and Hamburg were founded upon the same principle, and the latter had a continuous history from 1619 until the establishment of the imperial system of Germany. Its accounts were kept in "marks banco," equivalent to a half-thaler (37½ cents). Its notes represented only coin and bullion actually deposited and were payable in silver on presentation, but credits could only be transferred by the appearance of the depositor in person or by attorney. It made no loans and incurred no liabilities beyond the coin and bullion on deposit. The old system was continued for nearly two centuries without loss and served the purpose of the merchants in the most flourishing days of the "free cities." It was only after the Napoleonic wars that modern banking methods were gradually adopted at Hamburg, and the venerable institution was merged in the Reichsbank in 1875.

The commercial activity of England did not begin until that of Italy had declined and that of the Netherlands had begun to wane, and it was near the end of the seventeenth century before any important banking institution was established. Such facilities for exchange as existed were provided by private concerns, and the goldsmiths of London received money on deposit upon which they paid interest and which they loaned out. All the conveniences of domestic and foreign exchange were provided by private persons or firms. The currency was in a bad condition, and there was no regular system of taxation to provide revenues for the Government. The goldsmiths made advances to the Crown on interest-bearing securities, but after Charles II repudiated some of these obligations it became difficult to raise money on loans.

In the time of William III and his war expenses on the Continent some means had to be devised for raising funds on the public credit and managing the increasing national debt. It was then that a canny Scotchman named William Patterson came forward with a proposal to establish a bank that should lend its capital to the Government and have the privilege of issuing on the securities "bills" that would constitute a legal-tender currency. After some opposition and delay the suggestion was substantially adopted in 1697, when "The Governor and Company of the Bank of England" was established by Act of Parliament, or rather by what we would call a "rider" on a revenue bill. It was organized on a loan of £1,200,000 to the Government and authorized to issue notes which should be a legal tender except at the bank itself, to deal in bullion and commercial bills, and make advances on merchandise. It received the public funds on deposit and acted as fiscal agent of the Government, not only in placing loans, but to some extent in the collection of revenues from taxation, as well as making payments on official warrants. It was in close relations of mutual dependence with the Government and was regarded as to some extent a political institution, which occasioned opposition from the Tory party as well as from the goldsmiths whose business it threatened to curtail.

This was the Bank of England, which established in 1732 the home in Threadneedle Street that it still occupies after passing through many trials and vicissitudes of fortune. Its charter has been renewed and its capital increased several times and its privileges have been varied from time to time, but the character of the institution has not been greatly modified, except by a gradual adaptation to the growing requirements of commerce. An early attempt was made to establish a land-bank in competition with it, but it failed. The South Sea Company attempted to rival it in 1717 as the manager of the national debt and secured the privilege from Parliament, but it was short-lived, collapsing under the weight of its speculative enterprises. The intention was to give the bank a substantial monopoly by prohibiting any partnership or association of more than six persons from engaging in banking operations. This did not prevent private partnerships and corporate organizations of six persons or less from carrying on banking operations or from issuing notes for circulation, though these were not a legal tender for debts. Neither did the terms of the Act of 1742 renewing the charter prohibit larger joint-stock companies from conducting a deposit and discount business, provided they did not "borrow, owe, or take up any sum or sums of money on their bills or notes, payable at demand, or at any less time than six months from the borrowing thereof," but that privilege was then deemed essential to successful banking, and no such companies were formed for nearly a century after that.

After the political upheaval in France and the events that led to the Napoleonic wars the Bank of England began to have serious trouble. The currency of the realm was in a bad state, the Government was exacting in its demands for advances, the importance of constant specie redemption of circulating notes was not appreciated, and coin was drained away to the Continent. In 1797 the bank was obliged to suspend specie payments, authorized to do so by the " Restriction Act," and did not resume until 1821. The first part of that long interval was one of great financial confusion and distress, of enormous public expenditures, and the creation of the huge national debt of Great Britain. Many of the small banks failed, and " the bank " largely increased its note issues, which were still made a tender for debts, though not redeemable. A parliamentary inquiry led to the famous " bullion report " of 1810, the establishment of the gold standard and the present coinage system in 1816, and a gradual bringing of order out of chaos. After 1826 joint-stock banks of more than six shareholders were permitted to do business in England and Wales beyond a radius of sixty-five miles from London, including the issue of notes, and on the renewal of the charter of the Bank of England in 1833 they were permitted within that distance, but without the privilege of issue. The first to take advantage of the liberty was the London and Westminster. Not until then did the great bank begin to establish branches, the first being at Manchester, Gloucester, and Swansea. The Bank Act of 1844 established the British system on its present basis.

This divided the institution into a banking department and an issue department, the latter to be in charge of a committee appointed by the directors. What was called "the currency principle" was then first applied. The average circulation at the time was about £14,000,000, and this was taken as the amount that could be kept permanently afloat without being subject to demands for redemption. Securities to that amount were to be transferred from the banking to the issue department, and as much gold coin and bullion as the former did not require for its regular operations, and an exact equivalent of these two deposits was to be issued in circulating notes. No addition could be made to this volume except on deposit of an equal sum in coin or bullion, and all notes were to be redeemed on demand. Out of regard for vested interests the private and joint-stock banks could retain their existing circulation, but no addition could be made to it. It was intended that this should be gradually absorbed by the Bank of England, and it was provided that whenever any other bank went out of business or surrendered any part of its circulation that institution could issue two-thirds of the amount withdrawn by depositing "securities," but only on an order in Council authorizing it. This process of absorption has not yet been completed. The bank was required to make weekly reports to the Government and pay £180,000 a year for its privileges. This charge has since been increased to £200,000.

Scotland had a banking system with some peculiar features, established by its own Parliament before the union. The Bank of Scotland was in fact organized under an Act of 1695, before the Bank of England was in operation but not before its plan had been formed and discussed. It was a private joint-stock company with a special charter, and was authorized to lend on real or personal security at not more than 6 per cent and to negotiate bills of exchange. At first no deposits were received, but notes were issued to the amount of its capital, ranging in denomination from £1 to £100. It had a monopoly until 1716, but this was not continued on the renewal of its charter at that time. The Royal Bank of Scotland was incorporated by the holders of the public debt and began business in 1722. It began what has ever since been a distinctive feature of Scotch banking, the advancing of money on personal credits, the advances being made in notes of the bank. The British Linen Company of Edinburgh, formed in 1746 to promote the linen industry by lending money to the manufacturers, soon went into a regular banking business. Other banks were established from time to time, and at the time of the Bank Act of 1844 there were ten in existence, with numerous branches.

The Scotch banks passed through the trying time at the close of the eighteenth and beginning of the nineteenth century with very little strain. Their notes were the chief currency of the country, and though the issues were increased there was little call for their redemption. They were maintained at par while those of the English banks were depreciated and fluctuating, though within narrow limits on account of the strength of the Bank of England and the general confidence in it. In 1845 the "currency principle" was applied to the Scotch banks. They were allowed to retain the volume of notes then outstanding, £3,087,209, on the basis of securities, but all additions must be "covered" with coin, not more than one-fifth of which could be silver. The "authorized" or "uncovered" circulation was reduced to £2,676,350 by the failure of the Western Bank in 1857 and the City of Glasgow Bank in 1878 through bad management. This application of the "currency principle" somewhat modified the traditional character of Scotch banking by restricting the issue of notes and the practise that had prevailed of paying interest on deposits, but the peculiar feature of making advances on personal credits continued. This consists in giving persons properly vouched for or of known probity a credit to a certain moderate amount without making a deposit, and allowing him to draw upon it from time to time in the bank's notes, paying interest upon the amount taken while it is kept out and making payments by deposit of the notes, thereby lessening the interest-bearing loan to that extent.

Ireland depended upon private concerns for what were in those days regarded as banking facilities, such as making advances upon various forms of security and negotiating commercial bills and bills of exchange, until 1783. Some of these private bankers issued promissory notes payable on demand, which served as currency of uncertain stability. "The Governor and Company of the Bank of Ireland" was established by an act of the Irish Parliament in 1782 and began operations in Dublin the next year. It was organized by private shareholders and was not allowed to charge more than 5 per cent on loans and for discounts. Its circulation of notes was not restricted, and no other body corporate of more than six persons was to be allowed to "borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand or at less than six months from the borrowing thereof," this language being borrowed from the English law. This did not put an end to the circulation of the small banking concerns. The Bank of Ireland suspended specie payments from 1797 to 1821, and in the latter year, on an increase of its capital, surrendered its monopoly outside of a circuit of fifty miles from Dublin. Thereupon some English capitalists established the Provincial Bank of Ireland, with its head office in London and various branches in Ireland outside of the fifty-mile limit. Later, other banks were established and there were six in 1845, when the same restriction was put upon note issues as was imposed upon those of Scotch banks, and the monopoly of the Bank of Ireland within the fifty-mile circuit was abolished. At that time the authorized circulation was £6,354,404, more than half of which belonged to the Dublin institution. In Ireland as well as Scotland the banks are permitted to issue one-pound notes, while in England no denomination less than five pounds is allowed.

The first banking institution in France was founded by John Law in 1716 under the regency of the Duke of Orleans. It received a charter by letters patent, and was authorized to issue " bank crowns " redeemable in money of the weight and denominations of the day of issue, which was intended to keep them from fluctuating at a time when current coin was mixed and variable in weight and fineness. The bank was based upon sound principles and started well, acting as the fiscal agent of the Government, making loans on good security, discounting commercial paper, and redeeming its notes on demand, but Law was a promoter and speculator, and mixed up his banking concern with the Compagnie d'Occident, which was to exploit the resources of the Mississippi region. To strengthen his scheme he got the bank converted into a public institution as the Banque Royale, and issued a great volume of notes which became irredeemable. The story of that wild speculation and the collapse of the whole inflated financial " trust " is a familiar one, and France had nothing more to do with banks, except in the old-fashioned manner of private lenders and exchange dealers, until 1776, when the Caisse d'Escompte du Commerce was established during the ministry of Turgot, primarily to help the Government with its loans. It tried to serve the commercial community at the same time, but became too much involved in obligations of the Government and subject to its exactions, and it went down with other established institutions in the French Revolution. There is another familiar story in the " fiat-money " policy of those days, when France was flooded with " assignats."

Two important commercial banks were established in Paris after the Revolution and were doing a flourishing business when Napoleon became First Consul, but he desired a financial institution that should serve the Government and be subservient to it, and in 1800 he issued a decree establishing the Bank of France. This speedily absorbed one of the existing institutions, and the other was forced to give way to it when, in 1803, the Bank of France received the exclusive privilege of issuing circulating notes in Paris. In 1806 the bank was put on a permanent basis and brought into closer relation to the state. Its capital was increased to 90,000,000 francs, and its direction put in charge of a governor and two deputies appointed by the Government. Soon afterward its exclusive privilege of issuing notes was extended to all places in France in which it should establish branches.

After the fall of Napoleon banks were established in the different departments of France, some of which grew to importance, but they suffered severely in the financial disturbances attending the revolutions of 1830 and 1848. On both those occasions there was a suspension of specie payments, and various devices were resorted to for the relief of financial stress. Discount-houses were established, Government commissions advanced loans from the public treasury, and forced legal tender was given to the notes of the Bank of France. After the final downfall of the Bourbon dynasty a monopoly of the issue of circulating notes was given to that institution and its branches, and the departmental banks were consolidated with it, their capital being added to its own. From that time it began to fill the place in French banking that it has occupied ever since. It was of great service to the Government, to the commercial community, and to the various corporate enterprises that developed in the last half of the nineteenth century. It went through severe trials at the time of the

Franco-German War and the Commune, but came out triumphant and was of immense service in floating Government loans and otherwise aiding in the payment of the huge war indemnity to Germany.

The course of development from the old condition of banking and facilitating commercial exchange came somewhat later in Germany than in Great Britain and France. The first important institution was the Bank of Prussia, created by decree in the time of Frederick the Great (1765). It was strictly a state institution and under Government control, though there were private shareholders. As in other cases of that day, the issue of notes was considered the chief function of banking, apart from direct service to the state, and they were the main resource in making loans. The practise of making advances upon merchandise and pledge of securities as well as coin and bullion became a feature of German banking. The Bank of Prussia served as a financial agency of the Government, and it was mainly for that that it was established. The same motive was at the bottom of the development of similar institutions in other German states to supplement the private banking concerns.

There was an irregular growth with the usual vicissitudes until the consolidation of the German Empire, when the foundation was laid for the present system. There had been differences of coinage in the various states and much monetary confusion, but in 1873 the gold standard was adopted and a new and uniform currency system was founded with the mark as a unit in place of the thaler. The French indemnity aided materially in carrying out the plans of reform, and the demonetization of silver had a far-reaching effect. The Imperial Bank (Reichsbank) was established in 1875 on the foundation of the old Bank of Prussia. While it was made a private institution in its ownership, it was kept under Government control and regulation through a council of which the Chancellor of the Empire was president, one of the other four members being appointed by the Emperor, and the rest by the Federal Council, or Bundesrath. There is a "Central Commission" of fifteen members representing the shareholders, which has charge of most of the details of management.

The development of banking in other countries of Europe presents few novel features. It grew out of the old devices of money-lending and dealing in the coin of different countries, and in bills of exchange, as the requirements of traffic increased, and out of the exigencies of governments as their expenses were enhanced and they needed to raise funds on their credit. Their special need was for agencies to make advances and manage loans, and in return they granted special privileges for the issue of paper currency. Sometimes they issued notes of their own as well, and it took a long time for governments and banks to learn that notes are not money and can be made to serve the purpose safely only by being always redeemable on demand in coin. There was a banking institution in Vienna near the beginning of the eighteenth century similar in character to the earlier ones of Venice, Amsterdam, and Hamburg, but the National Bank of Austria was not founded until 1817. It was succeeded in 1878 by the present Austro-Hungarian Bank. Through its branches the latter has conducted a large part of the banking business of both countries which constitute the dual empire. Austria and Hungary grew together through struggle, and the united empire has had its troubles and losses. One of its greatest ills has been financial disorder and irredeemable "paper money," issued partly by the Government and partly by the bank, and only lately has it been getting on solid ground. A new monetary system on a gold basis was adopted in 1892, but the process of getting squarely upon it has been a slow and painful one.

Italy after the decline of its early commercial importance went through many political vicissitudes which are a matter of history, and through the experimental stage of modern banking, and emerged with three important institutions, the Bank of Italy, the Bank of Naples, and the Bank of Sicily, and many small local banks. But it has had a surfeit of " paper money " from time to time, from which it has not altogether recovered. Russia had the curse of irredeemable and depreciated paper currency, issued by the Government, long before it had a great bank. The Imperial Bank of Russia was not established until after the Crimean War, when the finances were in greater disorder than ever. It is peculiar in being in form a stock corporation in which the Government is the sole stockholder, and therefore has the exclusive power of control and management.

The Bank of Netherlands was established in 1814, after the failure of the old Bank of Amsterdam. It became and has continued to be the center of the banking system of Holland, having the exclusive right to issue circulating notes. While it was not a public institution and the state ceased to hold shares in it in 1864, the Government exercised close supervision over it through an official commission, and the president and secretary were appointed by the Crown. Through its influence modern banking methods have been gradually assimilated in Holland. When Belgium became an independent kingdom with a guaranteed neutrality in 1830 there was one strong banking institution within its limits, the Société Générale pour Favoriser l'Industrie Nationale, which had the privilege of issuing notes and discounting commercial paper. It remained largely under Dutch influence, and, though it received the public funds on deposit, it refused to make advances to the Government, and as a result the Bank of Belgium was founded in 1835. The Government transferred its funds to the new institution, which got into trouble by the practise of making long-time loans while issuing notes payable on demand. It lost the public deposits in 1842, when an arrangement was made with the Société Générale upon the renewal of its charter, but both institutions became embarrassed in 1848, and in 1850 the National Bank of Belgium was chartered, with the exclusive privilege of issuing circulating notes and a prohibition of loans upon mortgages or the securities of industrial enterprises. This became the principal banking institution of the kingdom and still holds that position.

The State Bank of Sweden was founded in 1656 and was the first to issue notes in excess of the amount of specie held for their payment, thus giving them the character of a credit currency. It was made a public institution in 1668, its entire capital being furnished by the state and its administration being in charge of a commission chosen by the Diet. It continues to hold that relation, but since 1824 banking corporations have been authorized, consisting of not less than thirty shareholders, which may issue notes within a defined limit, redeemable in gold on demand. The Bank of Norway was founded in 1814, mainly for the encouragement of agriculture. The capital was raised by a tax upon landed property, and the landowners became shareholders in proportion to their payments. Notes were at first issued in loans upon land security, but their depreciation on account of the lack of provision for ready redemption in coin ultimately led to a reform of the system. The State Bank of Denmark was created in 1813 as a Government institution in order to establish an orderly financial system, but in 1818 its privileges, resources, and obligations were transferred to the newly founded National Danish Bank. The capital of the latter was raised by a tax upon real estate, the shares being held by the landholders in proportion to their payments. No limit was fixed to its note circulation, but reserve requirements were gradually established.

Prior to 1836 banking facilities in Switzerland were furnished entirely by private banking-houses, and there was considerable commercial development in Geneva and Basle, but in that year a bank of issue was established at St. Gall. At that time the issue of notes and their use in making loans were still considered the chief function of incorporated banking institutions. These multiplied in the different cantons with a purely local character until 1875, when there were twenty-eight of them. Then a federal banking law was adopted under the revised constitution, which was superseded by a new act in 1881 establishing the present system.

In her days of enterprise and commercial activity Spain had a number of banks of the same type as those of Venice, Genoa, Amsterdam, and Hamburg, but they disappeared with her commercial decadence. A credit institution similar to that of other countries in the eighteenth century was established in Madrid in 1782 in the Bank of San Carlos, which continued in existence until 1874. The Bank of San Fernando was founded in 1829, with certain special privileges at the capital and at places where it had branches. In 1856 this was converted into the Bank of Spain, and a new law was passed in regard to banks in general, of which there were several at that time specially chartered by the Government. Under this law only one was allowed with the privilege of issue in the same city, and those newly organized could put out notes to the amount of three times their capital but must keep a coin reserve of one-third the volume. The Government appointed the governor of the Bank of Spain and commissioners to manage the "independent" banks. In 1874 the exclusive right of issue was conferred upon the former, and the others, then eighteen in number, were required to surrender their circulation to it. By a revision of the law in 1891 the limit of circulation was fixed at 1,500,000,000 pesetas ($300,000,000), against which a coin reserve of one-third was required, one-half of which must be in gold, but the bank was also required to make advances to the Government, and that involved it in difficulties. As Spain did not suspend the coinage of silver with the Latin union, its currency went to a silver basis and the notes of the bank depreciated heavily in relation to gold. It established branches which went far to crowd out the other banks, though they retained the ordinary functions of deposit and discount banking.

Banking development in the rest of Europe, in what were or still are colonies of European nations, and in other parts of the world, has been a mere extension or adaptation of the methods of the countries referred to above. A rapid survey of the present systems will be attempted in the chapters that follow.

XXXIV

THE BRITISH BANKING SYSTEM

The Bank of England is the center of the banking system of England and Wales, and to a certain extent the central agency for those of Scotland and Ireland. It is the sole depository for the British Government, and is its fiscal agent. It is also the chief factor in effecting international exchange and in controlling the course of gold with which international balances are settled. Notwithstanding its important public functions, it is a private corporation, controlled by its shareholders, who elect a board of twenty-four directors. By custom some of these are chosen each year, the changes being always made among the younger members, and it is an unwritten rule that none of them shall be in the banking business. They choose from their own number a governor for two years and a deputy governor for a like term, the latter usually becoming the successor of the former, and the offices being filled by rotation from the body of directors. The ex-governors constitute an executive council known as the Committee of the Treasury.

The notes of the Bank of England, of which the lowest denomination is £5, constitute the only paper currency for England and Wales except for the unabsorbed remnant of the circulation of the joint-stock and private banks, which amounts to less than £2,000,000, and are a legal tender in those countries, except in payments by the bank itself. As already stated, the issue department is entirely distinct from the banking department, and above the authorized limit described in the previous chapter, which by taking over the circulation of other banks has reached £18,450,000, all notes must be covered in full by coin or bullion, for which gold alone is used, though one-fifth in silver is legally authorized. The effect of this restriction has been a large use of coin in general circulation and a high development of the use of checks. The extent of the note circulation depends mainly upon the preference of the customers of the bank between them and coin. The banking department may obtain notes in any quantity by depositing coin and bullion with the issue department for the full amount, and can obtain coin by presenting notes there for redemption. It is immaterial to either department which are called for, as above the fixed limit of the securities the notes become practically coin certificates.

The currency system is not what is called "elastic," but owing to the moderate area of the country, its compactness and ample means of communication, the large use of coin and the general employment of checks, it works satisfactorily except in times of special stress, and then authority may be given for suspending the restriction upon the issue of notes upon securities. This has been exercised only three times since the Bank Act of 1844 was adopted. Much depends upon the circumstances and habits of the people of the country, and there is absolute confidence in the Bank of England, whose notes are as good as gold the world over. Any proposal to relax the restriction upon paper currency is generally discountenanced in England. The total of notes issued in August, 1903, was £52,406,-120, against which the issue department held £18,450,000 in securities and £33,956,120 in gold coin and bullion. Of these notes £23,045,125 were in the reserve of the banking department.

The Bank of England had eleven branches in 1830, and the number has not been increased, but the joint-stock and private banks have multiplied in number, in resources, and in volume of business, though in recent years there has been a diminution in the number of banks, accompanied by an increase of capital and extension of operations. According to latest reports there are sixty-eight of them, with 4,146 branches. It is through these that the bulk of the banking of England and Wales is carried on, and the character of the business of deposit and discount, of making loans and advances of money, and of dealing in exchange is not materially different from that with which we are familiar in this country. There is an incidental way of supplementing bank currency more or less in vogue with which we are not familiar, through "check-banks." These take deposits and furnish books of checks filled out to various amounts making up the aggregate, less a small charge for the accommodation. Arrangements are made for paying these at different banks and they have a limited circulation.

Apart from its own direct commercial business the Bank of England is a kind of bank of banks. There is no prescribed percentage of reserve either for it or for other banking institutions. It is left to the discretion of the managers, subject to their legal liabilities. The joint-stock and private banks are accustomed to have on hand only the cash deemed requisite for their current business and to keep regular deposits in the Bank of England. This puts upon that institution the burden of the banking reserve of the kingdom, as the banks of Scotland and Ireland make use of it to an extent in the same way. Accordingly it aims to keep on hand in cash as reserve approximately 50 per cent of its deposit liabilities. It has a way of protecting its reserve which is unknown in this country though it is followed to some extent on the Continent of Europe, and that is by raising its rate of discount when the reserve is too heavily drawn upon, which has the effect of restricting loans, and by lowering the rate when the reserve rises above what is regarded as a normal level. There is a weekly meeting of the directors on Thursday, at which a report of the condition of the bank is made and then the rate of discount is determined. It may remain the same for many weeks or it may be changed at short intervals, according to the state of the market, for it is by no means an arbitrary process. When there is a strong demand for money the general rate will naturally tend upward, and it is then that the reserve will be imperiled on account of the expansion of loans. The bank can not go much higher than the prevailing rate without sacrificing its own business, but can only fix a standard for that rate and give it stability. It can not put the rate too low without producing a demand upon its resources that will weaken the reserve.

It will be well to note just here the function of the Bank of England in connection with the gold movement. London, on account of the vast extent of British commerce, shipping, and banking facilities in different parts of the world, has long been the center of international exchange. English bills of exchange are drawn and negotiated everywhere and come home for payment, and are drawn in London to go everywhere in all sorts of international settlements. Final payment of balances in gold is made to London and from London all the time. Involved with this commercial process is a continual transfer of capital in loans and investments to and from London. When interest rates are high there they attract capital and gold tends to stay at home and to flow in from foreign sources. If they are low there and more attractive to capital elsewhere, it tends to flow out. The Bank of England, as the main reservoir of the reserves and the chief agent in the settlement of international balances, is the repository of most of the gold for the United Kingdom. From that it comes and into that it goes in the general process of distribution, though the actual transfers are chiefly made by the great private banking-houses of London.

When the supply is abundant and interest rates are low and exchange high, it goes out to meet the demand in settling balances elsewhere, and is distributed according to the pressure at different points. If it goes too fast and the reserve sinks too much, the discount rate goes up and checks or reverses the current, and balances are made to wait by an extension of foreign credits. If it is necessary to draw gold, the rates go high enough to attract capital to London and the metal flows in. The process of transfer is effected by bills of exchange drawn by bankers to be met at the point from which gold is to move. There is another device for affecting the current. Gold is bought and sold by the bank and the price is varied slightly according to the relation of supply and demand. Gold is taken by the bank for the mint, and the mint price is 77 shillings 10½ pence per ounce, but the depositor of bullion is paid in coin 77 shillings 9 pence, the difference being an interest charge for the time required for coinage. When bankers wish to obtain gold for export, and it is desirable to husband the supply or prevent exportation, a slight advance is made in the price, and when export is for commercial and financial reasons desirable it is slightly lowered. By those two devices of raising and lowering the discount rate and the price of bullion the gold movement is controlled, and serves as the barometer of the state of the international exchanges. A moderate difference in sight-exchange rates, which move inversely to local interest rates, will turn the current one way or the other. If exchange goes sufficiently above par to cover the cost of transportation, interest, and insurance, and afford a slight profit in sending gold abroad, it will be sent in preference to buying bills of exchange for foreign payments.

The capital of the Bank of England is £14,553,000, and the market value of the stock has recently been about £325 per share of £100. It has also what is called a "reserve fund," or surplus, of over £3,500,000. According to the latest statement at the time of writing (September, 1903), the issue department held £11,015,100 in Government securities and £7,434,900 in "other securities," or £18,450,000 in all, and £33,956,120 in gold coin and bullion against an issue of notes of £52,406,120. Of these notes £23,045,125 were in the reserve of the banking department and £29,360,995 were in circulation. At the same time the banking department held £2,145,427 in coin, £20,268,841 in Government securities, and £24,810,212 in "other securities." The coin and note items constitute the reserve held against deposits. These at the same date consisted of £8,779,756 in Government deposits and £43,286,965 in "other deposits." The total assets and liabilities of the institution balanced at a little over £112,500,000, or about $562,000,000.

While the Bank of England is such an important institution as the central reserve agency of the system, the fiscal agent of the Government and almost the only source of a bank-note circulation and coin supply, it does a relatively small part of the banking business of the kingdom. The total paid-up capital of the other sixty-eight joint-stock banks of England and Wales with their many branches is only £47,536,311, though the authorized, or "subscribed," capital is £210,667,180, but they have a surplus, or what in England is called a "reserve fund," aggregating £37,118,569. In May, 1903, they had invested in securities £130,812,018, and their total deposits were £600,333,000, or more than ten times those of the Bank of England. The cash in hand and at call was £164,-

466,000, besides which they had in notes as reserve in the Bank of England £16,322,000. The aggregate discounts and loans of these joint-stock banks were over £387,000,000, or about $1,900,000,000, those of the Bank of England at that time being less than £48,000,000. The aggregate of assets and liabilities was £717,730,076, and the outstanding notes of the twenty-three banks that still exercise their ancient privilege amounted to £1,923,155, of which £558,805 were in actual circulation.

But these by no means exhaust the banking facilities that center in London as the "Clearing-House of the World's Commerce," and extend not only throughout the kingdom and its colonies but into the remotest regions that are penetrated by European trade. There are thirty colonial joint-stock banks that have London offices and do a large loaning and exchange business there, including three of those in Canada, thirteen in Australia and New Zealand, three in India, four in Africa, and several with business divided between different colonies. Besides, twenty-seven foreign banks have offices and agencies in the British metropolis, including prominent institutions on the Continent of Europe, such as the Deutsche Bank, the Disconto Gesellschaft, and the Dresdner Bank of Germany, the Comptoir National d'Escompte of Paris, the Crédit Lyonnais, and the Imperial Ottoman Bank. They also include the Bank of Egypt, the Imperial Bank of Persia, and several specially organized for business in the East, in South America, Mexico, and the United States. This statement does not include the numerous private banking-houses, some of which have large resources and do a general banking business.

The clearings at the "Bankers' Clearing-House" in London, in August, 1903, were in the vicinity of £200,000,000 weekly, varying considerably in different weeks on account of special settlement days. During the season they had ranged from £152,000,000 to £206,000,000. At the five provincial clearing-houses, Manchester, Liverpool, Birmingham, Newcastle-on-Tyne, and Bristol, the weekly volume fell below £8,000,000.

The methods of the Scotch banks have not changed materially since the restriction was imposed upon their note issues, except that they are less disposed to pay interest upon deposits and are consequently less used as banks for savings, and there is a greater use of checks on account of the diminished freedom of issuing notes, but the development of commercial transactions has not been so great as to produce any radical change. They still make advances upon personal credits and loan upon a variety of securities, as well as discount commercial paper in the ordinary way, and deal in exchange. On account of the character of the system and the use of £1 notes, bank circulation has always been the chief currency of the country and commands universal confidence. This is due largely to the traditions and habits of the people. There are now eleven of these institutions, with 1,115 branches distributed over the country. Their aggregate paid-up capital is £9,316,070, but they have "reserve funds" aggregating £7,368,224. Their notes in circulation are about £8,000,000; their aggregate deposits in May, 1903, were £108,861,000, cash in hand and at call £26,032,000. Their investments in stock and bond securities were £33,030,616. They serve mainly the local business of Scotland, and the total of their discounts, loans, and advances according to latest reports were £71,487,456.

In Ireland there has been no such growth either in population or industrial and commercial activity as to produce much change. The nine banks have 685 branches; their paid-up capital amounts to £7,235,951, and the reserve funds to £3,909,000. The latest accessible reports give their notes in circulation as £6,841,300;

deposits, £50,247,217; cash in hand and money at call, £11,819,190; bond and stock investments, £18,877,819; loans and discounts, £37,385,062; total assets and liabilities, £69,357,828.

There is a joint-stock bank on the Isle of Guernsey with £50,000 paid-up capital, £45,000 reserve fund, £35,100 in circulating notes, £247,255 in deposits, £56,559 bond and stock investments, and £300,436 loans and discounts. It has a branch on the Island of Jersey. The Isle of Man Banking Company has seven branches, £30,000 paid-up capital, £44,000 reserve fund, £27,900 circulating notes in 1903, £914,586 deposits, £136,641 cash in hand and at call, £440,303 invested in securities, and £417,163 loans and discounts.

XXXV

THE GERMAN SYSTEM

When the Reichsbank of Germany was established on the foundation of the old Bank of Prussia, in 1875, the exclusive right to issue circulating notes in the future was granted to it, but there were thirty-two other banks which then had the privilege. It was provided that whenever they abandoned it the volume of circulation given up might be added to that of the Imperial Bank, and only seven of these banks of issue now remain, so distributed in different states of the empire that they find it desirable to retain the privilege for certain local advantages. Their total circulation is less than 200,000,000 marks or somewhat under $50,000,000, while that of the great institution at Berlin has latterly ranged in the vicinity of 1,200,000,000 to 1,500,000,000 marks. It has 310 branches in different parts of the empire, and though its notes are not legal tender, they circulate all over the country. They must be paid in gold on presentation at any branch. The other banks having notes outstanding are required to redeem them at their own offices, and at an agency at Berlin or Frankfort. They must accept each other's notes, but each can only pay out its own, except that the others may be paid to the banks issuing them, or in the cities where those banks are situated. This circumscribes their circulation.

The system of security for bank-notes is a modification of that of the Bank of England, but has more of the element of elasticity. There must be a reserve of "cash" equal to at least one-third of the circulation, imperial notes, of which there is an issue of 120,000,000 marks against the "War-chest" of gold coin kept at Spandau, and notes of other banks, as well as coin and bullion, being counted as "cash," and the rest must be covered at all times by discounted paper not having more than three months to run. Though the cash funds are spoken of as a "reserve," they are merely a part of the general resources and are not directly pledged to the redemption of the notes. The latter are not even a first lien upon assets, but are merely a part of the general liabilities. But as the Reichsbank, like the Bank of England, holds a large part of the reserves of the other banks, it usually keeps in its vaults coin and bullion to the amount of two or three times the proportion to circulation required to be held. There is a limit of 450,000,000 marks to the amount which it can issue under cover of discounted paper, and all excess over that must be covered by the cash reserve, but in times of emergency the limit may be exceeded on payment of a tax of 5 per cent per annum upon the excess while it is outstanding. A report is required four times a month on fixed dates, and whatever excess of circulation over the authorized limit and not covered by cash is then found to exist is taxed $\frac{5}{48}$ of 1 per cent. This gives a certain margin of circulation which will only be used in case of stress, but in general the volume is considerably below the legal limit.

The Reichsbank has the same method as the Bank of England for protecting its general reserve of coin and bullion, which is made important by its relation to the other banks and the consequent fact that it is the custodian of the gold fund of the country. It raises and lowers its discount rate according to the demands made upon its resources, but the law gives it an advantage which the

Bank of England does not have in requiring the other banks to conform to its rate when it is as high as 4 per cent, and not to cut more than $\frac{1}{4}$ of 1 per cent under it when it is lower. There are a considerable number of independent banks of deposit and discount in the empire besides those that retain the privilege of note issue, some of them important institutions, and though the transfer of credits in making payments by means of checks is more highly developed than in France, it is still much less so than in Great Britain and the United States. Bank-notes are largely used in business transactions, and as the lowest denomination is 100 marks, or nearly twenty-five dollars, gold and silver coin is ordinarily employed in smaller payments. The independent banks play an important part in promoting industrial enterprises, after the manner of our trust companies, and some of them have been accustomed to make advances on real-estate mortgages, as well as corporate securities.

The Reichsbank is a private institution under the control of the Government, as previously described, and acts as the fiscal agent of the empire in receiving and disbursing public money and in managing its financial obligations. On the renewal of its charter in 1899 its capital was fixed at 180,000,000 marks, and it was required to accumulate a surplus of one-third as much more. Until this was accomplished 20 per cent of the profits in excess of a dividend of $3\frac{1}{2}$ per cent was to be devoted to that purpose, 60 per cent was to be paid over to the state, and only 20 per cent was to go to the private shareholders. When the surplus had been fully made up, three-fourths of the profits above the regular dividend of $3\frac{1}{2}$ per cent was to go to the state and one-fourth to the shareholders. The revenue from this source and the service to the Government are the return required for the privileges granted, and for the use of the public funds.

With a capital of about $45,000,000 the Reichsbank has a circulation that usually fluctuates between $280,-000,000 and $450,000,000; it holds in coin and bullion something like $240,000,000, while its liabilities on current accounts run at not much more than $150,000,000, and its discounts and advances are usually about $240,000,-000. Its notes are largely used in making loans and enter into the cash resources of the other banks, while it has to hold itself in readiness to redeem them on demand. This indicates in only a very general way the banking facilities of Germany and the relation to them of the Imperial Bank.

Among the larger incorporated banks are the Deutsche Bank at Berlin, which has branches at Hamburg and Bremen and an office in London, a capital of about $40,-000,000; "reserve fund," or surplus, of $13,500,000; current accounts and deposits, $182,000,000; bills receivable, usually over $80,000,000; loans, $45,000,000; due on "current accounts," $75,000,000; securities, $25,-000,000; cash, $15,000,000. The Disconto-Gesellschaft has a capital of $37,500,000; surplus, $12,500,000; deposits on "current accounts," $60,000,000; "acceptances against credits and securities," $25,500,000; various forms of loans and investments something over $25,500,-000. These figures, derived from balance-sheets at the end of 1902, indicate in a general way the banking capacity of these institutions, which deal largely in public loans and participate in syndicate operations. The Dresdner Bank has a capital of $32,500,000, and total liabilities of about $143,500,000, in which deposits figure at $70,000,000, while in the list of assets are bills receivable, $28,500,000; loans, $25,000,000; securities, $10,-000,000; "current accounts," $55,500,000. There are several other banks of large resources, some of which loan on mortgage and do what we should call a "trust company business," and many "people's banks," and private bankers. A characteristic of German banking is a large use of coin and notes of the Reichsbank, and large capital and surplus in proportion to deposits and loans.

XXXVI

THE FRENCH SYSTEM

THE leading characteristic of the French system of banking is the comparatively small development of the use of credit for currency purposes in the form of checks upon deposits and the large use of bank-notes supplied exclusively by one central institution. The only restriction the Government puts upon the circulation of the Bank of France, whose notes are a legal tender so long as they are redeemed in specie, is a maximum limit to the issue, which has been repeatedly advanced until it stands at 5,000,000,000 francs. No security is required and no special reserve for either notes or other liabilities, though a very large amount of coin and bullion is held as a matter of business policy. While notes as small as five francs are authorized, few are issued below fifty francs, and coin is generally used for small payments. The circulation rests entirely upon the credit and assets of the bank, and is generally six or seven times the amount of deposits, and from three to four times that of loans and discounts, but the specie is kept at about 60 per cent of all liabilities, including the circulating notes. France has never formally abandoned the bimetallic standard, though under a suspension of the coinage of five-franc pieces by the Latin Union it has for many years practically maintained the gold standard. The bank holds the bulk of the legal-tender silver, except the subsidiary coin in common use, and this approximates one-half the amount of the gold in its vaults. It makes use of its legal right to pay silver, which it must take when offered, to protect its gold, instead of frequently changing its discount rate. It exercises its option to pay silver by charging a small premium on gold as the alternative, when it is considered desirable to prevent the withdrawal of the latter.

The result is the extensive use of bank-notes in all the transactions of business throughout the country. The bank maintains branches in all the departments of France, besides auxiliary offices, and under the Act of 1897 renewing the charter, the number of the former is to be increased, and the latter are to be multiplied until there shall be 377 "places bancables," instead of the 261 existing at that time. This serves to carry the circulation and general operations of the bank throughout the country, but there are many other institutions, some of considerable importance, engaged in a general banking business and using the legal-tender notes of the central institution as the bulk of their "cash." A characteristic of French banking is making a multitude of advances of small amount and discounting paper in sums ranging down to a few francs, as well as dealing with large financial transactions. A considerable part of the business of the Bank of France is rediscounting paper already taken by smaller institutions and bearing their indorsement, the profit of the latter being derived from a rate somewhat higher than the regular one.

While it receives the deposits of public money and acts as fiscal agent of the Government to a very important extent, the Bank of France is not a state institution, though the governor and two deputies are appointed by the president of the republic and are removable by the Minister of Finance. Their tenure of office is practically "during good behavior," and has in fact been very stable. The predecessor of the present governor held the office from

1882 to 1897. There is a general council consisting of fifteen regents and three auditors (*censeurs*) chosen by the two hundred stockholders having the largest number of shares, but three of the regents must be taken from the treasury disbursing agents. Each branch has a certain amount of capital allotted to it, half of which is held by local shareholders, and is in charge of a board of directors appointed by the governor from a list made up in some cases by local shareholders and sometimes by those of the bank in Paris. The manager is appointed by the Government and his subordinates are generally sent from Paris, so that the administration is thoroughly centralized. But more than half the discount of commercial paper is made at the branches, showing a thorough competition with local institutions where they exist. This tends to keep the circulation well distributed.

The capital of the Bank of France is 180,500,000 francs. The other statistics are variable, but the relation of the different items is interesting as indicating the general character of the business. The latest report at this writing shows on the side of assets about 2,500,000,000 francs in gold coin and bullion, 1,125,000,000 in silver, 400,000,000 in Government securities, and 1,000,000,000 discounts and advances, including advances to the Government. The liabilities are 4,250,000,000 francs in notes, 162,500,000 Government deposits, and 420,000,000 private deposits. The total of resources and liabilities is about 5,225,000,000 francs. A small tax is paid upon circulation according to volume outstanding, but the annual payment can not be less than 2,000,000 francs, or about $400,000.

The largest of the other banking institutions of France are the Crédit Lyonnais, the Société Générale, the Comptoir d'Escompte, and the Crédit Foncier. The last named does mainly a mortgage business. The others act largely as financial agents of corporations and do what we call a "trust company business," in addition to commercial banking. Le Comptoir d'Escompte was virtually wrecked some years ago in supporting a copper speculation syndicate. The smaller banks do a commercial business in competition with the branches of the Bank of France, using the notes of that institution as cash and relying on their redemption for actual reserves, but in ordinary times nobody thinks of demanding redemption. To a considerable extent their "bills" are rediscounted by the great institution at Paris, which is regarded as representing the financial power of the republic.

XXXVII

BANKS IN OTHER EUROPEAN COUNTRIES

Austria-Hungary has been for some years engaged in restoring specie payments on the basis of the gold standard and a new coinage system, with the crown as the unit in place of the old florin. The crown is equivalent to about twenty cents, and is exchanged for florins at the rate of two for one, though the original coinage value of the florin was over forty-eight cents. The Government treasury notes are being gradually withdrawn and are substantially at par. The Austro-Hungarian Bank has the exclusive right to issue circulating notes in the empire, but though it has 200 branches and agencies its general deposit business is comparatively small. Its capital is 90,000,000 florins. There is no definite limit to its circulation, but it is required to hold a reserve of at least 40 per cent in coin, and the uncovered issues can not exceed 200,000,000 florins without payment of a 5-per-cent tax upon the excess. There are fifty-seven joint-stock and private banks of deposit and discount, and the postal savings-banks may receive deposits of not less than 100 florins subject to check, but the system of using checks is not highly developed in the empire. The practise of keeping accounts in crowns is hardly established, and all reports still use florins as a term of account.

Italy still has Government notes in circulation and issues certificates on deposits of silver, but its currency consists chiefly of coin and the notes of the three banks of issue, the chief of which is the Bank of Italy, with a capital of 300,000,000 lire or $60,000,000. This institution was formed in 1893 by the fusion of the National Bank of the Kingdom of Italy, the National Bank of Tuscany, and the Tuscan Bank of Credit. An ultimate limit has been set to the circulation by gradual reduction to 630,000,000 lire for the Bank of Italy, 190,000,000 lire for the Bank of Naples, and 44,000,000 lire for the Bank of Sicily. This may be increased by covering the excess by deposits of coin and by advances to the Government. The notes are not a legal tender. The banks are under Government supervision, and the appointment of the director-general of the Bank of Italy is subject to the approval of the Government. The deposits of these banks on open accounts are comparatively small and checks are little used. There is a large number of private banks and small institutions, known as " people's banks," distributed over the kingdom, the latter making loans and advances on easy terms of security. The banking system of Italy is not highly developed, and has no other features of special interest. The latest statistics of the Bank of Italy show that it held during the summer of 1903 about $90,000,000 in specie and $14,000,000 in securities and credits, while its discounts and loans amounted to about $50,000,000. It had nearly $150,000,000 in circulating notes, which were at a discount, and only $7,000,000 in deposits on current account.

The Bank of Spain is the center of the backward banking system of that country. Its capital is $30,000,000, and it is authorized to issue notes to ten times that amount, and even that limit is exceeded. The latest statement at the time of this writing shows that, with about $100,000,000 in silver and $72,500,000 in gold, the bank had out over $325,000,000 in circulating notes, which were depreciated for lack of actual redemption. Its deposits were about $125,000,000, and its loans and discounts $210,-000. It has a monopoly of note issues, and other banks depend upon it for currency.

The Bank of Portugal, with a capital of $14,500,000, has also the exclusive privilege of issuing paper currency, and is the center of the banking system of the country. It is managed by a governor appointed by the royal treasury and ten directors chosen by the shareholders. Recent statistics are not at hand, but its circulation is usually from three to four times the capital and is secured by a specie reserve of about 20 per cent, while the current deposit accounts are relatively small and the loans less in amount than the capital and hardly one-fifth of the circulation. The latter is largely the currency in use and the cash of the small banks.

The National Bank of Greece has a capital of 20,000,-000 drachmæ, or about $4,000,000, and a surplus of half as much more, but its notes are three times as much as these two sums combined, and its deposits somewhat less than the circulation. It has struggled long with irredeemable paper and depreciated Government obligations. The Ionian Bank has its chief office in London. Its paid-up capital is $1,577,500, and it keeps about $1,000,000 in notes in circulation. Its cash holdings are about $375,-000, its ordinary deposits $2,750,000, and its loans, advances, etc., over $4,000,000. It holds about $575,000 in general securities, and its assets and liabilities are about $6,250,000.

The principal bank of Turkey is the Imperial Ottoman, which was established in 1863 by English and French capital. Though its authorized capital is $50,-000,000, only $25,000,000 has been paid up, but it has a surplus of $3,500,000. It maintains a number of branches and has a circulation of about $4,500,000, secured by a cash reserve which must be kept at one-third of the volume.

Its total "cash and money on call" at the time of the latest accessible report was about $15,500,000. It had deposits of over $35,500,000, and loans and advances somewhat below that figure. It held about $16,000,000 invested in securities. It is managed rather on the English plan, and is a comparatively "up-to-date" institution. Roumania, Bulgaria, and Servia have each its national bank of issue, which does a discount and deposit business, but they are slow in coming into line with modern methods.

The Bank of Belgium is the center of the banking system of that country. Its capital is $10,000,000, and its circulation about $25,000,000. It is required to hold specie to one-third of the amount of its notes and other demand liabilities. The notes are a legal tender so long as they are redeemed in coin on demand. The latest reports show deposits equal to hardly one-tenth of the circulation, the volume of which is greater than that of the loans and discounts.

The Bank of the Netherlands has a capital of $6,400,000, and issues notes without any fixed limit, except that it is required to hold a specie reserve of 40 per cent of notes and deposits. According to recent reports, its circulation was nearly $20,000,000 while its deposits were less than $100,000, and of $10,500,000 in specie more than $6,500,000 were silver. Its discounts and advances at the same time were less than $10,000,000. It is under close Government supervision, and is more a fiscal agent and currency-issuing institution than a commercial bank. The general banking of Holland is done largely by small banks and private banks using the notes of the Bank of Netherlands as the bulk of their cash.

The peculiar features of the Russian system is its one great bank of issue owned and controlled by the Government, which furnishes its entire capital and directs its business, using it largely as its own fiscal agent. Up to 600,000,000 rubles 50 per cent of its circulation must be covered by gold, and beyond that limit the full amount of the excess must be so covered. It also holds a large amount of Government securities in its issue department, and gold certificates are issued on deposits of the metal. It keeps current accounts with private persons and commercial establishments, but there are many joint-stock and private banks in the empire, and a number of mortgage banks that make loans on real-estate security. The Imperial Bank has a capital of $27,500,000, and the volume of its circulating notes in the summer of 1903 was nearly $290,000,000, but it held about $370,000,000 in gold and $45,000,000 in silver. It keeps a considerable account with the public treasury and has private deposits of $240,000,000 and more, its loans being considerably below that amount. Holding the specie reserve of the empire and issuing its paper currency is regarded as one of its most important functions. It is a source of considerable revenue to the Government apart from acting as its fiscal agent in negotiating loans and financing its industrial and railway enterprises.

Sweden, Norway, and Denmark constitute the Scandinavian Union, with the gold standard and the krone as the unit of value, worth about twenty-seven cents. The Bank of Sweden, which is owned by the state and managed by officers chosen by its legislature, issues legal-tender notes to the authorized limit of 30,000,000 crowns, and as much more as may be covered by a metallic reserve and credits in foreign banks, but it must in any case hold at least 10,000,000 crowns in gold. Over twenty other banks issue notes which are not legal tender and must be redeemed in gold on demand, like those of the state bank. The limit of the circulation is the amount of capital invested in securities, one-half their total credits and such metallic reserves as they may hold in excess of 10 per cent of their capital, which they must keep in gold in any case.

The Bank of Norway is the sole bank of issue in that country. The state is a shareholder, and the governing board of fifteen is chosen by the Storthing, the administration being placed in the hands of five directors at the central bank and three at each branch, also named by the legislative body. Its notes are a legal tender within the kingdom and are limited only by the requirement of a 50-per-cent reserve, one-third of which may consist of credits in foreign banks. Norway has a bank specially incorporated to make loans on real-estate mortgages, and in Sweden private banks do a business of the same kind. There are thirty provincial banks in Norway which maintain a central bank at Christiania to serve the purpose of a clearing-house.

The National Bank of Denmark issues notes which are a legal tender for debts and the only credit currency in the country. It must hold a metallic reserve of at least three-eighths of the outstanding volume, not less than 12,000,000 kroner (crowns) of which must be in gold coin. There are numerous other institutions doing a commercial banking business.

European banking systems have been extended into the colonies of European countries or imitated by them, and the banking of the rest of the world is done largely by companies chartered in Europe. The African Banking Corporation, the Bank of Egypt, the Bank of Calcutta, the Bank of Australasia, the Chartered Bank of India, Australia, and China, the Hongkong and Shanghai Banking Company, the British Bank of South America, and many others, are practically English concerns and are managed from London with officers and agencies elsewhere. There is nothing distinctive about their methods. The banks of Japan are modeled on the English system.

XXXVIII

THE OLD UNITED STATES BANKS

In the colonial days in America there was great scarcity of money, and the English colonies which afterward became the United States undertook to supply currency by emitting their own "bills of credit," often badly secured and soon discredited for lack of redemption on demand. It was to supply the same need that the first banks were established, the earliest being in Massachusetts in 1714. It was founded on land security, its notes being secured on real estate and other "imperishable commodities." It was under no legal regulation, was badly managed, and came to grief. There were other crude experiments in what was then called banking in the colonies before the Government of the United States was established, the chief purpose of which was to furnish "paper money," which was put out in the purchase of property, or in loans secured in a variety of risky ways. Banking in the modern sense was hardly known. After the Constitution was adopted banks were organized in the different States, and the first Secretary of the Treasury, Alexander Hamilton, promptly set about having a United States Bank founded, to be a "regulator of the currency," a depository for public money, and a fiscal agent of the Government. In accordance with his recommendations in a formal report a charter was granted by Congress in 1791 for a term of twenty years.

The first United States Bank had a capital of $10,000,000, divided into 25,000 shares, of which the Government was to hold one-fifth, paying for them in ten annual instalments, with interest at 6 per cent. The rest were open to general subscription and were to be paid for, one-fourth in specie and three-fourths in Government obligations, bearing interest at 6 per cent. The voting power was peculiarly distributed, one vote being cast for one share, one for the next two shares, and so on in arithmetical progression, but no shareholder could have more than thirty votes, and foreign holders, who came to be the majority, could not vote by proxy at all. The bank could not hold real estate, except for the accommodation of its business, nor lend on mortgage security. It could not become indebted to a greater amount than its capital, but deposits were not reckoned among its liabilities. This was the only limitation upon its issue of notes, but their volume was usually only about half its capital. It was subject to inspection by the head of the Treasury, and its notes were receivable for public dues so long as they were kept payable in coin. It was allowed to establish branches, and had one in each of the leading cities of the time, the main institution being in Philadelphia. It was indubitably successful, and when Secretary Gallatin first recommended a renewal of its charter in 1809 he reported that the Government had made a profit of $671,860 by the sale of its shares, besides receiving dividends at an average rate of 8$\frac{3}{8}$ per cent. At that time 18,000 of its shares were held abroad, but the exclusive power of management was in the hands of the holders of the 7,000 who resided in the United States. Its loans and discounts amounted to $15,000,000, its deposits to $8,500,000, it held $5,000,000 in specie, and its outstanding circulation was $4,500,000. The constitutionality of the charter had always been questioned, and there was a bitter political contest over its renewal, which resulted in defeat. The bank was put in liquidation, and shareholders received $434 for each $400 share.

The Government had then to rely for financial aid and service upon the State banks, and the War of 1812 brought trouble and disorder, including a suspension of specie payments, except in New England. An agitation began in 1814 for a charter for a new Bank of the United States. There was much debate in Congress, and a bill was passed which was vetoed by President Madison in January, 1815, but in December of the same year he suggested a national bank as a means of putting an end to the financial disorder. A somewhat different bill was passed, and approved by the President, April 10, 1816. The charter was to run twenty years, and differed little in its main features from that of the first bank, but the capital was to be $35,000,000, one-fifth subscribed by the Government, and paid either in cash or its own obligations bearing 5 per cent interest. Payment was made with a " stock note," which was not fully paid off until 1831. It was required that public money be deposited in the bank " unless the Secretary of the Treasury shall at any time otherwise order and direct." Private shares were to be paid for, one-fourth in coin and the rest either in coin or Government securities, and in three instalments, 30 per cent at the time of subscription, 35 per cent in six months, and 35 per cent in one year.

The early history of the bank was clouded by scandal, mainly on account of failure to collect the stock payments as provided and making loans on security of the shares even before they were fully paid for, but it was saved from disaster after a congressional investigation in 1819 by its new president, Langdon Cheves, of South Carolina, who borrowed $2,500,000 in Europe, reformed the management, and put the institution on a sound basis. During the next ten years it commanded general confidence and was regarded as a solid and valuable institution, both to the Government and to the country. Then began an attack upon it which brought it into politics and wrought its ruin.

Nicholas Biddle had succeeded Cheves as president of the bank in 1823, and in 1829 it had twenty-five branches and was in a prosperous condition. The trouble began with an attack upon the branch at Portsmouth, N. H., which was under the charge of Jeremiah Mason, who had been defeated for the United States Senate by Levi Woodbury. Mason gave offense by his strict management, and was charged with partiality toward the opponents of the administration of General Jackson. There was a political intrigue to secure his removal, but Biddle sustained him with injudicious zeal, and Jackson's "kitchen Cabinet" fomented the idea that the bank and its management were hostile to the administration and working against it and its friends. The result was that the President, in his message to Congress in December, 1829, to the surprise of everybody who was not in his personal confidence, declared that "both the constitutionality and the expediency of the law creating the bank are well questioned by a large portion of our fellow citizens; and it must be admitted by all that it has failed in the great end of establishing a uniform and sound currency." This precipitated a contest against the renewal of its charter, in which Henry Clay took a leading part as its defender, and it was made an issue in the campaign of 1832. The President had Congress against him, as well as a considerable part of his official Cabinet, including the Secretary of the Treasury, Louis McLane. A bill renewing the charter of the bank was passed in the summer of 1832 and promptly vetoed. Biddle again displayed his injudicious zeal in defending the bank and intensified the conflict for its destruction. At the election in November Jackson won an overwhelming triumph, and Clay, who was the candidate against him, was "snowed under."

There was no hope now of securing a renewal of the charter, which was to expire in 1836, but Jackson determined to administer another blow by causing the public deposits to be removed. Biddle furnished him a pretext by an act that savored of bad faith toward the Government. He had been notified by the Secretary of the Treasury that the Government wished to apply $9,000,000 of the $12,000,000 which it had on deposit to the payment of its outstanding 3-per-cent obligations, which were held largely abroad. The president of the bank agreed to take the necessary steps to get possession of the bulk of these, but sent one of the directors to London to make a private arrangement with the Barings for postponing payment of $5,000,000 of the debt, as money was worth 7 per cent to the bank, while the interest on the bonds was only 3 per cent. This became public and enraged the president.

As Secretary McLane was unwilling to direct the removal of the deposits to certain State banks, he was transferred to the State Department in the spring of 1833, and William J. Duane was put in his place. The House of Representatives declared by resolution that the deposits could be safely left in the bank, and Duane proved averse to obeying the behest of the President, who wrote him a long letter on the subject of ordering a removal of the deposits, or rather of making future deposits in State banks and gradually drawing out the funds in the national institution for disbursements. Duane was not a believer in the bank, but he regarded the right to the deposits as part of a contract with the Government and doubted the authority to place them elsewhere. He declined either to order their removal or to resign, and was himself removed, Attorney-General Roger B. Taney being put in his place and afterward rewarded for his subserviency by being appointed Chief Justice of the Supreme Court. The deposits were removed and the President was censured by a resolution of the Senate, which was afterward expunged from the record. After the expiration of its national charter the Second Bank of the United States obtained a new charter from the State of Pennsylvania, but it was badly managed and fell into disaster, and after two temporary suspensions it collapsed in 1841. The process of liquidation lasted fifteen years, and though its creditors were finally paid in full the shareholders recovered nothing.

The ruin of the United States Bank was wrought by politics in an exciting period and was started in a miserable local intrigue to discredit the management of an insignificant branch, when it was at the height of its prosperity and usefulness. In 1835 its loans amounted to $51,808,739, deposits to $11,756,905, circulation $17,339,797, and it held $15,708,369 in specie. For fifteen years it had been well managed and profitable, and had helped to maintain financial stability. Apart from its direct service to the Government, its business consisted chiefly in discounting commercial paper and dealing in domestic and foreign exchange. Depositing in State banks did not work well, and after their suspension in 1837 President Van Buren recommended that public funds be kept exclusively by public officers, and only specie be received for Government dues. A bill to establish what was called the "independent treasury system," after several defeats, was finally enacted in 1840, but when the Whigs came into power the next year the law was repealed. Two bills providing for a national bank were afterward successively passed and vetoed by President Tyler. The independent treasury system was finally established by an Act of Congress in 1846, and from that time down to the civil war the Government made its collections and disbursements in specie only and kept its funds in the custody of its own officers. As its receipts and expenditures were relatively small in those days, and any balance on hand was insignificant, as the Treasury had no connection with the banking system, which was wholly one of State banks, and as the Government supplied currency only by coining money, there was no disturbance of credit or of the money market occasioned by the financial operations of the Government.

XXXIX

THE OLD STATE BANKS

State banks were established even before the first United States Bank was chartered, and they increased in number and variety in the different States until the time of the civil war, gradually working through confusion toward a sound system, which might have become uniform even if it had not been ultimately nationalized. In their early history banking principles had not become settled and were imperfectly understood in this country. The business was for a long time in an experimental stage. The country was little developed, there was a lack of accumulated capital, and coin was scarce. The main purpose of banks was supposed to be to supply currency in the form of circulating notes to serve as "paper money," and security by constant redemption in specie was too little regarded.

The earliest and most rapid development was in Massachusetts, which was industrially and commercially the most advanced of the States. The Bank of Massachusetts was chartered in 1784, and was followed by several others in the course of the next twenty or thirty years, the first law to regulate banking being passed in 1805. Each institution was established under a special charter subject to very loose regulation, and the granting of charters was for some time the occasion for political favoritism. The principal restrictions applied to the payment of the capital in coin and the limitation of liabilities to twice the amount of capital. Among liabilities the notes but not deposits were included, and that was the sole restriction on the volume of notes, whose security was only the assets of the banks. They were generally issued in making loans on promissory notes or such commercial paper as was then used in making payments, and they constituted the bulk of deposits. Checks in the later form were not used, and deposits were not constituted by credits in the present way. Bank " bills " were mostly used in receipts and payments, in loans and deposits, and they formed the bulk of " current money." Little thought was given by people in general to their redemption in coin. Those of different banks circulated together, and not much attention was paid to the difference. It was hardly considered the proper thing, except among banks themselves, and not among all of those, to ask or expect their redemption unless coin was required for some specific purpose.

The only feature of New England banking deserving of particular attention is what is known as the Suffolk Bank system of redemption. After banks had considerably multiplied and had issued notes which wandered about at will, passing from hand to hand regardless of their origin and careless of redemption, Boston found itself flooded with " bills " which were not redeemable there and against which the local banks discriminated in receiving deposits, so as to drive them to a discount. This made them circulate all the more, and drove in the notes of the Boston banks, as the cheaper currency will always displace the dearer. To remedy this the Suffolk Bank devised a means of compelling the redemption of these notes at par in Boston. The country banks refusing to provide for this, the Suffolk adopted the plan of gathering up the notes and sending them home for redemption. Then it proposed that the different banks keep a permanent cash deposit with it and a sufficient margin above this to meet the current redemption of their notes, in return for which it would attend to the redeeming business. Six other Boston banks joined with it in putting the plan in operation, and in spite of some resistance the combination, which was dubbed the "Holy Alliance" and the "Six-tailed Bashaw," succeeded in establishing the scheme of redemption. It was begun in 1824 and lasted till the time of the civil war, though for a while there was another redemption agency in Boston, organized for the special purpose and called the Bank of Mutual Redemption. Under the Suffolk Bank system, and a law passed in 1845 providing that no bank should pay any notes but its own over its counter, constant redemption was kept up and all notes were maintained at par, each bank having its own legitimate proportion of the circulation.

The Suffolk Bank was practically a clearing-house for New England bank-notes. In 1857 there were 504 banks in its system, and it employed seventy clerks in assorting "bills" and attending to their despatch. Though the circulation of all the banks was less than $40,000,000, the redemptions amounted to $400,000,000 a year. The system was never established or regulated by law, and it was not until after the panic of 1857 that the banks of Massachusetts were required to hold a specie reserve of 15 per cent against both circulation and deposits. By that time most New England banks were on a fairly secure basis, and there had been a large development of commercial business in which they constituted an important agency.

State banking began in New York with the Bank of New York, which started without a charter in 1784, and in the establishment of which Alexander Hamilton was concerned. It was regarded as a Federalist institution, and Republicans could not get a bank charter from the powers that then were. The Bank of New York was regularly chartered with $900,000 capital and limited liability of stockholders in 1791. Soon after, certain Republicans secured a charter for the Manhattan Company to supply water to the city, but with the privilege of using its surplus funds in any "moneyed transactions" not inconsistent with the Constitution and laws. This was a shrewd device of Aaron Burr, under which the company established a bank that exists unto this day. Other bank charters were granted from time to time to those in political favor, and obtaining them became a source of scandal and corruption for many years. The banks were not materially different in the character and methods of business from those of New England, but in the course of time two methods of securing notes were adopted which were unknown there. One was known as the "safety-fund system," and the other was adopted under the free-banking law, which in 1838 put an end to the old plan of granting special charters and limiting them to those who could secure the favor of the Legislature.

The safety-fund system was started in 1829 by a legislative act recommended by Governor Van Buren. Under it each bank paid a tax of $\frac{1}{2}$ of 1 per cent of its paid-up capital into a "bank fund" in the custody of the Comptroller, until it should amount to 3 per cent of the capital, and whenever it was depleted it was to be restored to that limit by the same process. This fund was to secure not simply the redemption of the notes of failed banks, but the payment of all their liabilities, being resorted to at first only when their assets were exhausted. After some experience with failures and the depreciation of notes, it was provided that two-thirds of the fund might be used at once for the redemption of notes, the rest being reserved for the benefit of other creditors and the fund being restored from assets in the final settlement, so far as they would go. In 1842 the notes were made a first lien upon the entire fund, but it was still liable for other debts, and the Constitution of 1846 made note-holders preferred creditors in all cases of the failure of banks. The safety-fund plan of securing bank circulation was not worked out to perfection in New York before the civil war came to produce radical changes. Properly the fund should have been raised by a contribution proportioned to circulation instead of capital and used only to redeem the notes of failed banks. It is calculated that if that method had been pursued a tax of $\frac{1}{4}$ of 1 per cent on circulation would have been sufficient to provide for all failures that occurred while the system existed, making the notes of all the banks secure.

The political contest waged over the granting of bank charters and the alleged "monopoly" allowed to friends of the party in power led to an "antibank" movement, in which a faction of Democrats dubbed "Locofocos" finally joined with Whigs and gained control of the Legislature. This resulted in a "free-banking" law in 1838, under which anybody could set up a bank and issue notes on depositing securities with the State Comptroller. These might consist of stocks of the United States, or the State of New York, or those of any other State approved by the Comptroller, made equal to 5-per-cent stock of New York, or mortgages on real estate worth double the amount, exclusive of improvements, and bearing 6 per cent interest. Not more than one-half could consist of mortgage funds. These securities were to be sold to redeem notes in case of the bank's failure. After some failures in which the securities did not realize enough to pay the notes at par the bonds of other States were excluded, but failures continued in which the securities fell short of redeeming the notes. Too many banks were organized and the demand for bonds advanced their price and encouraged their issue. Afterward they depreciated, especially when failures occurred and it became necessary to sell them. The system worked badly, mainly on account of the uncertainty of the securities and bad management of the banks, but it was widely imitated in other States, where the effect was still worse. It, however, contained the germ of our present national system. Its principal fault, in case the securities were sound and proper management and supervision were exercised, was lack of elasticity in the issues, which could only be expanded by investing in additional bonds and contracted by withdrawing them.

Illinois and other Western States had a disastrous experience with "free banking," but there was a lack of proper regulation and of capable management. There was difficulty in securing the paying-up of capital in specie, even when it was required by law. In some cases a first instalment was paid, and then notes were issued in return for the "stock notes" of subscribers and taken back in payment for more shares. Sometimes the same specie was transferred from one new bank to another to answer the technical requirements of "paid-up capital." There was seldom much kept on hand, and in many cases there was no pretense of redeeming notes in coin. The securities required were often of the most dubious character, and there was much unscrupulous evasion of such requirements as the law laid down. There was a mania for issuing "paper money," and many banks did no legitimate business, but issued notes for the interest to be obtained in loaning them and to be collected on the bonds deposited for their security, which were in fact sometimes paid for with the notes they were intended to secure. The notes could generally be kept in circulation without any demand for redemption until failure came, when they depreciated and sometimes became worthless, the proceeds of the deposited securities never reaching them. In Michigan banks were established in the wilderness with practically no capital and little available security for notes, and these came to be known as "wild-cat banks." Hardly a Western or Southern State escaped the infection, and it even spread in Pennsylvania, though Philadelphia had one famous institution in the Bank of North America. It was first chartered by the Continental Congress in 1782, and afterward by the State, and exists yet under the national system. First and last it was fairly well managed and successful.

During the period of so much reckless "banking," the memory of which still clouds the old State system, there were even outside of the Eastern States some sound and prudently conducted banks. Several States established banks of their own that carried on a regular business and issued circulating notes, which the Supreme Court decided not to be State "bills of credit," within the meaning of the constitutional prohibition. Some were bad and some were good, as in the case of other banks, all depending upon the ability and integrity with which they were managed. This is as essential for financial success in public as in private business. Kentucky, Alabama, and Mississippi had State banks in the strict sense, which were ruined by politics, dishonesty, and lack of sound methods. The case of Mississippi was notorious on account of the capital being raised by an issue of bonds which were afterward repudiated, staining the credit of the State for many years. The "paper-money" lunacy and lack of faith in the necessity of redemption were at the bottom of most of these failures. But there were examples of successful public banks in South Carolina and Indiana. The former was established on various assets belonging to the State and was the depository of its funds and its fiscal agent. Its debts could not exceed twice its capital, and that was the only restriction on the issue of notes, but deposits were not included in liabilities. The bank had three branches and could make limited loans on mortgage security. It was, on the whole, safely managed and survived the civil war. Its assets were the only security for its liabilities, including circulating notes.

The Indiana experiment was equally successful and had some points of peculiar interest. The State owned half the capital and advanced the funds for five-eighths of the stock taken by private subscribers, issuing "bank notes" bearing 5 per cent interest to raise the money. These were negotiated in London and the proceeds advanced to shareholders on their notes, which were subsequently paid. The capital was $1,600,000, divided among the branches, afterward increased to thirteen, and the central institution only exercised supervision and control, the branches doing all the business and being managed by the private shareholders. The president and four directors were elected by the Legislature, and the stockholders of each branch chose one director. The capital was actually paid in silver, Spanish and Mexican coin, and each branch could issue notes equal to twice its capital, less its other debts. While the assets of the branches were independent they were jointly liable for obligations. The bank did a legitimate business and was successful and profitable, because it was ably and honestly managed. Indiana did not wholly escape the free banking craze; but after the Constitution of 1851 had authorized a general banking law and forbidden the State to own shares, the "Bank of the State of Indiana" was reorganized as a private incorporated institution and continued to be soundly managed under the presidency of Hugh McCulloch, who had previously had charge of the Fort Wayne branch.

The State Bank of Ohio was established on much the same plan, with branches and a central directing institution, but the State never had any ownership in it. It was fairly well conducted and successful. A prosperous banking business was conducted in Wisconsin under the charter of an insurance company by dint of capable management. It had no legal right to issue notes, but it made "certificates of deposit" serve the same purpose, and they circulated safely as money because it scrupulously redeemed them in coin on demand. But one of the best State banking systems of the antebellum days was that of Louisiana, which was established in 1842. Under the law then passed, all banks were required to hold a reserve of specie equal to one-third of their liabilities, including notes and deposits. The other two-thirds had to be covered by commercial paper having not more than ninety days to run. There was no other limit put upon circulation. No bank could pay out any notes but its own, and balances between banks had to be settled in specie every Saturday. There had to be at least fifty stockholders, none of whom should have less than thirty shares, and there were examinations by a board of State officers at intervals of not more than three months. It was a perfectly sound system and the banks were ably and honestly conducted. As a result they were prosperous, did not suspend in the panic of 1857, and continued in operation until the capture of New Orleans during the civil war.

Experience in banking under State laws was working toward a system when it was interrupted by that momentous event which wrought so many radical changes. It had, in fact, developed several systems, out of which one of enduring soundness might have been evolved. The issue of notes to be used as currency was, until near the end of the period, regarded as the chief function of banks, these to be used in making loans and effecting exchanges. In New England and some States West and South circulation was secured, like other liabilities, only by assets, sometimes being made a first lien and sometimes not. In a few cases a specified percentage of specie reserve was required. In Massachusetts a sound system of redemption was established by the cooperation of Boston banks and without the sanction of law. Boston became in effect a reserve city for New England and the Suffolk bank a clearing-house for notes. It was an exemplification of the "banking principle." New York adopted in a crude way the "currency principle" in requiring the deposit of securities and allowing no issue of notes above their officially estimated value. It also applied in a crude way the safety-fund principle as an additional safeguard for the redemption of the notes, or rather for the payment of all liabilities, of failed banks. The proceeds of the securities were assumed to afford the means of redeeming the notes.

The variety of laws and the loose and often unscrupulous practise under them in different States led to the issue broadcast of a vast variety of notes, which circulated promiscuously all over the country on account of the lack of proper provision for their return and redemption. Banks might discriminate in accepting them, but the people generally did not. As a result many counterfeit and spurious notes and those of insolvent banks floated about and vitiated the currency. "Counterfeit detectors" and "bank-note reporters," keeping track of the mixture of "paper money," were periodically published and became the *vade mecum* not only of banks but of mercantile houses. It is this confusion of good and bad, of weak and strong, this lack of a real system for the country, that has left such an unsavory memory of the old State banks, but there was nevertheless a plentiful sprinkling of sound institutions and the germs of good banking. Exactly the extent of the business at its culmination, say in 1861, is largely a matter of estimate, though in some States accurate records were kept. The number of banks has been set down as 1,600, the amount of capital stock about $430,000,000, loans and discounts approximately $700,000,000, and deposits $260,000,000. The aggregate circulation was in the neighborhood of $200,000,000, and this was something less than half the volume of currency in the country, the rest consisting of coin.

XL

THE CANADA BANKING SYSTEM

The development of banking in the States in the direction of what might have become a settled system was arrested by the civil war, but it was afterward taken up in Canada and carried to its logical conclusion. The early banks of the old provinces were conducted rather on the Scotch model, and were mainly devoted to the issue of notes to be advanced in loans and secured only by general resources. Their circulation always exceeded deposits. They were subject to little regulation and some of them were private partnerships. Charters were afterward granted with limitation of liability, and after 1837 only chartered banks could issue notes. After the union of Upper and Lower Canada in 1841 an attempt was made to impose the English "currency principle" of setting an authorized limit to circulation, to be protected to the full by Government securities, beyond which all issues were to be covered by coin or bullion, but it was not acceptable and the attempt was given up. In 1851 an experiment was made with a new banking system similar to that in New York, notes being secured by a deposit of public securities, but little progress was made with it and that was also abandoned. Shortly after the confederation of the provinces and the establishment of the Dominion Government the matter of a banking system was taken up in earnest, and an act was passed in 1870 which laid the foundation upon which the present system was built up and perfected.

Canada has always depended mainly upon bank-notes for its currency. While it is a gold-standard country it has no gold coinage of its own. United States gold coin is a legal tender at par, and so is British gold, with the pound sterling as a unit at $4.866. There is no silver coinage except for subsidiary purposes and its legal-tender limit is $10. There are no silver dollars, no coin certificates, and gold is little used except as a fund to maintain the redemption of notes. Dominion legal-tender notes redeemable in gold on demand are authorized to the amount of $20,000,000, which must be secured to the extent of 15 per cent by gold coin, and at least 25 per cent by gold coin and Dominion securities guaranteed by the Imperial Government, and the other 75 per cent by ordinary Dominion securities, all held in custody of the Minister of Finance. Beyond this limit notes may be issued on deposit of gold to the full amount, and the outstanding volume is nowadays about $27,000,000, the larger part being held in the reserves of banks.

The Canada banks have always had the privilege of maintaining branches, and there are now 34 banks with an aggregate of over 700 branches. No bank can be organized with a smaller capital than $500,000, of which $250,000 must be paid-up at the start. The Bank of Montreal has a capital of $13,379,240 and 48 branches. The Act of 1870 limited the note circulation to the amount of the paid-up and unimpaired capital, required each bank to receive its own notes at par at all its branches, and to redeem them in coin or Dominion notes at its main office. The old tax of 1 per cent on circulation was abolished, and the principle of double liability of stockholders for all obligations, including circulation and deposits, was adopted. Charters were to run for ten years, and in 1880 the law was amended so as to make circulating notes a first lien upon assets in case of failure.

In 1890 an additional security for the redemption of the notes of insolvent banks was provided. Each bank was required to keep on deposit with the Finance Minister an amount of cash equal to 5 per cent of its average circulation for the previous fiscal year. In case of suspension the notes of a bank draw 6 per cent interest until redeemed, and unless paid from the assets within two months the Finance Minister appoints a day for redeeming them from the redemption fund. Whatever is paid in excess of the bank's own contribution is to be recovered from the assets, and any deficiency in the 5-per-cent fund must be made up *pro rata* by the other banks, but the call can not exceed 1 per cent of circulation in any one year. Each bank is required to maintain agencies for the redemption of its notes at several designated cities in different parts of the Dominion. There is no prescribed percentage of reserve, but of whatever is kept 40 per cent must be in Dominion notes. The banks are required to make monthly returns of their condition.

The Canada system, then, is substantially one of banks with large capital and the privilege of establishing branches wherever it is convenient or profitable. This enables them to distribute their capital widely in the banking business and brings them into competition with each other throughout the country, with the result of practically uniform interest charges and the fullest accommodation at the lowest competitive rates. Their circulation is limited only by the amount of their paid-up capital and secured only by their assets and the double liability of stockholders. The amount of cash reserve is left to the judgment and discretion of responsible managers, and the redemption fund is an insurance for the redemption of the notes of failed banks, which keeps them from depreciating until paid. The system has worked successfully and been largely instrumental in the industrial and commercial development of the Dominion. Its greatest advantage is in furnishing an elastic currency that is entirely safe. The banks pay out only their own notes and send others home for redemption, redeeming their own on demand at the agencies. This keeps up a constant process of redemption and issue and the volume fluctuates with the requirements of business. It rarely exceeds 50 to 60 per cent of the bank capital, but it varies in different parts of the year by about 20 per cent, according to the demands of the season in marketing the annual products of the country. The general business of the banks in discounting commercial paper, making loans, buying and selling exchange, and transferring funds and credits is similar in all respects to that of the national banks of the United States. They can not pay dividends of more than 8 per cent until they have accumulated a surplus of 30 per cent of their paid-up capital.

The freedom with which notes are issued and retired obviates the necessity of transferring funds from one part of the Dominion to another according to local demands, such as are produced by the autumnal crop movements. The banks have suffered from no panic or crisis in thirty years and more.

The tendency in recent years has been toward a diminution in the number of banks and an increase in capital and in branches. During 1903 the Commercial Bank of Windsor was absorbed by the Union Bank of Halifax, and the Halifax Banking Company by the Canadian Bank of Commerce at Toronto. According to the latest record (August, 1903), there are now thirty-four central banks. These are distributed as follows: One on Prince Edward's Island, capital $324,856, reserve fund $222,737, deposits $996,627; three in New Brunswick, capital $880,000, reserve fund $960,000, deposits $3,986,052; six in Nova Scotia, of which four are in Halifax and two at Yarmouth —capital $7,596,714, of which $2,000,000 is of the Bank of Halifax and $2,828,130 of the Royal Bank of Canada in the same city—reserve fund $7,224,504, deposits $43,-178,647, of which nearly $20,000,000 were in the Bank of Halifax and over $14,500,000 in the Royal Bank of Canada; twelve in Quebec, of which six are in Montreal and three in the city of Quebec, the only other large one being at Sherbrooke, capital $39,500,878, reserve fund $20,801,-442, of which $13,609,000 of capital and $9,000,000 of reserve fund belonged to the Bank of Montreal, deposits $189,548,843, of which $87,507,048 were in the Bank of Montreal; Ontario twelve, of which nine are in Toronto, capital $28,791,018, reserve fund $18,913,528, $8,700,-000 of the former and $3,000,000 of the latter belonging to the Canada Bank of Commerce, deposits $189,548,843, of which $87,507,048 were in the Canada Bank of Commerce. The total capital of the thirty-four banks was $77,-093,466, total reserve fund, or surplus, $47,722,212, deposits $422,688,150. The few banks having capital of less than $500,000 were chartered before that limit was set by the banking law.

About $35,000,000 of the deposits were at agencies outside of Canada and only about $110,000,000 of those in Canada were subject to demand-checks, the rest requiring notice of draft. A small amount, about $6,500,000, were due to banks outside of the Dominion. There was due from foreign banks about $20,000,000, including those of the United Kingdom. Of the resources, about $360,000,-000 were in "current loans," and $40,000,000 in call loans in Canada and $58,000,000 in loans outside of Canada and something over $60,000,000 was held in securities owned. The clearings at the eleven Canada clearing-houses for the week ending August 22, 1903, aggregated $49,164,102, of which $20,474,348 were at Montreal and $14,315,692 at Toronto.

XLI

THE UNITED STATES NATIONAL SYSTEM

When the United States became involved in a war for the preservation of the Union in 1861 the Government had no relation with the banking system of the country, and the policy for many years had been to avoid all such relation. The Treasury received and disbursed all the revenues in coin and kept all its own deposits with sub-treasuries at leading cities in different parts of the country. There was consequently no effective financial agency to meet the new requirements, but the Government was soon compelled to resort to the strong banks of the Eastern cities for help. It began at once to meet the war expenses by means of loans instead of increasing revenues. The banks offered to advance $150,000,000 in gold on three-year notes bearing 7.30 per cent interest, to be reimbursed from the proceeds of bonds, and they also took the bulk of the bonds when issued and undertook to market them. Notes payable on demand at sub-treasuries and bearing no interest were issued for circulation, but were not made a legal tender for debts. The banks objected to this, because it not only threatened their own circulation but was a menace to continued specie redemption, which had, in fact, to be suspended at the end of 1861 by both the Government and the banks. Early in 1862 legal-tender notes were issued without interest and with no provision for redemption, and the result was a general disappearance of coin and depreciation of the whole paper currency.

Already there had been proposals for national banks, based mainly on the free banking system of New York, with a deposit of Government bonds for the security of circulation. Congress was reluctant to resort to this expedient, but came to it early in 1863 through a mixture of motives. One motive was to make a market for bonds and to secure their general distribution in this country in order to sustain the public credit at home, and another was to supply a safe and uniform currency, of which the need had greatly increased, and to diminish the necessity of issuing a large volume of irredeemable Government notes. It was also felt that it would facilitate an early return to specie payments. The first Bank Act, of February, 1863, was defective, and progress under it was unsatisfactory. It was superseded by the Act of June, 1864, which remedied some of the defects and made liberal provision for the conversion of the State banks to the national system.

This law provided for the organization of "associations for carrying on the business of banking" by any number of "natural persons" not less than five, to have succession for a term of twenty years. This has been continued by renewal of charters for a like period. It required a capital of at least $100,000, except that banks might be organized with not less than $50,000, with the approval of the Secretary of the Treasury, in places of not more than 6,000 inhabitants, and in places of 50,000 or more the capital could not be less than $200,000. Half had to be paid in before business could begin, and the rest in instalments of not less than 10 per cent monthly. No provision was made for more than one place of business, which precluded the establishment of branches. A deposit of Government bonds with the United States Treasurer was required of not less than one-third of the capital stock and in no case less than $30,000. Shareholders were made ratably liable for debts to the par value of their stock in addition to the amount of capital invested in their shares.

A bureau was established in the Treasury Department, under the charge of a Comptroller of the Currency, to attend to the execution of all laws relating to bank currency, and each bank was authorized to issue notes to the amount of 90 per cent of the market value of the bonds deposited, but not exceeding 90 per cent of the par value, subject to a tax of 1 per cent upon the aggregate circulation. Sixteen leading cities were designated as reserve cities, and in those the banks were required to keep in "lawful money" 25 per cent of their circulation and deposits. Elsewhere they must keep 15 per cent, but three-fifths of it might be deposited in reserve city banks. New York was made a central reserve city, and one-half the cash reserve of banks in the reserve cities might be kept on deposit there, thus centralizing the bulk of the reserves but weakening their volume, as the deposits in New York, against which it held 25 per cent, might include half the reserve of the reserve cities, which might include three-fifths of those of the "country banks." This made the actual reserve less in amount than the nominal aggregate for all the banks, and was calculated to put a heavy strain upon New York in time of stringency. In 1887 it was provided that any city of 200,000 inhabitants might be made a central reserve city, and Chicago and St. Louis were added to New York, but the latter continued to bear the brunt of the reserve requirements, as its banks still held large deposits of the reserve money of outside institutions.

All notes were to be prepared and printed in uniform style for each denomination, and issued from Washington with the Treasurer's signature and that of the Register of the Treasury, certifying to the deposit of the security, and blank places for those of the proper officers of each bank, to be affixed before the actual issue for circulation. They were not to be a legal tender for private debts, but the banks were required to receive those of each other, and they were receivable and payable by the Government except where coin was specifically prescribed by law, as in the case of customs receipts and payments on account of the public debt. The first act provided only that each bank should redeem its notes over its own counter, but the second required the establishment of redemption agencies in certain leading cities. In 1874 an entirely new system of redemption was provided, which put the whole responsibility upon the Government.

Each bank was then required to keep 5 per cent of the amount of its circulation in "lawful money" on deposit with the Treasurer of the United States. This was to constitute a fund for the redemption of its notes whenever they were sent to the Comptroller for the purpose, no matter by whom. The practical effect was little more than to keep the circulation clear of worn and mutilated currency, and the process was conducted mainly through the banks themselves. Provision was made for replacing redeemed notes on replenishment of the fund. This was in no sense a "safety fund." Each deposit belonged to the bank making it and was for the redemption of its own notes alone. It could be counted as part of its reserve, and after the amendment of 1874 the reserve was to be a percentage of deposits only, not including circulation. If a bank desired to withdraw a part of its circulation it had to make a special deposit of "lawful money" to the amount, and then the Government would take up the necessary proportion of notes and release the corresponding amount of bonds. An amendment in 1882 limited the aggregate amount of withdrawals to $3,000,000 a month, and provided that any bank retiring notes could not increase its issue again within six months. As to the redemption of the notes of insolvent banks, the Comptroller attended to that entirely. He was required to redeem all the notes at once on demand, and the proceeds of the bonds held as security would indemnify the Treasury. Besides, the Government had a first lien on assets and on the liability of shareholders.

At first a limit of $300,000,000 was put upon the volume of bank-notes to be issued, and one-half the amount was to be apportioned among the States according to representative population, but as preference was given to existing banks converted to the national system, the result was the concentration of the bulk of the circulation in the Eastern cities. Attempts were made to remedy the inequality, first by authorizing an additional $54,000,000 and assigning it to other parts of the country, and afterward by withdrawing $55,000,000 from Eastern banks and transferring it to those of other parts of the country, but this had only mitigated the difficulty slightly when the Specie Resumption Act of 1875 removed the limit upon circulation altogether. When the act of 1864 was passed, notes of State banks were still in circulation to the amount of nearly $180,000,000, and little more than $31,000,000 had been issued by national banks under the act of the previous year. On July 1, 1865, some months after the war was over, the State banks still had about $143,000,000 of their notes out, while the circulation of the national banks was a little over $146,000,000. Then Congress decided to give the latter a monopoly by imposing a tax of 10 per cent upon the circulating notes of all other banking institutions, and when this took effect, July 1, 1866, the issues of the national banks had risen to over $276,000,000, and those of State banks had fallen below $20,000,000. There were then 1,634 of the former in existence, many of which had been converted from State institutions. No bank could have a circulation exceeding the amount of its paid-up capital or more than 90 per cent of the bonds deposited as security, and after 1874 no bank withdrawing circulation could reduce the amount of bonds held by the Treasury below $50,000.

In 1882 the amount necessary to be held was reduced to one-fourth of the capital in the case of banks whose capital stock was $150,000 or less.

Under this system the amount of circulation fluctuated with the value of the bonds that had to be invested in as security and the rate of interest which the banks could derive from their possession, rather than with the demands of business for currency. When the resumption act was passed it was the purpose to withdraw the Government legal-tender notes to the extent of 80 per cent of bank-notes issued to take their place, until their volume was reduced to $300,000,000, but after the act took effect, in 1879, and the process of redemption was begun, a temporary stringency caused an outcry against their retirement and the process was arrested, leaving the volume at $346,681,016, where it has remained ever since. The maximum issued had been $442,424,007, in March, 1866. The banks aided materially in bringing about resumption, as they held a large part of the legal-tender notes and refrained from offering them to draw gold from the Treasury, but their own circulation did not expand. In fact, as the Government bonds appreciated in market value and were refunded at lower rates of interest it was severely contracted. The maximum was something over $362,000,000 in 1883, and it fell to little more than $173,000,000 in 1892. The fluctuation was affected by the demand for currency, but it was kept within inelastic limits by the bond-security requirements.

Considerable relief was afforded by the Gold Standard Act of 1900, which provided for refunding certain bonds in long-term issues at 2 per cent, permitted the banks to issue notes to the full par value of the bonds deposited, and reduced the interest on circulation from 1 to $\frac{1}{2}$ of 1 per cent when the new 2-per-cents were used for security. It also permitted banks to be organized with a capital as low as $25,000 in places of not more than 3,000 inhabitants.

These provisions led to the establishing of many new banks and the conversion of more of the existing State banks. The total number of national banks had increased in the summer of 1903 to over 5,000, with a paid-up capital exceeding $754,000,000 and a total circulation of over $413,000,000. Banks incorporated under State laws have continued to prosper, although they could not maintain circulating notes under the tax imposed by national authority, and they added materially to general banking facilities, especially in the more sparsely settled parts of the country, where capital was not plentiful. Many of these were organized with less capital than was required under the national system even after the passage of the Act of 1900. Laws regulating banks of deposit and discount differed in different States, but were generally closely assimilated to the National Banking Act, except that they made no provision for circulation. In New York, where the power to issue notes nominally continues, they are required to keep a reserve of 15 per cent of deposits, and in New York city those belonging to the Clearing-House Association must, under its regulations, keep 25 per cent.

Special safeguards are laid down in the national law for banking operations as well as for circulation. To enforce the requirement regarding the reserve against deposits, it is provided that when that of any bank falls below the prescribed percentage it shall not increase its liabilities by making new loans or discounts, or otherwise than by the purchase of sight-bills of exchange, and shall make no dividend until the reserve has been fully restored. The Comptroller may notify any bank whose reserve is insufficient that it must be made good, and if it is not done within thirty days he may, with the concurrence of the Secretary of the Treasury, appoint a receiver to wind up its business.

Banks are prohibited from loaning more than 10 per cent of the amount of their capital to one person and from certifying checks for any amount in excess of the balance the drawer has on actual deposit. They are subject to examination under authority of the Comptroller, and must make returns to him in a prescribed form, and he reports upon their condition as to capital, resources, loans, deposits, circulation, etc., not less than five times a year. The old policy of not making Government deposits in banks was abandoned when the national system was first established, and authority was given for depositing any revenues except customs receipts in banks to be designated as public depositories by the Secretary of the Treasury, who must require security for safe-keeping and repayment by the deposit of Government bonds "and otherwise" to his own satisfaction. Authority was also given for using the banks as fiscal agents of the Government, and in this capacity they have been especially useful in placing loans and in refunding operations.

The system has proved an exceptionally safe and stable one for the general purposes of banking, though there is a point of weakness in the multitude of small banks scattered over the country in place of strong institutions in commercial centers and cities of importance, with branches in smaller places. The latter would be able to employ their resources more widely and furnish capital more readily wherever it was needed, and the result would be greater uniformity in the rates for loans as well as greater security for all concerned. Their currency is uniform and safe, and it circulates all over the country and is accepted everywhere regardless of its particular source, because the Government is responsible for its redemption, but it lacks the essential quality of elasticity, on account of the bond security required. If they rested upon the credit of the banks themselves and were secured by a first lien upon assets and the liability of shareholders, with the addition of a specified cash reserve, if deemed requisite, and with a safety fund for the redemption of those of insolvent institutions; and if each bank was made responsible for the redemption of its own notes, there would still be uniformity and safety with the desirable quality of elasticity. The volume would adapt itself constantly to the requirements of business under the influence of interest rates, varying with supply and demand, and there would not be the same necessity as now for continually transferring funds from one part of the country to another in response to local demands. The lack of the capacity to expand and contract readily, to fluctuate with the transactions of commerce, results in the constant flow of money to the reserve cities when it is not needed elsewhere, and the draft from them when the need returns, with little reference to the actual demand at the centers, and there is no easy means of getting rid of a redundancy or supplying a deficiency. The currents of this ebb and flow center upon New York, stimulating speculation at one time and inducing stringency at another. When the demand comes for the annual crop movement the drain is severe and has a serious effect upon the money market if there is a normal demand for funds at the financial center for business uses. The lack of the power of the banks to respond with a legitimate use of their credit in the issue of notes is aggravated by the Treasury operations in drawing currency from the regular channels by collections and returning it by payments in a spasmodic fashion.

XLII

TENDENCIES OF AMERICAN BANKING

WHILE the theory and the general principles of banking are the same everywhere, and varying methods are only different ways of attaining results that are essentially the same, the system of any particular country is the outgrowth of its own history and circumstances, and becomes intrenched in traditions that it is not easy to change. A sudden transformation of a system, however desirable the result might be when once established, is practically impossible, unless it is caused by a sudden and exceptional stress of circumstances.

The European systems, for the most part, had their origin in the needs of governments for a financial agency to assist them in raising loans and handling revenues, and to supplement monetary resources with their credit. Their private privileges were a compensation for public services. The usual result was one great central institution in close relation with the Government, with the right to establish branches and local agencies, and all other banking concerns were made in a sense subordinate and subsidiary to this. The tendency has been to limit the right to issue circulating notes to the large central banks, and to make of these a part —sometimes the main part—of the national currency. This confuses them with money, whereas they belong in the category of credit.

When this country formed a government of its own, it began, under the influence of English traditions, by establishing a great National Bank, without interfering with the right of States to have banking systems of their own. The result, as we have seen, was, after two notable experiments, the survival of the State systems alone, under which there were in a few cases central banks associated with State governments and maintaining branches, but for the most part a large number of independent local institutions brought gradually under the regulation of law, which tended toward uniformity, and having no association with each other except what they voluntarily formed to serve their own purposes.

When the events of the civil war led to the establishment of a new national system, there was no reversion to the idea of a great central institution with branches and agencies, but the adoption of the State plan of independent banks of moderate capital scattered all over the country. Constitutional obstacles as well as a strong sentiment for the integrity of the rights of States within their own jurisdiction prevented any superseding of the separate State systems, except in the matter of issuing circulating notes to form a part of the common currency of the country. For the sake of uniformity, safety, and a concentrated supervision and control the notes of State banks were taxed out of existence.

Circumstances rather than reason or sound policy dictated the system of bank currency that was then adopted, and that has become intrenched in the traditions and prejudices of a generation that has seen a remarkable financial development. Now there is a strong tendency to pull away from it, which is powerfully resisted. Notwithstanding the great number and the individual independence of our national banks, the principle upon which their circulation is based is substantially that of the Bank of England. It is not a bank currency in the true sense of the term, but a Government currency; not a means of employing bank credit to meet the requirements of business, but a means of applying Government authority to supply "money" to the country, for which the mint and the treasury, and not the banks, are the proper agency.

A certain portion of the circulation of the Bank of England rests upon Government and "other" securities, and that is an unchanging portion except as it is added to by the surrender of circulation by the other banks. The rest is based upon a full equivalent in coin. It can only be increased by a deposit of coin or bullion to the full amount, as it is diminished only by redemption in coin, which is merely the payment of the demand notes. In the United States the notes must be secured by deposit with the public Treasury, not of coin in any part, but of Government bonds to the full amount at their par value. The volume can only be increased by buying and depositing more bonds, and can be reduced only by the deposit of money to redeem the notes and the withdrawal of bonds. With the necessity of investing so much capital in bonds at a premium, getting 2 per cent from these, and paying an annual tax of $\frac{1}{2}$ of 1 per cent on circulation, there is hardly greater facility in adapting the currency to the needs of the country than there would be in having bullion coined at the mint, if the proceeds were used directly as the basis of circulation.

There is little advantage in this kind of Government currency over that which consists of coin and coin certificates issued directly by the Government through the mint and public Treasury. If the four hundred millions of bank notes were replaced with these, and the Government bonds deposited for their security were converted into active capital, the banks would be as well off and the currency would be substantially as flexible and adjustable as it is at present. It could be increased by having gold coined and depositing the coin for certificates, as additional notes of the Bank of

England are obtained, and it could be reduced by redemption as now.

A true bank currency consists of the notes of banks, resting upon their credit and secured by their resources, each bank being required to pay its own notes in standard coin on demand and to send those of other banks home to be paid like their checks, instead of using them as cash. This was the form with the safest and soundest of the old State banks. It is the form adopted and adapted from them by the banks of Canada. The tendency of sentiment in this country is likely to be more and more in favor of making Government currency the issue of the Government alone and based wholly upon coin, and gradually to permit the banks to have a currency confined to the circle of their operations and based upon their credit, with all necessary safeguards for holding them to their obligation to redeem these like other demand liabilities, and special insurance for their prompt payment in case of insolvency. Either this or no bank circulation is the logical alternative. Bank of England notes are virtually gold certificates. Bank of France notes and the notes of Canada banks are a credit currency, making the "money supply" constantly vary with the requirements of business for a medium to effect exchanges, in which credit plays such a prominent and varied part.

Another weakness of the American system which there is an irresistible tendency to correct arises from the multiplicity of small banks, due to the lack of authority for any national bank to maintain branches. There is economy and strength, especially in banking, in large capital and concentrated skill and responsibility in management. It tends to a distribution of resources from centers where they accumulate and their application over a wider field at competitive rates, making the cost of banking credit cheaper and more uniform and the credit itself safer. In the absence of the privilege of establishing branches and local agencies the present tendency is for banks in the large cities to diminish in number and increase in capital and resources, and to acquire control over other banks through which they must of necessity do much of their business. Banks can not, as national corporations, own the stock of other banks, but there is nothing to prevent the same set of capitalists from controlling a large bank in New York or any other important financial center, or more than one, and at the same time controlling small banks wherever they may find it convenient or advantageous. There is a strong tendency to consolidation, combination, and extended control in banking, as in other business requiring the use of large capital, and it is likely to go on with only a part of the advantages of "branch-banking" and some disadvantages which that does not involve. But with the requirement of fully paid-up capital, a constant surplus, Government supervision, full reports of condition, and frequent examinations, there is little danger of abuses of power and none of monopoly. In nothing is competition so free and so incapable of injurious restraint as in money and credit. Whoever has it can use it and can let others use it for a consideration.

The tendency of banks to use their resources for the promotion of speculative enterprises, and to share in their risks, is one of the dangers of a system where there are so many of them competing with each other under independent management. It is the business of banks to make loans and advances upon assured credit and sound security; to serve the legitimate ends of industry and trade and the financial operations by which they are promoted and sustained, and not to have any part of their resources involved in risky ventures or be prostituted to the schemes of capitalists who gain control over their management. It is an era of combination and association, and there is a disposition among powerful capitalists to unite in directing great interests and making them work together; but banking should stand apart as the common agency of all, to be used conservatively and impartially for the benefit of industry, trade, commerce, and finance, of which it is the necessary, and should be the faithful and trustworthy, servant.

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