

STANDARD BANKING



American Institute of Banking

Section American Bankers Association

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PREFACE

"STANDARD BANKING" aims to combine banking principles and banking practices. Some of the material used in previous publications of the American Institute of Banking - material that has stood the test of time and experience—has been utilized in revised form in this work. To such material much original matter has been added. The result of such combination is a new text-book adapted alike to class and correspondence instruction. The work of preparing "Standard Banking" has been done jointly by E. W. Kemmerer. Professor of Economics and Finance in Princeton University; George E. Allen, Educational Director of the American Institute of Banking, and other officers of the Institute. Other professional educators and practical bankers have participated in the work of composition and revision. Among those to whom particular credit is due are: C. W. Allendoerfer, Vice-President of the First National Bank of Kansas City; Robert H. Bean, Executive Secretary of the American Acceptance Council; Godfrey F. Berger, Bank Examiner in the New York State Banking Department; James B. Birmingham, Assistant Cashier of the National City Bank of New York; Edward M. Earle, Department of Extension Teaching of Columbia University; Fred W. Ellsworth, Vice-President of the Hibernia Bank and Trust Company of New Orleans; William Feick, Assistant Cashier of the Irving National Bank of New York; B. L. Gill, Vice-President of the Seaboard National Bank of New York; George A. Kinney, Trust Officer of the Chase National Bank of New York; Ernest T. Love, Assistant Cashier of the Chase National Bank of New York; Fred L. O'Hair, Assistant Cashier of the National City Bank of New York; Thomas B. Paton, General Counsel of the American Bankers Association; Gardner B. Perry, Vice-President of the American Trading Company of New York; James Rattray, Assistant Vice-President of the Guaranty Company of New York; O. M. W. Sprague, Professor of Banking and Finance in Harvard University; and Wilbert Ward, Assistant Cashier of the National City Bank of New York.

INSTITUTE PLATFORM

R ESOLUTION adopted at the New Orleans Convention of the American Transition of the American Institute of Banking, October 9, 1919: "Ours is an educational association organized for the benefit of the banking fraternity of the country and within our membership may be found on an equal basis both employees and employers; and in full appreciation of the opportunities which our country and its established institutions afford, and especially in appreciation of the fact that the profession of banking affords to its diligent and loyal members especial opportunities for promotion to official and managerial positions, and that as a result of the establishment and maintenance of the merit system in most banks a large number of Institute members have through individual application achieved marked professional success, we at all times and under all circumstances stand for the merit system and for the paying of salaries according to the value of the service rendered.

"We believe in the equitable cooperation of employees and employers and are opposed to all attempts to limit individual initiative and curtail production, and, insofar as our profession is concerned, are unalterably opposed to any plan purporting to promote the material welfare of our members, individually or collectively, on any other basis than that of efficiency, loyalty and unadulterated Americanism."

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WHO IS A BANKER?

A SUCCESSFUL BANKER is composed of about one-fifth accountant, two-fifths lawyer, three-fifths political economist, and four-fifths gentleman and scholar—total ten-fifths—double size. Any smaller person may be a pawnbroker or a promoter, but not a banker.—George E. Allen.

Standard Banking

CHAPTER I Money

ONEY is a comparatively modern device. Our earliest record of coined money dates back to only the seventh century before Christ. Goods were exchanged long before money existed. The exchange of one commodity for another when neither commodity is money is called barter. For thousands of years of the world's history barter was the usual method of exchange. The savage exchanged a stone axe for a shell necklace, or a few arrow-heads for a fox skin. Barter is still practiced on a large scale in the more backward parts of the world, as in Central Africa, the interior communities of China and many parts of Russia. In our own country it is not unknown. Farmers still exchange eggs and butter for groceries, and often give the local miller grain for grinding their wheat into flour. Automobiles are exchanged. Domestic servants receive a substantial percentage of their compensation in the form of board and lodging.

LIMITATIONS OF BARTER.—As the population grows and the number of goods to be exchanged increases, barter tends to break down. The chief trouble with it is what is known as "lack of double coincidence" in desires. One savage, for ex-

ample, may have a fox skin that he wishes to exchange for arrow heads; the second savage, however, who has a good supply of arrow heads, may not want a fox skin at all, but may want a shell necklace, so that an exchange is impossible. For effective barter not only must A want what B has to give, but B must want what A has to give; and the wants must be for such quantities of the respective articles as to make an exchange possible and desirable for both parties. Under a barter economy some kinds of articles that are in widespread demand are more easily exchanged than others. Arrow heads and ornamental shells, for example, may be in great demand among a primitive hunting people, cattle and sheep among a pastoral people, and grain among an agricultural people. each case the man who has a supply of the most highly desired article is likely to find no difficulty in exchanging it for the other things he wants. It is the man who has the article that very few people want and who wants an article that very few people have, who has the most difficulty in a barter regime. Often his only way of getting the desired article is by a roundabout series of exchanges. If he wants to exchange article A for article F, but finds that none of the people who have F care anything about A, he may be able to exchange A for B, an article of limited popularity, but still more widely desired than A, and then be able to exchange B for C, an article of somewhat greater popularity, and then C for D, an article of great popularity - perhaps ornamental beads - and then he will have no difficulty in finding some possessor of article F that will be glad to part with it for D. Such roundabout exchanges are common in primitive communities.

MEANING OF MONEY.—In this way people come to understand that, from the standpoint of getting what one wants by barter, it is a wise policy to keep a part of one's wealth always in the form of one of these widely desired and highly exchangeable articles, and this may even be true of people who have no desire to use for their direct needs any more of the particular article. A hunter, for example, may have all the arrow heads he needs for his own hunting and yet be glad to accumulate more for purposes of exchange, after he learns that arrow heads are highly exchangeable. In this way articles of a high degree of exchangeability come to serve as common media of exchange. People receive them for the most part, not with the idea of using them directly, but of passing them on to others in exchange for what they want. This was true of wampum beads among some of the North American Indians, of furs in the Hudson Bay Colony, of arrow heads in parts of Mexico, and of cattle among the patriarchs of the Old Testament and in Homeric times. It was true also of tobacco in Colonial Virginia. When one of these articles reaches such a high degree of exchangeability as to become a common medium of exchange, it becomes money. Following the lead of Francis A. Walker, therefore, we may say that "money is as money does," and that the first and most fundamental thing that money does, the thing that constitutes it money, is to serve

as a common and generally accepted medium of exchange for goods and services, a medium that is readily accepted without reference to the character or credit of the person who offers it. Other functions of money, all of which are derived from this primary function, are (1) common measure of value, (2) standard of deferred payments, (3) storehouse of value, and (4) bank reserves.

COMMON MEASURE OF VALUE. - We measure length in terms of a unit of length that we call the foot or the meter; we measure weight in terms of a unit of weight that we call the pound or the kilogram, and we measure value in terms of a unit of value that we call in the United States the dollar. We know how much the dollar is worth because in using dollars as media of exchange we are continually comparing dollars with the values of all sorts of goods which we are buying or selling. We are testing out its value every day in the process of exchange. Every time we buy an article for money we measure the value of the article by the money given; so also does the seller of the article. In serving as a common medium of exchange, therefore, money becomes a common measure of value. We measure and express the values of all commodities in terms of the value of the dollar.

STANDARD OF DEFERRED PAYMENTS.—Deferred payments are payments that are postponed. A purchase or sale is a two-sided proposition. If the seller receives his money at the time he delivers the goods, we call the transaction a cash transaction;

if, on the other hand, he delivers the goods today and does not receive payment on delivery, a debt is created and this debt is expressed in terms of money. The payment is deferred and the money becomes the standard by which the amount of the debt in the meantime is measured and expressed. While debts might be measured in bushels of wheat or tons of coal or any other standard commodity, we know as a matter of fact that they nearly always are measured in money. This is true because money, by reason of its great exchangeability, is the thing which it is the safest for creditors and debtors to commit themselves to as a means of future payment. The importance of this standard of deferred payment function will be appreciated if we consider the hundreds of billions of dollars worth of debts in the world today-book accounts, bonds and mortgages, insurance contracts, bank deposits, bank loans, etc.

STOREHOUSE OF VALUE.—Another function of money is that of serving as a store house of value. By this is meant that people keep a part of their wealth—the miser, most of his—in the form of money. Sometimes money is hoarded for long periods; more often it is kept only short periods and then passed on in exchange for goods. The average length of time that most of us keep a piece of money in our pockets now-a-days is very short; but to the extent that we do hold wealth in the form of actual money, whether it be for a week or for ten years, we are using it as a storehouse of value. We use money as a storehouse of value because of its high degree

of exchangeability, because, of all goods, money is the most marketable.

BANK RESERVES .- The last function of money to be considered is that of serving as bank reserves. This is one of the most important functions of money, but it is one that can better be understood after we have studied the functions of a bank. Bank deposits and bank notes are usually payable on demand in legal tender money, and banks must therefore always have a certain amount of such money available to meet the demands of their creditors. The cash held for this purpose is called "bank reserve" in the United States, and "cash balance" in England and many other countries. Naturally a bank holds its reserve in the commodity that is used as a common medium of exchange, namely, money, because the public wishes its deposits to be paid in the most highly exchangeable commodity possible.

VALUE OF MONEY.—By value of money is meant the market value of the actual monetary unit (not necessarily the legal unit) as expressed in its purchasing power over goods and services. The value of the dollar is expressed in what the dollar will buy. If the prices of everything should suddenly be doubled, the value of the dollar, namely, its purchasing power, would be cut in half; and if the prices of everything should suddenly be cut in half, the value of the dollar would be doubled. It is for the purpose of buying goods and services that we want dollars, and the value of the dollar varies, therefore, in proportion to amount of goods and services it will buy.

DEMAND AND SUPPLY. - The value of money, like the value of every other commodity-for money is only a commodity of a particular kind-is the resultant of the interaction of the forces of demand and supply. In the days when cowrie shells or wampum were used as money among the Indians, the number of shells required to buy a bear skin, a tomahawk, or a dozen arrow heads depended upon the number of bear skins, tomahawks and arrow heads there were available for exchange, and equally upon the number of cowrie shells there were available. At times, when through the discoveries of some fortunate persons a large additional supply of cowrie shells was thrown on the market, prices in terms of cowrie shells would rise; on the other hand, when the supply of cowrie shells dwindled because few new ones were being found and the old ones were being lost or broken, paid out to other tribes, or diverted to uses as ornaments, prices of goods in terms of cowrie shells would fall. If the supply of cowrie shells remained unchanged, while the number of skins, tomahawks, arrow heads, etc., that the members of the tribe had to buy and sell, increased, prices fell, because at the old prices there were not enough cowrie shells to go around in effecting the exchanges of an increased number of goods.

UNIVERSALITY OF DEMAND. — Cowrie shells were first used only as ornaments, namely for necklaces, bracelets, and bangles. The universal demand for ornaments among the Indian tribes using them made the cowrie shell a highly exchangeable

commodity. In time, therefore, the shells became a common medium of exchange, and therefore money in trade among the Indians themselves and between the Indians and the colonists. Their value was created by two sorts of demand; the demand for them as ornaments, and the demand for them as media of exchange. With either demand removed, their value would have been less. Had the supply of these shells been strictly limited, and had their use as ornaments fallen out of favor, the money demand alone would have been sufficient to give them a value, and that value would have been the result of the interaction of the forces of demand for shell money and the supply of shell money. A sudden doubling of the supply of shells would have greatly enhanced prices and likewise would a wholesale destruction, through forest fire or otherwise, of the supply of marketable goods, assuming the supply of shell money to be unchanged.

MARKET PRICE.—If we eliminate exchanges by barter, and assume that all exchanges were effected by the payment of shell money by the buyer to the seller, it will be seen that if an increasing number of Indians who had shell money wanted tomahawks, their desire for tomahawks, coupled with the facts that they had the wherewithal to pay for them and the willingness to pay, would have put up the prices of tomahawks. The diversion of this effective demand from other things to tomahawks would have tended to depress the price of other things. When an article is sold for cash, the article passes from seller to buyer and the money representing the price

passes from buyer to seller. The price is the number of money units (in this case cowrie shells) that is given for the article, and a real market price does not exist until the exchange is made, for the proof of the price is in the exchange. If the would-be seller of a tomahawk asks fifty shells for it, and the would-be buyer offers thirty, there is no method of determining what the market price is. These are merely "bid" and "asked" prices. When and if, however, they agree on forty-two shells, and a sale for that amount is effected, that price emerges as the real market price of a tomahawk. The more shells the would-be buyers of tomahawks have and the fewer tomahawks there are on the market, the higher the subjective prices the would-be buyers are willing to bid, the higher the subjective prices the would-be sellers will ask, and the higher will be the resulting market price.

RATE OF TURNOVER.—In this connection it should be noticed that the amount of exchange work a given number of cowrie shells can perform depends upon the number of times the shells exchange hands, or upon what is known as their "rate of turnover." A hundred shells exchanging hands for goods twice in a year and lying idle the rest of the time do 200 units of money work in a year, while another hundred that exchange hands for goods ten times in a year do 1000 units of money work, and therefore are five times as efficient as the first hundred. The effective shell money supply is obviously increased as truly by increasing the average rate of turnover, with the quantity of shells remaining constant, as it is by

increasing the number of shells, with the average rate of turnover remaining constant. It is only the shells that are passed from hand to hand as money that directly affect prices. Shells used continually as ornaments have no effect on prices, except as their purchase and sale as commodities give rise to a demand for shell money for making payments. If, however, prices should fall and shells as money should become more valuable than some of the shells used as ornaments, ornaments would be broken up by the Indians in order that they might get the shells for money. These shells would then influence prices because they would increase the supply of shell money. The opposite is likewise true. An increased demand for shell ornaments might lead to the transfer of some shells from money uses to ornament uses and thereby reduce the supply of shell money, increase the value of the shell monetary unit, and reduce prices.

QUANTITY THEORY OF MONEY. — The average price of goods sold is equivalent to the amount of money in circulation multiplied by its average rate of turnover and divided by the number of commodity units exchanged. While some prices at any particular time are rising and some are falling, the general price level obviously cannot change except through changes in one or more of the three factors: (1) Money in circulation; (2) rate of monetary turnover, and (3) number of commodity units sold. Here we have the law of demand and supply in its simplest form applied to a regime in which only one kind of money circulates and in which credit is un-

known. This expression of the law of demand and supply in its application to money is the simplest formulation of what is known as the "quantity theory of money."

OUANTITY THEORY AND GOLD COIN .-So far we have been assuming that all the money in circulation consisted entirely of cowrie shells. principle would not be changed by assuming that the money, instead of consisting of beautiful shells found in the country in limited quantities and useful also as ornaments, consisted of small pieces of gold. We assume that the gold instead of cowrie shells was found in the territory of this tribe, that it was in wide demand for ornaments because of its beauty, and that because of the universal demand for it for ornaments. it became the most highly exchangeable commodity among the members of the tribe, and therefore became money. Assume that, to simplify exchanges by means of this money through avoiding the necessity of weighing the gold at each transaction, and of testing its purity, the chief of the tribe made provisions for putting up the gold in small round discs of uniform size weighing 10 grains each, and bearing his stamp as a guarantee that they were of full weight and contained pure gold. Assume that anyone who had gold could take it to the chief and have it cut into discs and stamped, without charge, and that there was nothing to prevent the use of these discs for bracelets, necklaces, etc., or to prevent their being melted down for other purposes whenever the owner so desired. The conditions then would be practically

identical with those assumed for the isolated Indian tribe whose money was exclusively cowrie shells, but we would have a tribe with a gold standard currency, free coinage and coined money. The law of demand and supply would apply here just as truly as it did in the case of the cowrie shell money.

STANDARD COMMODITY MONEY .-- For convenience let us call this ten grain gold disc a dollar (although its gold value would be only about \$0.43 of United States money). Obviously the value of 10 grains of pure gold and the value of a gold dollar would be practically the same thing under such conditions, just as the value of 10 cowrie shells as money and of 10 cowrie shells as ornaments would be the same thing, because, in both instances, they would be interchangeable without loss. Double the amount of gold, other things equal, and its value would go down, prices rising; cut the amount of gold in half, other things equal, and its value would rise, prices falling. As long as gold as money and gold as bullion were interconvertible without expense, 10 grains of gold in one form could not be appreciably more or less valuable than 10 grains in the other. This would be what is called standard commodity money, and would be essentially like our United States gold coins of today.

PAPER MONEY AND GOLD COIN.— Let us suppose that the tribe in which these gold dollars are circulating is growing in population and in wealth, so that every year it needs more coin to carry on its business at the old price level, and assume that the

supply of new gold available is being exhausted; then prices would tend downward. This increase in the value of gold arising from the fact that the monetary demand is increasing while the supply of money is remaining constant might be prevented by introducing into circulation a cheaper money as a substitute for some of the gold. Invariably, the introduction of a substitute in place of the real thing tends to lessen the value of the real thing. Suppose the original circulation in this tribe to have been \$100,000, and assume that the number of goods to be exchanged should be increased 25 per cent. Unless the rate of monetary turnover should change, prices would have to fall on an average 20 per cent in order to make possible the effecting of the increased amount of exchange work with the original amount of money. But suppose the government should issue \$50,000 of paper money, withdrawing from circulation \$25,000 of gold coin, as a gold reserve, and assume that a gold reserve averaging that amount would be adequate as a redemption fund, to maintain the gold parity of this \$50,000 paper. Then the price level would be unchanged, for the net circulation would have increased from \$100,000 to \$125,000, while the physical amount of business to be done would have increased in exactly the same proportion.

MONEY AND PRICES.—If \$50,000 of gold should be withdrawn from circulation and placed in reserve against an issue of \$100,000 of paper money, there would be a net increase in the circulation of \$50,000 representing \$25,000 more money than necessary

to compensate for the growth in the physical volume of business. This would cheapen the dollar as compared with goods—both the gold dollar and the paper dollar, because they would be interchangeable-and cause a rise in prices. The fact that the introduction of these paper dollar substitutes for gold coin had pushed down the value of gold money would lead to the melting down of some of the gold money to provide gold for ornaments. The important fact to note is that the introduction of paper money substitutes for gold coin as media of exchange tends to increase the supply of money, to push down the value of gold and to push up prices. It increases the total amount of money in circulation and usually forces an extra supply of gold into the merchandise uses. Whether the substitute is paper money, silver money, copper money, or bank checks, makes no difference as regards this principle.

GRESHAM'S LAW.—If the cheaper money is issued to excess, prices rise unduly and the public loses confidence in the new money. Paper money is presented in increasing quantities at the reserve fund offices for redemption in gold coin and gold is promptly hoarded or used as ornaments in increasing quantities. If the reserve is exhausted before confidence is restored, the paper money becomes inconvertible. People will always use the cheaper money in place of the dearer money in paying debts and buying goods if it will go as far. When money is issued in excess, a cheaper money tends to drive a dearer money out of circulation. This is known as Gresham's Law. It

is merely an instance of an article of trade (money) seeking the best market.

INCONVERTIBLE PAPER MONEY .-- Under such circumstances, however, the inconvertible paper money would continue to circulate. Business must be carried on and there is no other exchange medium available. The need of some medium of exchange is imperative. There may be a slight resort to barter, but for most exchanges barter is cumbersome to the point of being prohibitive. The suspension of gold payments will bring a new element of uncertainty into business, and cause injustice and hardship to some classes, notably creditors, and people living on fixed incomes. It may retard somewhat the amount of business development and activity but it will not stop business. The value of the paper money, like the value of other kinds of money, will be determined by the law of demand and supply. If the supply of paper dollars is limited, business will gradually recover from the shock, and as business increases the value of the paper dollar will rise and in time perhaps again reach the gold par. This is true even if there are no promises of future redemption in gold. Promises or prospects of such redemption in the future, however, strengthen public confidence, give the paper money an investment value, and through influencing the demand for the money, tend to increase its value. If this inconvertible paper money is issued in increasing quantities and out of all proportion to the increase in the physical volume of trade—as there is always a great danger that it will be—it will depreciate rapidly and at an accelerating rate. The increased supply itself will lessen the value; it will also greatly depress business and thereby lessen the supply of goods placed on the market to be exchanged.

LAW OF DEMAND AND SUPPLY FUNDA-MENTAL.—The fundamental fact to bear in mind in studying the value of money is that the law of demand and supply applies to money as truly as to all other commodities. To this law everything else, including the value of the bullion in the coin and convertibility or inconvertibility, is secondary. These other factors affect the value of money only through influencing the supply of money relative to the demand for money.

Kinds of Money

STANDARD AND NON-STANDARD MONEY.—Money may be classified as standard money and non-standard money. Standard money is money that stands on its own bottom. It independently represents the unit of value, and to its value the values of other kinds of money conform, rising as it rises and falling as it falls. All money that is not standard money is non-standard money and depends for its value largely on standard money. Standard money may be commodity money or fiduciary money. Commodity money is money the value of whose content as a commodity is practically equivalent to its value in the form of money. The cowrie shell money in our original illustration was

commodity money, for the value of the shells as commodities for ornaments was the same as their value as money. Gold coin is standard commodity money in the United States. It is commodity money because each gold coin (unless worn) is worth practically the same amount as gold as it is as money. Anyone can take 258 grains of standard gold (namely, gold .900 fine) to any United States mint and receive without charge for coinage a ten dollar gold piece for it; and if one melts down a new ten dollar gold piece, he will get from it ten dollars worth of gold bullion. Gold coin is standard money because it independently embodies the unit of value and because all of our other kinds of money, namely, paper money, silver money, copper money and nickel money, have their values determined by the value of the gold dollar. So long as we maintain the gold standard, whenever the value of gold rises the value of our gold dollar rises, and with it and exactly to the same extent the value of a dollar of every kind of money in circulation in the United States, regardless of variations in the value of the material (e.g., silver and copper) out of which the other money is made. In a silver standard country like China it is the ups and downs of silver that determine the value of the standard dollar and of all other forms of money with which the standard dollar is interchangeable. A country whose unit of value consists of commodity money made of gold is called a monometallic gold standard country and one whose unit of value consists of commodity money made of silver is called a monometallic silver standard country.

BIMETALLIC STANDARDS.—Until the early seventies of the last century there were a number of countries, of which France was the most important example, which had a double metallic standard, using both gold and silver indifferently as standard money and giving both kinds of money unlimited legal tender powers. Such a standard is known as a bimetallic standard. When maintained by one country alone, the system is known as national bimetallism, and when two or more countries are leagued together for maintaining such a standard as was France with the other states of the Latin Union (Belgium, Switzerland and Italy) from 1865 to 1873, the system is called international bimetallism. A century ago most of the leading countries of the world had bimetallic standards, but true bimetallism no longer exists. The theory and history of bimetallism are important and interesting but a discussion of them falls outside the province of this volume.

FIDUCIARY STANDARD MONEY. — The other class of standard money is fiduciary standard money. It is different from commodity standard money in that it has a value substantially greater than the value as a commodity of the material of which it is made. Good examples of fiduciary standard money are the Indian rupee from 1893 to 1898 and the United States greenback from 1862 to 1879. The Indian rupee contains 180 grains of silver 11/12 fine. Prior to 1893 there was free coinage of silver in India. In other words, anyone could take one hundred and eighty grains of standard silver to the Indian mints

and obtain a rupee for them, paying only a slight charge of two per cent, called "brassage," to cover the expenses of coinage. The rupee was silver standard commodity money. In June, 1893, the Indian government closed the mints of India to the free coinage of silver and from 1893 to 1898 there was little increase in the number of rupees in circulation in India. Meanwhile the population of India grew, business increased and the demand for money became greater. Inasmuch as the supply of money was practically constant the value of money rose although during those years the price of silver was declining. By January, 1898, the gold value of the silver in the rupee had declined to about 10 pence of British gold, and the money value of the rupee had increased to the equivalent of about 16 pence of British gold. Later the British government fixed the gold value of the rupee at 16 pence by making it practically interchangeable with gold at approximately that rate; but until that was done, the rupee was a fiduciary standard coin, its value depending upon the supply of money and the demand for money, with practically no regard to the value of its silver content. The value of a rupee of Indian non-standard money, namely, paper money, and fractional coins, moved up or down with the value of the rupee. Practically all prices and wages were quoted in terms of this rupee.

GREENBACK EXPERIENCE. — During the Civil War the United States issued several hundred million dollars of so-called United States Notes or "greenbacks." These paper money notes were not

redeemable in gold from the time of their original issue in 1862 to Jan. 1, 1879. Their value in terms of gold greatly depreciated, at one time reaching the low figure of thirty-five cents gold to a dollar of greenbacks. Meanwhile under the force of Gresham's Law the greenbacks drove out of circulation throughout the greater part of the United States practically all gold and silver coin. The real money of trade, except on the Pacific Coast, where gold continued to circulate, was almost entirely greenbacks and bank notes redeemable in greenbacks. Prices were quoted in greenbacks, and when one used the term dollar, it was understood that he meant a greenback dollar except in the rare cases when he specifically mentioned a gold dollar. The greenback dollar during those years was the actual standard of value although itself varying in value from day to day as the result of the interaction of the forces of demand and supply. Legally the country was on a bimetallic commodity money standard but actually it was on a fiduciary money greenback standard.

STABILITY OF VALUE.—The first requirement of a good monetary system is that the monetary unit shall be reasonably stable in its value, that is, in its purchasing power over commodities in general. A monetary unit whose purchasing power over commodities in general is continually undergoing great changes is bound to work injustice in a country where there are large amounts of long-time debts. If the value of the dollar declines rapidly, as it did between 1896 and 1920, the creditor suffers in being paid

back the principal of his debt in a less valuable dollar than he lent, and presumably in receiving for his interest dollars of less value than he contemplated when he made the loan contract. If the dollar rises rapidly in its value as it did between 1873 and 1895, the creditor benefits and the debtor suffers. A reasonably stable unit of value is a requisite of any good currency system. It is, however, exceedingly difficult to attain. Neither gold or silver has so far met this requirement very well and the world has the problem yet to solve.

ELASTICITY OF VOLUME.—A second requirement, one that is closely related to the first and necessary to its complete realization, is the requirement of elasticity. The amount of money work to be done in a country varies from season to season and from year to year. In an agricultural country, for example, more money is needed during the crop-moving months than during the agriculturally slack months of the winter. Periods of prosperity demand more money than periods of business depression. An ideal currency system is one that contains one or more elastic elements that enable the volume of currency to increase as trade demands increase, and to decrease as trade demands decrease, without necessitating substantial changes in prices. The elastic elements in the currency are usually the standard coins (namely, gold coins in gold standard countries and the larger silver coins in silver standard countries) and bank notes.

DURABILITY AND CONVENIENCE. — Among the other requirements of a good currency

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system the following are worthy of mention. The different kinds and denominations of money should be of sizes convenient to handle and transport. The denominations should be of a character easy to compute, which means that they should be chiefly on a decimal basis. The various kinds of money should be durable and in other respects as inexpensive to make and to administer as possible, consistent with the realization of the other important requirements. They should be of such a quality of workmanship that they cannot be easily counterfeited. And, finally, they should be beautiful in design.

LEGAL TENDER.—The term "legal tender" is applied to money that is legally tenderable in payment of debts, unless the contract calls for payment in some specified kind of money, as, for example, "gold coins of the present standard of weight and fineness." A debt calling for the payment of "one thousand dollars" may be paid in any kind of money that is unlimited legal tender, as, for example, United States notes, silver dollars, gold coins and gold certificates. Contracts, however, calling for payment in gold coin, or in silver dollars, or in any other kind of money, must be paid in the kind of money specified regardless of what may be legal tender. As long as the different kinds of money in circulation are maintained on a parity with gold as they are in the United States today, and as the Gold Standard Act of 1900 requires them to be, the question of legal tender seldom rises. It becomes important, however, in times like the greenback period from 1862 to 1879, when the money of current use is

at a discount in terms of the legal standard money. It was during this greenback period that the United States Supreme Court in a series of famous cases. known as the "legal tender cases," settled the American interpretation of the legal tender quality. The chief of these cases were Lane County v. Oregon (1868) 7 Wallace 71; Bank v. Supervisors (1868) 7 Wallace 26; Bronson v. Rodes (1868) 7 Wallace 229; Hepburn v. Griswold (1869) 8 Wallace 603; Knox v. Lee (1870) 12 Wallace 457; Juilliard v. Greenman (1884) 110 U.S. Reports 421. Fractional coins are usually made legal tender only to a limited amount in one payment, the object being to make it possible to pay fractional sums in legal tender money, but to prevent a debtor from unloading on his creditor an unreasonable amount of fractional money.

United States Money

ELEVEN DIFFERENT KINDS.—There are eleven different kinds of money in circulation in the United States, namely, gold coins, standard silver dollars, subsidiary silver, gold certificates, silver certificates, Treasury notes issued under the act of July 14, 1890, United States notes (also called greenbacks and legal tenders), National bank notes, Federal Reserve notes, Federal Reserve Bank notes, and nickel and bronze coins. While they do not all possess the full legal-tender quality, each kind has such attributes as to give it currency. Gold coin is legal tender at its nominal or face value for all debts, public and private, when not below the standard

weight and limit of tolerance prescribed by law; and when below such standard and limit of tolerance it is legal tender in proportion to its weight. Standard silver dollars are legal tender at their nominal or face value in payment of all debts, public and private, without regard to the amount, except where otherwise expressly stipulated in the contract. Subsidiary silver is legal tender for amounts not exceeding \$10 in any one payment. Treasury notes of the act of July 14, 1890, are legal tender for all debts, public and private, except where otherwise expressly stipulated in the contract. United States notes are legal tender for all debts, public and private, except duties on imports and interest on the public debt. United States notes, upon resumption of specie payments, January 1, 1879, became acceptable in payment of duties on imports and have been freely received on that account since the above date, but the law has not been changed. Gold certificates are unlimited legal tender. Silver certificates and National bank notes are not legal tender. Silver certificates are receivable for all public dues, while National bank notes are receivable for all public dues except duties on imports, and may be paid out by the Government for all salaries and other debts and demands owing by the United States to individuals, corporations and associations within the United States, except interest on the public debt and in redemption of the National currency. All national banks are required by law to receive the notes of other national banks at par. The minor coins of nickel and copper are legal tender to

the extent of 25 cents. Foreign coins are not legal tender.

GOLD COINS.—While the gold dollar is the unit and standard of value, the actual coinage of the \$1 piece was discontinued under authority of the act of September 26, 1890. Gold is now coined in denominations of \$2.50, \$5, \$10, and \$20, called, respectively, quarter eagles, half eagles, eagles, and double eagles.

SILVER COINS.—The standard silver dollar was first authorized by the act of April 2, 1792. Its weight was 416 grains .8924 fine. It contained the same quantity of fine silver as the present dollar, whose weight and fineness were established by the act of January 18, 1837. The coinage of the standard silver dollar was discontinued by the act of February 12, 1873, and it was restored by the act of February 28, 1878. The coinage ratio between gold and silver under the act of 1792 was 15 to 1, but by the acts of 1834 and 1837 it was changed first to 16,002 to 1 and finally to 15.988 to 1 (commonly called 16 to 1). This is the present ratio. The trade dollar of 420 grains troy was authorized by the act of February 12, 1873. It was intended for circulation in oriental countries as a substitute for the Mexican dollar, which it slightly exceeded in weight; but by the terms of the authorizing act it was made legal tender in the United States in sums not exceeding \$5. This legal-tender quality was withdrawn by the joint resolution approved July 22, 1876, and the coinage was limited to such amount as the Secretary of the Treasury should consider sufficient to meet the export demand. The act of February 19, 1887, provided for the retirement of trade dollars and their recoinage into standard silver dollars or subsidiary silver.

SUBSIDIARY SILVER.—The silver coins of smaller denominations than one dollar, authorized by the act of April 2, 1792, were half dollars, quarter dollars, dimes, and half dimes. They were the equivalent in value of the fractional parts of a dollar which they represented—that is, two half dollars were equal in weight to one silver dollar, and so on. These coins were full legal tender when of standard weight, and those of less than full weight were legal tender at values proportional to their respective weights. By the act of February 21, 1853, the weight of the fractional silver coins was reduced so that the half dollar weighed only 192 grains, and all the smaller denominations were reduced in proportion. Their legaltender quality was at the same time limited to \$5, and they thus became subsidiary coins. The present subsidiary coins are half dollars, quarter dollars, and dimes. Their weight is slightly different from that prescribed by the act of 1853; but the limit of their legal-tender quality has been raised to \$10.

PAPER MONEY.—The first paper money ever issued by the Government of the United States was authorized by the acts of July 17 and August 5, 1861. The notes issued were called "demand notes," because they were payable on demand at certain designated subtreasuries. They were receivable for all public dues, and the Secretary was authorized to re-

issue them when received, but the time within which such reissues might be made was limited to December 31, 1862. The amount authorized by these acts was \$50,000,000. An additional issue of \$10,000,000 was authorized by the act of February 12, 1862, and there were reissues amounting to \$30,000. The demand notes were paid in gold when presented for redemption and they were received for all public dues, and these two qualities prevented their depreciation. All other United States notes were depreciated in value from 1862 until the resumption of specie payments. The act of February 25, 1862, provided for the substitution of United States notes in place of the demand notes, and the latter were therefore canceled when received. By July 1, 1863, all except about \$3,350,000 had been retired, and nearly three millions of this small remainder were canceled during the next fiscal year. These notes were not legal tender when first issued, but they were afterwards made so by the act of March 17, 1862.

UNITED STATES NOTES.—The principal issue of United States paper money was officially called United States notes. These were the well-known "greenbacks" or "legal tenders." The act of February 25, 1862, authorized the issue of \$150,000,000, of which \$50,000,000 were in lieu of an equal amount of demand notes, and could be issued only as the demand notes were canceled. A second issue of \$150,000,000 was authorized by the act of July 11, 1862, of which, however, \$50,000,000 was to be a temporary issue for the redemption of a debt known as

the temporary loan. A third issue of \$150,000,000 was authorized by the act of March 3, 1863. The total amount authorized, including the temporary issue, was \$450,000,000, and the highest amount outstanding at any time was \$449,338,902 on January 30, 1864. There are still outstanding \$346,681,016. The reduction from the original permanent issue of \$400,000,000 to \$346,681,016 was caused as follows: The act of April 12, 1866, provided that United States notes might be retired to the extent of \$10,000,000 during the ensuing six months, and that thereafter they might be retired at the rate of not more than \$4,000,000 per month. This authority remained in force until it was suspended by the act of February 4, 1868. The authorized amount of reduction during this period was about \$70,000,000, but the actual reduction was only about \$44,000,000. No change was made in the volume of United States notes outstanding until after the panic of 1873, when, in response to popular demand, the Government reissued \$26,-000,000 of the canceled notes. This brought the amount outstanding to \$382,000,000, and it so remained until the resumption act of January 14, 1875, provided for its reduction to \$300,000,000. The process was, however, again stopped by the act of May 31, 1878, which required the notes to be reissued when redeemed. At that time the amount outstanding was \$346,681,016, which is the present amount. The amount of United States notes redeemed from the fund raised for resumption purposes since January 1, 1879, to June 30, 1910, was \$712,260,694; but the volume outstanding is undiminished because of the provisions of the act of May 31, 1878, which require the notes so redeemed to be paid out again and kept in circulation. The act of March 14, 1900, also directed the reissue of United States notes when redeemed, but they must first be exchanged for gold as provided in the said act. The act also provides that when silver certificates of large denominations are canceled, and small denominations issued in their place, a like volume of small United States notes shall from time to time be canceled and notes of \$10 and upward issued in substitution therefor. The act of March 4, 1907, provides for the issue, under certain conditions, of United States notes in denominations of \$1, \$2, and \$5, and upon such issue an equal amount of United States notes of higher denominations shall be retired and canceled.

GOLD CERTIFICATES.—The act of March 3, 1863, authorized the Secretary of the Treasury to receive deposits of gold coin and bullion in sums not less than \$20, and to issue certificates therefor in denominations not less than \$20, said certificates to be receivable for duties on imports. Under this act deposits of gold were received and certificates issued until January 1, 1879, when the practice was discontinued by order of the Secretary of the Treasury. The purpose of the order was to prevent the holders of United States notes from presenting them for redemption in gold, and redepositing the gold in exchange for gold certificates. No certificates were issued after January 1, 1879, until the passage of the

bank act of July 12, 1882, which authorized and directed the Secretary of the Treasury to receive gold coin and issue certificates. This act, however, provided that "the Secretary of the Treasury shall suspend the issue of gold certificates whenever the amount of gold coin and gold bullion in the Treasury, reserved for the redemption of United States notes, falls below one hundred millions of dollars." The act of March 14, 1900, reenacted this provision, and further provided that the Secretary may, in his discretion, suspend such issue whenever and so long as the aggregate amount of United States notes and silver certificates in the general fund of the Treasury shall exceed \$60,000,000. It provided further that of the amount of such certificates outstanding onefourth, at least, shall be in denominations of \$50 or less. The act of July 12, 1882, made them receivable for customs, taxes, and all public dues. The act of March 4, 1907, provides for the receipt of deposits of gold coin in sums of not less than \$20 and the issue of gold certificates therefor in denominations of not less than \$10. Gold certificates were made legal-tender in payment of all debts and dues, public and private, by the act of Congress passed December 24, 1919.

SILVER CERTIFICATES.—The act of February 28, 1878, authorizing the issue of the standard silver dollars, provided that any holder of such dollars might deposit them in sums not less than \$10 with the Treasurer or any assistant treasurer of the United States and receive certificates therefor, in

denominations not less than \$10, said certificates to be receivable for customs, taxes, and all public dues. The act of August 4, 1886, authorized the issue of the smaller denominations of \$1, \$2, and \$5. Silver certificates have practically taken the place in circulation of the standard silver dollars which they are coined to represent. The act of March 14, 1900, provided that thereafter the issue of silver certificates should be limited to the denominations of \$10 and under, except that 10 per cent of the total volume of such certificates, in the discretion of the Secretary of the Treasury, may be issued in denominations of \$20, \$50, and \$100.

TREASURY NOTES, ACT OF JULY 14, 1890.—These notes were authorized by the act of July 14, 1890, commonly called the "Sherman Act." The Secretary of the Treasury was directed to purchase each month 4,500,000 ounces of fine silver at the market price, and to pay for the same with Treasury notes redeemable on demand in coin and legal tender for all debts, public and private, except where otherwise expressly stipulated in the contract. was provided in the act that when the notes should be redeemed or received for dues they might be reissued, but that no greater or less amount of such notes should be "outstanding at any time than the cost of the silver bullion and the standard silver dollars coined therefrom, then held in the Treasury purchased by such notes." The authority for the purchase of silver bullion under this act was repealed by the act of November 1, 1893, up to which date

the Government had purchased 168,674,682.53 fine ounces, at a cost of \$155,931,002, for which Treasury notes were issued. The amount of Treasury notes redeemed in gold up to the close of the fiscal year 1910 was \$110,582,179 and the amount redeemed in standard silver dollars was \$84,556,867. Treasury notes redeemed in standard silver dollars are canceled and retired in accordance with the requirements of the act of 1890. Sections 5 and 8 of the act of March 14, 1900, also provide for the cancellation and retirement of Treasury notes to an amount equal to the coinage of standard silver dollars and subsidiary silver from the bullion purchased with such notes.

FRACTIONAL CURRENCY.—When specie payments were suspended, about January 1, 1862, both gold and silver coins disappeared from circulation. The place of the subsidiary silver coins was for a time supplied by the use of tickets, duebills, and other forms of private obligations, which were issued by merchants, manufacturers, and others whose business required them to "make change." Congress soon interfered, and authorized, first, the use of postage stamps for change; second, a modified form of postage stamp called postal currency, and finally, fractional paper currency in denominations corresponding to the subsidiary silver coins. The highest amount authorized was \$50,000,000. The highest amount outstanding at any time was \$49,-102,660.27, and the amount still outstanding, though not in use as money, is \$15,234,756.28, of which

\$8,375,934 is officially estimated to have been destroyed. Much has been kept as relics.

NATIONAL BANK NOTES.—The issue of circulating notes by national banking associations was first authorized by the act of February 25, 1863. This act was found to be defective and was superseded by the act of June 3, 1864. The act of June 3, 1864, is the basic act for the national banking system. This act provided for the organization of national banks with a capital of not less than \$100,000, nor less than \$200,000 in cities with a population in excess of 50,000, except, that in places not over 6,000 population, banks might be organized with a capital of not less than \$50,000. Organizing banks were required to deposit with the Treasurer of the United States registered interest-bearing bonds to an amount not less than \$30,000 nor less than one-third of their paid-in capital stock. Upon the transfer and delivery of bonds to the Treasurer of the United States, banking associations were entitled to receive from the Comptroller of the Currency circulating notes of different denominations in blank, equal in amount to 90 per cent of the current market value, but not to exceed 90 per cent of the par value of the bonds deposited. Issues were limited to an amount equal to the paid-in capital of each bank depositing bonds and to a total of \$300,000,000 for the entire country. The notes authorized by this act were made receivable at par in all parts of the United States for all public dues to the United States, except duties on imports, and also for obligations of the Government except interest on the public debt and in the redemption of national currency. The notes were made receivable for all purposes by national banks and were redeemable in lawful money at the bank of issue and at designated agencies in reserve cities. Taxation upon the average outstanding circulation was imposed at the rate of one-half of 1 per cent semi-annually. Various and material amendments to the basic act have been made. The act of March 3, 1865, provided that one-half of the total circulation authorized should be apportioned according to population and the remainder according to banking requirements. This apportionment and the limitation on the aggregate amount of circulation were repealed January 14, 1875. Provision was made by the act of June 20, 1874, for the deposit of lawful money by each bank with the Treasurer of the United States in an amount equal to 5 per cent of its outstanding circulation to be used for the redemption of the national bank notes. The provision authorizing redemption agents in various cities was repealed. At the same time provision was made for the retirement of circulation by the deposit of lawful money with the Treasurer of the United States. The destruction of notes upon redemption by maceration instead of by burning was authorized by act of June 23, 1874. No material modification affecting national bank circulation was made subsequent to 1874 until 1882. By the act approved July 12, 1882, national banks with a capital of \$150,000 or less were not required to deposit or to keep on deposit with the Treasurer of the United

States bonds in excess of one-fourth of their capital stock as security for circulating notes. The act of June 20, 1874, provided that the amount of bonds on deposit for circulation should not be reduced below \$50,000, which determined the amount of bonds required to be deposited by banks organizing with a capital stock of over \$150,000. A limitation of \$3,-000,000 was placed in 1882 on the total amount of circulation that might be retired in any one month by the deposit of lawful money. This amount was increased by the act of March 4, 1907, to \$9,000,000. The act of March 14, 1900, fixed the tax on circulation secured by 2 per cent bonds at one-fourth of 1 per cent semi-annually and provided for the organization of banks of not less than \$25,000 capital in places with population not in excess of 3,000. This act increased the amount of circulation allowed from 90 per cent to par value of the bonds deposited, but did not modify the requirement that banks should deposit bonds for circulation. The Federal Reserve Act, approved December 23, 1913, provides that national banks thereafter organized shall not be required to deposit United States bonds as a condition precedent to being authorized to begin business. Banks organized since that date may be banks of issue in accordance with previously existing law. The Federal Reserve Act further provides that after two years from its passage and for twenty years thereafter any member bank desiring to retire the whole or any part of its circulation may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing the circulation to be retired. Provision also is made for the purchase by the Federal reserve banks of bonds offered for sale by the national banks, the purchase money to be deposited in the Treasury for the redemption of the circulation to be retired.

FEDERAL RESERVE BANK NOTES.—Section 4, paragraph 8, and section 18 of the Federal Reserve Act provide that Federal reserve banks may take out circulating notes upon the deposit with the Treasurer of the United States of any bonds of the United States in the manner provided by existing law relating to national banks, in an amount equal to the par value of the bonds so deposited, said notes to be issued and redeemed under the same conditions and provisions of law as relate to the issue and redemption of circulating notes of national banks secured by bonds of the United States bearing the circulation privilege, except that the issue of such notes shall not be limited to the capital stock of the Federal reserve bank issuing them. It is thus seen that Federal reserve bank notes are identical in nature with national bank notes, the difference being that such notes are taken out by Federal reserve banks instead of by national banks.

FEDERAL RESERVE NOTES.—Section 16 of the Federal Reserve Act authorizes the issue, at the discretion of the Federal Reserve Board, of Federal reserve notes to Federal reserve banks through Federal reserve agents. These notes are issued for the

purpose of making advances to Federal reserve banks and any Federal reserve bank may make application therefor to its Federal reserve agent, tendering collateral acceptable for rediscount under the provisions of section 13 of the act in an amount equal to the face value of the notes applied for. If the commercial paper offered is satisfactory, the agent, acting under authority received from the Federal Reserve Board, will issue the notes to the applying bank. In addition to the security afforded by the collateral deposited with the Federal reserve agent the notes when issued must be protected by a gold reserve of 40 per cent, at least 5 per cent of which must be deposited with the Treasurer of the United States as a redemption fund, the balance being held in the vaults of the Federal reserve bank. Federal reserve notes are obligations of the United States and are receivable on all accounts by all Federal reserve banks, national banks, and other banks members of the Federal reserve system. They are also receivable for all taxes, customs, and other public dues. They are redeemable in gold on demand at the Treasury Department in Washington or in gold or lawful money at any Federal reserve bank. The notes are issued in denominations of \$5, \$10, \$20, \$50, and \$100, and the designs of each denomination for each Federal reserve bank are uniform, the notes being distinguished only by the letter and number designating the bank and a seal bearing the name of the bank. The first issue of these notes was made on November 16, 1914.

CHAPTER II

Credit

REDIT may be generally defined as a promise to pay in the future for something received in the present. It is an exchange of the privilege to use wealth, which may be composed of tangible goods or of rights or privileges. While credit implies exchange, the process of exchange is not completed until payment is made. Credit has been called protracted exchange. Anybody who borrows expects to use what he borrows. Anybody who loans expects to receive some other value in place of what is loaned. The lender transfers present goods for future payment. As present goods are usually more desirable than future goods, they have more value, and when exchanged for future goods the borrower expects to pay the lender something more than he receives, as the motive of his borrowing is to make not only enough to pay an increase to the lender but something more. Borrowers sometimes borrow to maintain themselves and not with any idea of profiting by the transaction. One who borrows simply to maintain himself hopes that the loan received will enable him to pass the crisis and ultimately to gain. Where payments are deferred, prices are likely to be higher than where exchanges are made for cash. Business houses give discounts for cash or for shorttime payments. The foundation of credit is confidence. Credit used in the sense of honesty and reputation is the credit on which business is founded. There is a difference, however, in the character of credit. If one lets a horse and carriage for hire he feels certain of the return of that property at the end of the time agreed upon. If one, however, lends or sells lumber he parts with his control over it. It is consumed. The point is that there is risk where wealth is destroyed and this is a risk both for the one who loans and the one who borrows. The future itself is problematical and he who trusts it expects to reap a corresponding reward. Law provides for such future risks in that it protects lenders through such means as actions for damages for breach of contracts, by mortgages, and by the sale of collateral.

CREDIT INSTRUMENTS.—Credit know it could not have performed analogous functions among primitive peoples. Such peoples, however, used credit in the sense of loaning, for they loaned cattle and undoubtedly other forms of property. This might be called a simple form of credit as contrasted with the complex forms of the present time. In ancient days loans without interest were made by relatives with the motive of assistance, or loans were made to strangers or to dependent classes at usurious rates. In general, the idea of the use of credit was at first not for the purpose of the further development of industry. This concept arose when it was seen that present wealth might be exchanged for future wealth by the use of a machine of evidence involving a statement of value, and that this machine, known as negotiable paper, might be traded

in on a market. The principal forms of negotiable paper are bills of exchange and promissory notes. A "bill of exchange" or "draft" may be defined as an order drawn by one party, called the "drawer," on another party, called the "drawee," for the payment of money to a third party, called the "payee," the amount to be charged to the drawer. A bill of exchange may be drawn payable at sight or at some specified time subsequent to sight or demand. Unless the drawee wishes to pay a time draft or bill when presented, he writes across the face of the paper the word "Accepted," with his signature and the date. This means that the drawee assents to the terms of the bill or draft and binds himself to honor it at maturity. It then becomes known as an "acceptance." A "promissory note" is a promise made in writing by one party, called the "maker," to pay a sum of money to another party, called the "payee," or to his order.

CREDIT AND BANKING.—Banks are institutions organized and operated primarily for the purpose of dealing in money and credit. From the standpoint of a bank, credit is used from two different angles, namely, that of the bank as a creditor, and that of the bank as a debtor. As a creditor the bank is concerned with "the capacity for credit" of its customers, actual and prospective. It wants to know how much it can safely lend to each customer, and the amount and character of the collateral it should require or the number and character of endorsers. These are questions that call for an un-

derstanding of the customer's moral character and business ability and demand a knowledge of the nature of his business and of his assets and liabilities. This phase of the subject of credit is more fully considered in subsequent chapters. The fundamental function of a bank, however, is to lend its own credit, and thus become a debtor, chiefly in the form of bank deposits and bank notes. The nature of these two forms of bank credits may best be made clear by assuming a bank comparatively free from governmental restrictions as regards deposits, bank note issues, and reserves—a bank similar to the first or second United States banks of the last century or to a Canadian joint stock bank of today-and by running a few simple operations through the balance sheet. Let us assume that the bank organizes with \$1,000,000 of cash paid-up capital. It expends \$150,-000 for a banking house and \$15,000 for furniture and fixtures. When it opens for business its balance sheet stands as follows:

Resources	
Banking House	\$ 150,000
Furniture and Fixtures	15,000
Cash in Vault	
Total	\$1,000,000
Liabilities	
Capital Stock	\$1,000,000
Total	\$1,000,000
DISCOUNT OPERATIONS - By	the end of

DISCOUNT OPERATIONS.—By the end of the first week the bank has received deposits of cash

amounting to \$140,000; and has discounted for various customers \$500,000 of sixty-day notes at 6%. the borrower in each case having left the entire proceeds of his discounted note on deposit with the bank. The cash deposits of \$140,000 added that amount to the "cash in vault" as a resource, and the same amount as a deposit on the liability side. A discount charge of \$5,000 was made by the bank for discounting the \$500,000 worth of notes, which is 6% of this amount for 60 days. This discount is taken out in advance and the amount is entered among the liabilities as undivided profits, since (when earned) it will be a liability of the bank to the bank's own stockholders. This amount may also be credited to an account called "unearned discount," and only taken into undivided profits as the time which the note has to run elapses and the discount is actually earned by the bank. The balance, namely, \$495,000, is entered as deposits. The balance sheet then stands as follows:

Resources

Eanking House	\$ 150,000
Furniture and Fixtures	15,000
Cash in Vault	975,000
Loans and Discounts	500,000
Total	\$1,640,000
Liabilities	
Capital	\$1,000,000
Undivided Profits	5,000
Deposits	
Total	\$1.640.000

It will be noticed that of the \$635,000 of deposits, \$495,000 represent no cash payment to the bank whatsoever, but is merely a book entry placing to the credit of depositors this amount which is the proceeds of the notes the bank has discounted for them. The bank has merely loaned these customers its credit, which they may check against as they will. Suppose that during the next few days there are a large number of applications from responsible business men for loans and that the bank discounts for these men \$2,000,000 of paper, this time all 90-day paper at 6%, the entire proceeds (amounting to \$1,-970,000) being left for the time being on deposit. Here the bank is lending and placing to the borrowers' credit on deposit account \$1,970,000, although its books show at the time the loans are made that it has only \$975,000 of cash in its possession. These deposits, moreover, are payable in cash on demand. After this operation the balance sheet stands as fol-

lows: Resources	
Banking House	\$ 150,000
	15,000
Cash in Vault	975,000
Loans and Discounts	2,500,000
Total	\$3,640,000
Liabilities	
Capital	\$1,000,000
Undivided Profits	35,000
Deposits	2,605,000
Total	\$3,640,000

The bank has now loaned \$2,500,000 although its total receipts of cash from the beginning have been but \$1,140,000, and it has spent \$165,000 of that for Furniture and Fixtures. It still has on hand \$975,000 in cash, but it owes depositors \$2,605,000. Obviously if the depositors should all exercise their legal right to draw out at once the full amount of their deposits, the bank would not have enough money to pay much more than a third of the amount demanded. There are sufficient resources, if they were all turned into cash, to meet all possible demands, paying every dollar of deposit, but the resources are largely in the form of customers' notes that will not be due for some time, and depositors may demand cash. As a matter of practice, however, the bank knows that there is very little likelihood that any large percentage of deposits will be withdrawn in any one day. It furthermore knows that every day there will be receipts as well as withdrawals, since its business customers will ordinarily deposit the money and checks they receive over their counters each day. money the bank receives over its counters in a day will often exceed that it is called to pay out; while checks on one depositor's account which are deposited by another depositor will cancel each other so far as the balance sheet of the bank is concerned, the transfers being effected merely by debits and credits on the books of the bank.

CASH RESERVE.—The result is that a cash reserve equivalent to a small percentage of deposits—in most small banks less than ten per cent.—is

sufficient to meet the demands of depositors and to leave a margin of safety. The bank in our illustration is carrying a cash reserve against deposits of over 37%, despite its large loans. Usually a borrower discounting paper at a bank does not leave the entire proceeds of the loan on deposit long. He ordinarily checks against the new credit at once and gradually reduces it. As he does so, the bank loses some of its cash and has its percentage of reserve reduced. Let us assume in the illustration that through the presentation of checks over the bank's counter \$475,000 of cash is withdrawn. Then the balance sheet stands as follows:

Resources

Banking House Furniture and Fixtures Cash Loans and Discounts	\$ 150,000 15,000 500,000 2,500,000
Total	\$3,165,000
Liabilities	
Capital	\$1,000,000
Undivided Profits	35,000
Deposits	2,130,000
Total	\$3,165,000

The percentage of reserve is reduced from about 37 to about 23. The less rapidly a borrower reduces the deposit credit representing the proceeds of his loan, and the larger the deposit balance he keeps at the bank, the more profitable the account is to the

bank, for in a sense the bank is having its cake and eating it too. Borrowers who withdraw the proceeds of their loans quickly and who normally carry low deposit balances in proportion to the amounts they borrow, are not likely to receive such favorable treatment from banks as customers who keep substantial balances in proportion to their loan accounts. It is the latter class that are the most profitable to the bank. Often banks make the maintenance of a deposit balance of a predetermined minimum or average amount a condition to granting a certain line of credit.

BANK NOTES.—The second important form of bank credit is bank-note credit. From the standpoint of the issuing bank, notes of the simplest type of asset currency are essentially the same as demand deposits. Such a bank note is, like the bank deposit, a promise to pay lawful money on demand. Like a deposit it requires of the bank the maintenance of an adequate cash reserve, and like a deposit it is readily transferable from person to person. The deposit is an implied parole promise to pay, evidenced ordinarily by a pass book, the payment to be made usually against checks properly drawn and signed in accordance with banking law and established practice. The note is a promise to pay engraved on a piece of paper which circulates as money. Like the check the note must be redeemed by the issuing bank in lawful money when presented over the bank's counter. Under these circumstances it should obviously be a matter of little difference to a bank issuing such bank notes,

whether a borrower takes the proceeds of his loan in the form of a deposit credit which he can check against or in the form of bank notes which he can use directly as money. The similarity of these two forms of bank credit may be made clearer by carrying through our balance sheet a few operations involving bank notes. Let us suppose that among the customers of our bank there are several factories employing laborers whom they pay weekly in "cash." These factories, we will suppose, have sold heavily on credit and finding themselves short of ready funds for their payroll, borrow of the bank by discounting 60-day notes totalling \$500,000 at 6 per cent. Having made proper arrangements regarding balances, they take entire proceeds of loan at once in bank notes and use them to pay their laborers on Saturday. The balance sheet of the bank now stands:

Resources	
Banking House	\$ 150,000
Furniture and Fixtures	15,000
Cash in Vault	500,000
Loans and Discounts	3,000,000
Total	\$3,665,000
Liabilities	
Capital	\$1,000,000
Undivided Profits	40,000
Deposits	2,130,000
Bank Notes	495,000
Total	\$3,665,000

The percentage of reserve against demand liabil-

ities (formerly only deposits, but now deposits and notes), will be reduced from 23 per cent. to 19 per cent. So long as these bank notes remain out circulating from hand to hand or are held in the tills of merchants or in the pockets of the people, they make no demand on the bank's cash. The bank has in effect swapped its non-interest-bearing demand promises to pay, that circulate as money, for the factories' interest-bearing time promises to pay, that do not circulate as money. In this way the bank lends its credit and realizes its profit. Whether the bank's demand promises to pay are in the form of bank notes or of a deposit obviously makes little difference to the bank.

BANK NOTES AND CHECKS. - Although bank notes and bank deposits are similar forms of credit from the bank's point of view, they are different in important particulars from the public's point of view. Let a stranger in any city try to make purchases with his checks and he will soon recognize that a check, however good, is a very different thing from a bank note; or let anyone compare a check with a bank note in its usefulness for buying a railroad ticket or in buying stamps at the post office. The bank note is accepted everywhere in the country as money, without reference to the character or the credit of the person who is paying it, even though the place of payment may be thousands of miles away from the office of the issuing bank, and although the bank may be entirely unknown to the person receiving the note. While this is not true in countries with

defective bank-note currencies, it is normally true in advanced countries. The check is accepted only when the recipient has confidence in the character and credit of the person drawing it. The receiver of the note is quite likely to pass it on to someone else in purchasing goods or paying for services, and so it often remains "away from home" (namely, the issuing bank)-sometimes very far away from home-for a long period of time, passing through the hands of many people who know little or nothing of the standing of the issuing bank or perhaps of any other bank. Relatively speaking, bank notes and other forms of money, as contrasted with bank deposits circulating through the instrumentality of checks, so-called "deposit currency," are used much more extensively by the poor than by the well-to-do. Ordinarily a check makes one payment, is deposited by the recipient at his bank, and is then sent "home," and cancelled. Its life is brief. People expect to scrutinize checks when they are offered and to test out their value at once by sending them home quickly. It would be an unendurable nuisance to trade if bank notes had to be treated in the same way. Bank note holders are not in the same position to protect themselves that depositors are. One selects the bank at which he keeps his account, with knowledge of its officers and financial standing. He is not in position to examine the financial standing of all the banks whose bank notes are paid to him. In case of bank failure the deposit loss is likely to fall in the main on financially broader shoulders than is the bank note loss. All this is said

on the assumption that the issuance by banks of circulating credit—both deposit credit and note credit—is unrestricted by law. Because of these and other differences, from the public point of view, between deposits and bank notes, governments usually throw special safeguards around the issuance of bank notes as a means of protecting the public.

BANK NOTE PROTECTION.—In most cases bank notes enjoy a prior lien on the assets of the issuing bank, so that in case this bank fails, bank note holders shall receive their pay in full before anything is paid to depositors or stockholders. Special guaranty funds are frequently set aside for the protection of note holders in case of bank failures. Legal reserve requirements often exist against notes where they do not exist against deposits; and where they exist for both they are often higher for notes than for deposits. The pledging with the government of some special form of asset, like United States bonds against National bank notes in this country, has been a common device. In recent years there has been a strong tendency to give a monopoly of the bank-note issue privilege to central banks which are closely identified with the financial interests of the state, and whose quasi-public character is recognized. This is now the situation in most of the leading countries of Europe.

Bank Reserves

KINDS OF RESERVES.—The term bank reserve in the United States is used loosely and in a variety of meanings. We speak of "cash reserve,"

"deposited reserve," "legal reserve," "actual reserve," "secondary reserve," "lawful money reserve," and so forth. In the strictest and narrowest sense of the term a true bank reserve would consist solely of legal tender money actually in the possession of the bank, for it is only in such money that a bank may legally pay its creditors—chiefly depositors and note holders -if they so insist. These obligations, moreover, for the most part are demand obligations, and failure to meet them on demand is an act of insolvency. Inasmuch as all kinds of money in the United States are backed by the United States Government, which is responsible for maintaining them at a parity with gold, the American public today draws no discriminating line between those kinds of money that are unlimited legal tender like gold coin, gold certificates, silver dollars, and United States notes, those that are limited legal tender like fractional coin, and those that are not legal tender (except perhaps in certain specified relations) like silver certificates, Federal Reserve notes, National bank notes, and Federal Reserve Bank notes. The result is that non-legal tender forms of money under reasonable restrictions may safely serve as reserve money in the United States.

SECONDARY RESERVE. — The "secondary reserve" is the bank's second line of defense. Strictly speaking, it is not a reserve at all, but an investment by the bank in supposedly highly liquid assets that can be turned into cash on short notice and with little or no loss. Secondary reserves usually consist of highgrade, short-time commercial paper, and of securities

that are supposedly readily marketable. In the United States one of the most important kinds of secondary reserve, although it is not usually recognized as a secondary reserve at all, is the deposit of funds by one bank in another. These deposits except those made with the Federal Reserve Bank usually yield interest to the depositing bank. They are actually only highly liquid investments, for they must be turned into a primary reserve, namely into "money on hand," before they can be used to meet a bank's cash obligations to its customers.

RESERVE CONSIDERATIONS.—From the previous discussion of the balance sheet the function of the bank reserve has been made evident. It is the fund a bank carries for the purpose of meeting actual and probable demands upon it for cash on the part of its customers. Cash in reserve does not directly yield the bank a profit and therefore, other things equal, the larger the proportion of its assets a bank keeps in the form of "idle" reserves, the less the profit it makes. The profit-making motive therefore continually operates to drive reserves down to the minimum. On the other hand a bank is a credit institution and its own reputation for strength and solvency is its greatest asset. Anything that impairs that reputation drives away customers and ultimately reduces profits. Financial standing in the community is easily weakened by a bank and when once weakened can only slowly be restored. Failure at any time to meet the demands of depositors and note-holders is an act of insolvency, and even if it is only temporary is a serious blow to a bank's prestige. So also is a reputation for "running near the limit." These considerations compel banks to carry sufficient reserves to meet all probable demands and, in addition, to afford a substantial margin of safety. There is here a continual conflict of motives, immediate profits on the one hand, and safety, prestige and long-run profits on the other hand.

LEGAL RESERVES .- Because experience has shown that many banks in their zeal for immediate profits will reduce their reserves to dangerously low figures, thereby imperiling the funds intrusted to them and threatening the country's whole delicate credit structure, and because the banks that do this are for a time dangerous competitors of the more conservative banks that are protecting the public interests, we have found it desirable in the United States. as have the people in some other countries, to impose by law legal reserve minima. Such minima are enforced by the laws of the Federal government and also by the laws of most of our states. They virtually say to the banks: "Each bank must decide for itself above a reasonable limit what percentage of reserve it needs. This percentage will vary from bank to bank according to the character of its customers and the type of business it chiefly serves. For each bank it will also vary from season to season according to the seasonal changes in the business needs of the community. But there are limits beyond which no bank can safely go without endangering the public interest; and 'the rules of the banking game' are that those limits shall

not be passed, except perhaps temporarily under emergency conditions and subject to certain penalties."

BANK DEPOSITS AND PRICE LEVELS.— In the first chapter was discussed the subject of the elementary principles determining the value of money as that value is expressed in the level of prices; but throughout the discussion it was assumed that all exchanges were made by means of money and none by bank checks. Having considered the general character of bank deposits, the student is now in position to examine the relation of deposit currency to the value of money. The introduction of bank notes into a country formerly carrying on its exchanges with gold money under a system of free coinage, and the extensive development of the use of checks, would obviously lessen the value of gold money. Highly efficient media of exchange would be provided in the form of bank notes and checks and these media serving as substitutes for money in hand-to-hand circulation, would, like any other substitute, lessen the demand for the article whose place they were taking. Their introduction would increase the supply of media of exchange in the particular country, and depress the value of the dollar with the result that the dollar's gold content, namely, 25.8 grains of gold .900 fine, would be worth less as compared with goods in this country than formerly and less than it was worth abroad. In seeking the best market some of the gold coins would be melted down and exported and some would go into the merchandise uses at home. Suppose in this way 100,000 ounces of fine gold (the equiv-

alent of \$2,067,000) should be driven out of circulation. The release of this quantity of gold from the money uses in the country introducing banks would have the same effect on the world's supply of gold as the production of 100,000 additional ounces by the world's gold mines. It would tend to make gold cheaper in terms of other commodities the world over and therefore likewise make gold units of value cheaper; that is, the dollar, the sovereign, the yen, the franc, etc. Prices would tend to rise in all gold standard countries just as the water level would rise in a series of connected lakes if there had been a cloudburst over one of them. The dollar in the home country would continue to be equivalent in value to 25.8 grains of gold .900 fine, but both dollar and gold bullion would be less valuable than before in terms of other goods. Furthermore, there would be more dollars of circulating media in the country because of the addition of the notes and checks to the circulation, and also because of a return flow of some of the gold originally lost as the released supply spread itself out over the entire world, creating a new equilibrium of world gold value. Some gold would be permanently lost from the country introducing bank notes, but there would be a net gain in its supply of circulating media, the value of a dollar would tend to decline and the price level to move upward.

DEPOSIT CURRENCY CIRCULATION.—Of course banks need money for reserves against their bank note issues, and their deposits which circulate in the form of checks, so that the amount of

notes and checks used for exchange purposes would not represent a net increase in the circulating media. Furthermore, while a check is occasionally indorsed by the receiver and passed on to a second party in the purchase of goods, and, rarely, even to a third or fourth party, before it is returned to the issuing bank and cancelled, such purchases are negligible compared with the entire amount of purchases by checks, and for all practical purposes it is a fair assumption that each check makes one purchase and is then deposited and sent home to die. The average gold coin (or other piece of money) on the other hand, changes hands in the purchase of goods many times in the course of a year. A given amount of deposit, however, will serve as the basis of a check circulation of many times its value. With an average daily deposit balance at his bank of \$10,000 throughout the year a merchant depositing his receipts at his bank every day and making most of his payments by means of checks, may easily make check payments in the course of a year of several hundred thousand dollars. If we should arbitrarily assume that by all depositors (in check accounts) in commercial banks the average volume of checks drawn in the course of a year amounts to \$30 for each dollar of average daily balance, and if we should arbitrarily assume that the banks on the average find from experience that to be safe they must carry average gold reserves against deposits of 10 per cent., it would follow that \$1 in reserve would serve as a money basis of \$300 of check transactions in a year. Estimates of

the average annual rate of monetary turnover for the United States for pre-war times vary from about 20 to 50. At the lower figure a dollar in active circulation would do \$20 of money work in a year as contrasted with \$300 worth of money work assumed for the dollar held in reserve against deposits, and at the higher figure it would do \$50 worth. The foregoing assumption, as regards the rate of deposit turnover, is lower than the estimates of some economists who have carefully studied the subject. Investigations are now under way that promise to yield valuable information as to the ratio of deposit turn-over in different parts of the United States. It is safe to say that under a highly developed system of deposit banks the average dollar in bank reserve is many times as efficient for purposes of exchange work as the average dollar in exclusively hand-to-hand circulation. development of deposit banking accompanied by the increasing resort to the use of checks in business transactions is a great economizer of gold and tends to push upward continually the price level.

RELATIONSHIP OF CIRCULATION TO RESERVES AND DEPOSITS.—As the amount of money in circulation increases, the proportions of the total that are kept in bank reserve and in active hand-to-hand circulation, respectively, tend to remain about constant under a given degree of banking development. Furthermore, in a given state of banking organization and development the average ratio of reserves to deposits tends to be fairly constant, although there are temporary ups and downs from

season to season and although changes in business confidence exercise an influence on the ratio, banks tending to hold larger percentage reserves when troublesome times are threatening and smaller percentage reserves when the financial skies are clear. Speaking broadly, it may be said that in a given state of banking organization and under normal conditions of business confidence an increase in the amount of money in circulation tends to cause a proportionate increase in the amount of bank reserves and therefore to lead to a proportionate expansion of bank deposits and of deposit currency circulation. This is a useful basic principle to work from but it must be applied with caution, and careful allowances must be made for changing conditions in banking laws, banking organizations, business confidence, and business practices affecting the rate of monetary and deposit turnover. The quantity theory of money which we are here expressing is like every other economic law, merely a statement of the tendencies of certain economic forces under a given set of conditions. Like the broader law of demand and supply of which it is merely one phase, the quantity theory is useful only when applied intelligently and with due allowance for complicating forces.

Seasons and Cycles

SEASONAL MOVEMENTS IN MONEY MARKETS.—The demand for money in the United States is seasonal in character. This fact is largely due to conditions pertaining to the marketing of

agricultural crops. Seasonal demands for money vary to some extent in different sections of the country in accordance with local conditions, but the seasonal swings manifested in New England, the Middle States, and the district tributary to Chicago, are essentially the same. Since this territory includes New York City, the country's dominant money market, it may be taken as typical. This territory shows five important seasonal periods which may be briefly described as follows:

- (1) Throughout January and during the early part of February there is normally a pronounced "easing up" of the money market. By the forepart of January the crop-moving demand for money in the West and South is over and the return flow of cash is at its height. There is a natural reaction—in part psychological—which results from the relaxing of the heavy strain on the money market incident to January 1 settlements and to the passing of the holiday season. At this time freight traffic, both on the railroads and the inland waterways, is relatively small.
- (2) The next seasonal movement is the "spring trade revival," beginning about the middle of February and extending until the latter part of March or the fore part of April (in some years a week or so later). This recovery is stimulated by the cheap money prevailing during the preceding period, railroad traffic is released from the incubus of cold weather and snow, and the inland waterways are opened up; on April 1 comes the demand for large

interest and dividend settlements, and in this period comes the spring demand of agriculturists for the planting of the crops.

- (3) The third important seasonal movement is the weakening money market of the late spring, followed by the summer depression. This period extends from the fore part or middle of April to the fore part of August. It is interrupted by a temporary reaction about July 1, the time of semi-annual settlements. This period shows the natural reaction from the high rates of the preceding period, the anticipation and later the realization of the hot months of summer comprising the vacation period, the lessened demand for funds in the middle West after the planting of the crops, and the resulting return of cash to New York. The declining and cheap money market at this time, which finds expression in such phenomena as large bank reserves, low percentage of loans to deposits, low interest rates, gold exportations, and high security prices, is to some extent self-corrective.
- (4) The crop-moving period is the fourth period. This period, the discounted beginning of which is evidenced by the upward turn of interest rates on sixty to ninety day commercial paper and four months' time paper as early as the first week in July, may perhaps best be dated from the first week in August, when call rates begin their upward movement and when bank reserves begin their decline. Under pressure of the crop-moving demand for cash in the West and South, bank reserves are depleted and the money market tightens rapidly until about October 1.

(5) The fifth and last seasonal period in the New York money market extends from about the first week in October to the opening of the new year. It is a period of considerable uncertainty and of many minor fluctuations, but the demand for moneyed capital continues large until after the holiday season and January settlements. The westward movement of cash falls off rapidly in November and December, and by the latter month the return flow has set in. The southward movement declines in November, but shows some signs of increasing temporarily in December. Gold imports reach a low point in December.

Doubtless the Federal Reserve System has exercised influence in the direction of lessening the extent of these seasonal fluctuations, and also some influence upon the delimitations of the periods themselves. Seasonal demands for money, however, are organic, and while new banking conditions may diminish their acuteness, the problem of periodical variations promises to continue to complicate the banking business.

BUSINESS CYCLES.—In addition to seasonal variations, business is affected by longer periods of alternating depression and activity. Such alternations follow one another at irregular intervals, and have become known as "business cycles." Nobody can predict exactly the length of any period of activity or the length of any period of depression. Such periods in the past have been of varying duration, and have been characterized by similar phenomena, as follows:

(1) Beginning with a period of depression, there

is a gradual recovery, and business reaches a stage of what may be called normal activity. From the normal stage business may develop into a condition of abnormal activity, culminating in a crisis. The crisis itself may be accompanied by a panic or not, but invariably a period of depression follows any crisis. Banks are not mainly responsible for these changes, for banking operations rather reflect than create business conditions; but the banking business is deeply concerned with alternations between depression and activity. When business is inactive the trend of commodity prices is downward, and profits are small, if there are any profits at all. The demand for capital is relatively small, including the demand for bank loans. Banks at such times commonly find that they could lend a good deal more than the solvent borrowers want. At such a period there is a good deal of business house cleaning. Weak concerns are weeded out, and those that stand the strain are forced to put into use every device that will lessen the cost of production. A period of depression, therefore, may be regarded from many points of view as creating the conditions necessary for more prosperous times.

(2) What brings about a revival in business activity? It is a little difficult to say, but usually it would seem to be something which stimulates particular branches of business. It may, for example, be the active demand in foreign countries for American agricultural products. If such a demand comes, and there happen to be good harvests in this country, obviously at least one class in the community gets a

large and satisfactory return for its endeavors. The demand for other commodities from the agricultural sections of the country would in such circumstances unquestionably increase. Improved conditions in agriculture would have an effect which would be felt to a greater or lesser extent throughout the whole range of industry. This demand would be greater in some branches than it would be in others. It might be particularly great for agricultural implements. This increased demand for agricultural implements would in turn create an increased demand for iron and steel products; and, again, the increased prosperity in agricultural sections of the country would presumably extend to the railroads and increase their demand for products. The increased demand thus spread to these other lines of business would in turn from them react back once more over the entire industrial field, and thus by a process of induction, so to speak, each kind of business would act and react upon all kinds of business in a favorable way. People would in such circumstances begin to feel a bit more optimistic about the future. Wholesalers, jobbers and retailers would begin to stock up more largely with all kinds of commodities in which they deal. Financial conditions would be favorable to the advance, because in a period of financial depression the demand for capital is relatively small, including the demand for short-time loans. All conditions, then, are favorable to the expansion of business in case a profitable demand arises for additional products of industry. A period of recovery has then been reached.

(3) With the advent of business activity an increased number of people are willing to invest additional capital for an expected future demand. A willingness manifests itself to extend railroads, to enlarge factories or build new factories, to construct additional office buildings, etc., and for the time being no difficulty is encountered in securing capital for such enterprises. This construction work necessarily creates an increased demand for the production of industries which supply material for construction purposes, notably the iron and steel industry. Prices now begin to advance and perhaps advance rather rapidly. This further increases business activity for the time being, for when prices advance profits immediately increase, and for a very natural, simple reason. Wages and salaries do not move up very rapidly, not nearly so rapidly as prices of most commodities may move. Naturally, therefore, the advantages from advance in prices goes to those persons who own the current products of industry. The persons who own the current products of industry are the active business men and the shareholders in corporations. Increased profits naturally stimulate further enterprises, further construction and further investments designed to supply additional commodities of all sorts. Now the demand for capital may begin to outstrip current savings. Rates, not only for short-time loans but for capital which is to be invested for long periods, begin to advance, but the business man is perfectly ready to pay these higher rates, because his profits, owing to higher prices, are unusually large.

(4) This is the situation of affairs during a period of activity which becomes a period of normal business activity. When prices are moving upward profits are large, and errors of judgment are particularly likely to be made in the investment of additional capital. The assumption is made that profits will remain at their existing high level or perhaps reach a still higher point. Less care is exercised in such circumstances in making investments, and the willingness to pay fancy prices for the capital which is secured is marked. Moreover, after a time, wages do begin to advance, and even salaries may move up a little, though they are the last to be affected. The upward movement of wages may be more rapid after a while than the further upward movement of prices, although on the whole that does not seem to be the case. From the study of price statistics and wage statistics it does not appear that in the year or two of abnormal activity preceding a crisis wages in general have been moving up more rapidily than prices. The serious cause for trouble in the labor situation is to be found elsewhere. The increased activity of business necessarily means full employment for everybody and competition for workmen and a larger amount of overtime. The results are higher costs of production. Men are taken on rapidly, and the average efficiency of the men is lowered, partly because men are naturally not so efficient when they know they can with perfect ease get another equally good and perhaps better position, partly because of inadequate training, since business is so active that there is not time to train the newer

men taken on, and partly because of overstrain. Men can work overtime for a short period without affecting their efficiency, but a good deal of overtime is bound to lessen the average output per hour of the workman. All of these elements tend to increase the labor cost of production toward the close of active business, and all of these are factors quite independent of the amount of wages paid.

(5) In a period of very active business, also, there is less time to devise and put into operation further arrangements for lessening cost. The thing which seems important is to get out product and get it out as rapidly as possible. Just because profits have been large, business men are prepared to take more risks. They are prepared to extend their operations unduly on the capital which they themselves have invested in their business. They trust that everything will come out all right, even though they allow a good many bills payable to accumulate; and even though they are granting more and more credit to their customers. Balance sheets show an increased amount of receivables, and an increased amount is borrowed on short time. When the supply of capital available for longtime investment becomes a scarcity, when it becomes difficult to float issues of bonds, or to secure money through additional preferred or common stock, a business which is expanding its operations is likely to attempt to do so on the basis of an increased amount of short-time credit. Now a concern which has borrowed a large amount on short time is in a very vulnerable position. If anything happens which delays

collections very much, or if anything happens to banks which makes them desire to contract loans, such an overextended business gets into difficulties. Moreover, if anything happens which tends to check the upward movement of prices, which causes profits to decline, it will have a serious effect upon such a business, for after all one of the considerations taken into account in granting short time credit is the high earning power of the borrowing concern. If it is evident that the earning power is lessened, banks may be inclined to curtail loans.

(6) All the conditions, therefore, tend to become unfavorable in a period of general business activity. The situation becomes one in which comparatively slight disturbing influences may cause a collapse. It is, however, impossible to predict just when a collapse will come. Sometimes the business situation changes slowly from one of business activity to one of depression, without any striking or dramatic circumstances. That is, however, not the rule. As a rule, a crisis marks the transition between business activity and business depression. At the end of a period of very active business, an exceptionally large number of concerns are in a position where anything which lowers their earning power, or which delays the payment to them for what they have sold, will put them into difficulties. These difficulties may be only temporary, if the earning power is good, but whether they are temporary or permanent the immediate effect is pretty much the same—it weakens the banks, it destroys confidence in the immediate future of business, and brings

home to people generally that it is highly probable that over all the field of industry there are presumably many weak and overextended concerns. When people begin to feel this way about the situation, they naturally cancel all plans for future investment which they can by any means cancel. Plans for construction work of all sorts are given up, and the demand for the various materials which go into construction work falls off. Prices drop, and with the fall of prices profits drop, and many concerns which were based upon the assumption that profits would continue at the rate at which they were when those enterprises were started go to the wall. Then is seen the beginning of a period of depression once more, which after a time will be used for another business house cleaning. Crises may degenerate into panics or they may not, and it does not depend so much upon the severity of the crisis as it does upon the character of the banking system. When a crisis comes on, people engaged in business attempt to strengthen themselves against a storm. They do it in two ways-by deferring payments to others and by seeking to get paid by others and seeking to borrow from banks. The demand for accommodation from the banks is invariably increased when a crisis comes along. The proceeds of such loans are commonly not used, but are wanted as a sort of insurance or backlog.

(7) Under such circumstances, the contraction of loans by banks not only makes the general business situation for the moment more unsatisfactory, but it also lessens public confidence in the banks and leads

people to withdraw money from the banks, thus still further strengthening the tendency of the banks to force contraction. In our various crises this course has been followed until panic conditions have been created, and until the banks have realized that it was impossible to insist upon further contraction because it would involve general ruin. The banks have then, when forced by panic conditions, continued loans and have also sometimes suspended cash payments. other countries, and it is hoped in this country under the Federal Reserve System, the contraction of loans in crises is not insisted upon simply for the purpose of strengthening the banks. It is hoped that there will be sufficient cash and credit available so that loans will not be contracted at such times, but that a sufficient increase in loans will be made to meet the needs of the business community. If we get such conditions crises will not in the future in this country degenerate into panics.

CHAPTER III

Banks and Banking

eral Reserve System. Although the law creating this system was not passed until December 23, 1913, and although the Federal Reserve banks did not open their doors for business until November of the following year, the Federal Reserve System to-day is by far the largest and strongest central banking system in the world. During the war it rendered incalculable services to the United States and its Allies—services so great that the Allied cause probably could not have been financed without it.

PLAN OF ORGANIZATION.—Under the Federal Reserve law the country is divided into twelve Federal Reserve Districts, in each of which there is a Federal Reserve bank. All of the Federal Reserve banks are under the general control of a body of men in Washington known as the Federal Reserve Board. In determining the boundaries of these districts, the law required the authorities to have "regard to the convenience and customary course of business," and to make each district large enough to provide the minimum capital of four million dollars required by law for a Federal Reserve bank. No one of the twelve banks was to be made so large as to dominate the others. Territorially, the districts vary widely in size. The San Francisco district, for ex-

ample, covers nearly fourteen times the area of the New York district, although the San Francisco Federal Reserve Bank has only about one-fourth the resources of the New York Federal Reserve Bank.

MEMBERSHIP IN THE FEDERAL RE-SERVE SYSTEM.—All National banks are required by law to be members of the Federal Reserve system, while State banks and trust companies which measure up to certain standards as to amount of capital, character of business, and amount of reserve, are permitted and encouraged to join. Every bank joining the system must subscribe to the stock of the Federal Reserve Bank of its district an amount equal to six per cent of the member bank's capital and surplus. One-half of this subscription, namely, three per cent, must be paid in promptly and the other three per cent is pavable on the call of the Federal Reserve Board. This stock yields the member banks a six per cent cumulative dividend, which is fixed by law. The stock must be retained as long as the bank continues to be a member of the Federal Reserve System. If the member bank goes out of business or for any other reason ceases to be a member of the Federal Reserve System its Federal Reserve bank stock will be redeemed at par.

FEDERAL RESERVE BANK DIRECTORS.

—Each Federal Reserve bank is under the control of a board of nine directors, which are divided into three classes of three directors each. These classes are known respectively as Class A, Class B, and Class C directors. Class A directors are bankers, Class B

directors are business men or farmers, representing the business community, and Class C directors represent the public at large. Each director holds office for three years, and one director of each class retires every year. The banks of a district are classified into three groups, representing (1) the large banks, (2) the middle-sized banks, and (3) the small banks. Each of these groups select, on the basis of one vote for each bank, one Class A director and one Class B director. Class C directors are appointed by the Federal Reserve Board. One of the Class C directors, who must be a banker, is made Chairman of the Board.

FEDERAL RESERVE BOARD.—Above the twelve Reserve banks and coordinating them is the Federal Reserve Board with headquarters at Washington. The Board is assisted by a Federal Reserve Council, consisting of twelve members, one being appointed by the Board of Directors of each of the twelve Federal Reserve banks. In this way the banks of the country are closely knit together into one comprehensive organization. All interests are represented, while the general public interest is made dominant through the control, in matters of broad policy, exercised by the Federal Reserve Board at Washington directly and through its three representatives in each Federal Reserve bank, namely, the Class C directors. The chief functions of the Federal Reserve System are: (1) to centralize and render mobile the country's bank reserves; (2) to provide an elastic bank note and bank deposit currency; (3) to provide an efficient

system for the clearing and collection of checks; (4) to serve as a depository and fiscal agent of the federal government; and (5) to act as the conservator of the American money market.

BANK RESERVES CENTRALIZED AND MOBILIZED.—Under the Federal Reserve System, the reserve money of the country, instead of being widely scattered as formerly in thousands of banks, is largely centralized in the twelve Federal Reserve banks. In fact all legal reserves of National banks and of the majority of State banks and trust companies belonging to the system now consist of deposits in their respective Federal Reserve banks. All member banks, of course, carry some cash in their own vaults for till money purposes, but this till money cannot be counted as legal reserve. Against time deposits all National banks are required to keep a legal reserve of three per cent; and against demand deposits National banks in central reserve cities must keep a legal reserve of thirteen per cent, those in reserve cities a legal reserve of ten per cent, and those in other cities, a legal reserve of seven per cent. Many commonwealths authorize State institutions joining the Federal Reserve System to substitute for the legal reserve requirements of State law those of the Federal Reserve law.

Centralized as it is in a dozen large reservoirs which are closely piped together, this vast sum of reserve money can be quickly directed at any time to the places where it is most needed. If, for example, funds are comparatively plentiful in the New York district, and scarce in the Chicago district, they may be quickly diverted from New York to Chicago (1) through the rediscounting by the New York Federal Reserve Bank of the paper of the Chicago Federal Reserve Bank, or (2) through the increasing sale in the New York market by Chicago banks and by brokers of bankers' acceptances, trade acceptances and other commercial paper from the Chicago district. Such paper has been made highly marketable throughout the country by the fact that it can be readily turned into cash at any Federal Reserve bank by the process of rediscount or sale.

DISTRIBUTION OF RESERVE FUNDS.— Within any Federal Reserve district, reserve funds may likewise be easily turned to the point of greatest need. Through the natural reduction of rediscounts and loans by a Federal Reserve bank for banks in those parts of its district where funds are comparatively plentiful and through the increase of advances to banks in those sections where funds are in greater demand, the bank reserve strength of the district can be so distributed as to give its maximum efficiency and take care of the varying seasonal needs of the different sections. Within a district, moreover, just as among the different districts, there has been made possible an easy flow of bank funds from section to section through the open discount market which has been largely created by the fact that the Federal Reserve bank is always ready to rediscount or purchase high grade business paper of short maturities. BANK NOTES AND DEPOSIT CURRENCY

ELASTICITY.—A second important function of the Federal Reserve System is the service it renders in providing an elastic bank-note and deposit currency. A member bank needing funds may obtain them from its Federal Reserve bank by rediscounting eligible acceptances and commercial paper, or by borrowing on its own notes collateralled by eligible paper or by the Government debt. It may have the proceeds placed to its credit as reserve money on which it may expand its loans and deposits, or it may take the proceeds in Federal Reserve notes, which it may use as till money. To a member bank, Federal Reserve notes and Federal Reserve deposits are interconvertible. It may deposit notes and obtain a deposit credit, or it may check against a deposit credit and obtain Federal Reserve notes. When it borrows from its Federal Reserve bank, it takes the proceeds of its loan in the form or in the proportions between the two forms that best meet its needs. The expansion is in Federal Reserve circulating credit. The member banks in meeting the needs of the public largely determine the form, whether Federal Reserve notes or bank deposits, in which that expansion shall take place. While a Federal Reserve bank is normally required to hold a cash reserve at least equivalent to thirty-five per cent of its deposits, and a gold reserve of not less than forty per cent of its outstanding notes, these limits are not absolutely fixed, and in times of emergency they may be reduced under certain safeguards and penalties laid down in the law. As the demand for money later slackens, say after the crop moving period is over, member banks reduce their obligations to Federal Reserve banks by paying off their loans, with the result that Federal Reserve notes are retired, and Federal Reserve bank deposits are reduced.

FEDERAL RESERVE NOTES AND FED-ERAL RESERVE BANK NOTES.—Federal Reserve notes, it should be observed, are obligations of the United States Government, and a "first and paramount lien on all the assets" of the issuing Federal Reserve bank. They are supported by the specific pledge with the Federal Reserve agent of high grade collateral amounting to at least one hundred per cent of their value. These notes are as strong as the United States Government itself. Federal Reserve banks issue another form of paper money which is known as Federal Reserve bank notes. Federal Reserve bank notes are bond-secured notes which differ from the National bank notes practically only in the fact that they are issued by Federal Reserve banks instead of by National banks.

CLEARING AND COLLECTING CHECKS.—A third function of the Federal Reserve System is to provide an efficient system for clearing and collecting checks. Each Federal Reserve bank exercises the function of a clearing house in its district for member banks and for qualified non-member banks known as clearing member banks. From such banks in its district the Federal Reserve bank will receive at par checks drawn on all member and clearing member banks and on all other non-member banks, which

agree to remit at par through the Federal Reserve bank of their district. Clearing and collection services for members and clearing member banks and for other Federal Reserve banks are also rendered by each Federal Reserve bank in the case of checks received from outside the district which are drawn upon member and clearing member banks of its district and upon all other non-member banks of its district whose checks can be collected at par by the Federal Reserve bank. Recently Federal Reserve banks have extended their free collection system to cover items like promissory notes, trade bills, time drafts, acceptances, and coupons.

GOLD SETTLEMENT FUND.—An important feature of the clearing and collection system is the gold settlement fund (and the separate but similar Federal Reserve agents' fund). The gold settlement fund consists of gold belonging to the respective Federal Reserve banks and held for safe-keeping in the United States Treasury. The sums belonging to the twelve Federal Reserve banks are made payable to the order of the Federal Reserve Board. Payments among Federal Reserve banks are effected daily by telegraph through debits and credits on the books of the gold settlement fund which are kept at Washington by the Federal Reserve Board.

GOVERNMENT DEPOSITARY AND FIS-CAL AGENT.—A fourth function of the Federal Reserve System is to serve as a depositary and fiscal agent of the United States Government. The Federal Reserve banks act as depositaries of the general funds of the United States Government, and with the discontinuance of the sub-treasuries, the Federal Reserve banks have the custody of Government trust funds, and perform other functions formerly entrusted to the sub-treasuries. The Federal Reserve banks transfer funds from place to place for the Government without charge. They make temporary advances to the Government when needed. They act as fiscal agents of the Government in the issue, conversion, and payment of the Government debt, and in the payment of interest. In this connection they rendered services to the Government of immense value during the great war, for upon them fell a large part of the responsibility for organizing the great Liberty Loan and Victory Loan campaigns, for floating the numerous large issues of certificates of indebtedness, and for administering in behalf of the Government the securities representing these vast loans.

CONSERVATOR OF AMERICAN MONEY MARKET.—The last of the important functions of the Federal Reserve System is the general one of acting as the conservator of the American money market. The Federal Reserve System is a great public trustee. Upon it the public must largely depend for the conservation and regulation of the American money market. The Federal Reserve authorities have great power, and with that power goes a large public responsibility. In meeting this responsibility their chief weapon—although not their only one—is the power to raise and lower the Ameri-

can discount rate through varying the discount rates of the twelve Federal Reserve banks. By raising their rates, and if necessary taking vigorous measures to make their higher rates effective, the Federal Reserve banks have the power to curb a runaway money market and to prevent a dangerous outflow of gold; in other words, to prevent an expansion of credit which, if unchecked, might be disastrous. By lowering the discount rates, on the other hand, when the prospects are brightening, they may stimulate a needed credit expansion.

FIRST UNITED STATES BANK.—The Federal Reserve System is an evolution of circumstances and experience. There were, at the close of the American Revolution, probably not more than three or four well established and sound banks in the United States, so that the organization of a National institution which should have branches scattered over the country and which should be practically the representative of the Federal Government was peculiarly desirable. Such an institution was created in 1791, upon the recommendation of Alexander Hamilton, the first secretary of the Treasury, and became known as the First Bank of the United States. The bank had a capital of \$10,000,000, divided into 25,000 shares of \$400 each. Of this sum \$8,000,000 was open to subscription by the public, while the other \$2,000,000 was to be subscribed by the United States and paid in ten equal installments with interest at 6 per cent. The subscriptions to the stock were to be paid at least one-fourth in specie and the balance

in government bonds. Each shareholder was entitled to cast one vote for one share, one vote for the next two shares and so on according to a declining scale up to thirty votes, which was the maximum number of votes that could be cast by any one person or con-The power to inspect all the affairs of the bank except the accounts of private individuals was given to the head of the Treasury, and he was also authorized to call for reports as often as once a week if he chose. Simple asset-currency bank notes were authorized to be issued. The bank was not permitted to become indebted for amounts greater than its capital stock over and above the amount of its deposits—a restriction that practically limited the issue of notes to an amount not in excess of the capital stock. The notes were made receivable for public dues as long as they should continue to be payable in gold and silver. There were no legal reserve requirements against either notes or deposits. The bank was allowed to establish branches wherever the directors saw fit, but only for discount and deposit. No trade of any kind could be conducted, and the bank was not allowed to hold real estate, though it might lend on mortgage security. The bank was to transact much of the fiscal business of the Government. It was given an exclusive National charter for twenty years. The First United States Bank proved to be a great success, rendering the currency of the country more stable, supplying much needed banking accommodation, providing a note currency which was on the whole satisfactory, and render-

ing valuable fiscal services to the Government. The bank forced upon many State banks the obligation of redeeming their circulating notes upon demand. Throughout its history it maintained itself in a strong position. Nevertheless, there was considerable opposition to the bank from the first, and this opposition grew stronger as the time came for the expiration of its charter. The bank stockholders were of course desirous of continuing the institution, and as early as 1808 petitioned for a renewal. Their application was supported by Secretary of the Treasury Gallatin, who showed that the Government had been well served by the bank and incidentally had made a handsome profit on its stock, besides earning dividends averaging 83% per cent per annum. An exceedingly strong situation was occupied by the bank at this time, as it had on hand about \$5,000,000 in specie, while its loans and discounts were \$15,000,000, consisting chiefly of short-time paper. The opposition was due in part to the fact that a large proportion of the bank's shares was owned abroad, and that profits, therefore, went to foreign stockholders. The antagonism, moreover, of the State banks, which had been growing in number, was very strong. After a bitter struggle, Congress declined to renew the charter, and the bank went out of existence in 1811.

SECOND UNITED STATES BANK.—It was an unfortunate time at which to make a change in the system of banking. The War of 1812 was on the point of breaking out, and the public and the Government more than ever needed the aid of a strong

financial institution. The State banks in this period of National crisis proved to be weak reeds for the Government to rest upon. Conditions became so bad that fresh proposals were put forward for the organization of a new United States bank. Congress finally passed a law in 1816 authorizing the Second United States Bank. The Second United States Bank was in most respects like the first, although it was much larger. The capital was \$35,000,000, one-fifth being subscribed by the Government, and four-fifths by the public. In order to be assured of an exclusive charter for twenty years the bank paid the Government a bonus of \$1,500,000. The bank was not well managed during the first few years of its existence, but later was placed in sane hands and applied a rigid system of control over the State institutions through insisting on their keeping their notes redeemed in coin upon presentation. Branches were established here and there as needed, and the note currency issued by the bank became a practically universal circulating medium. Although the bank carried on various operations that were probably outside the scope of its charter, and did not conform entirely to the limitations with respect to methods of issuing circulating notes, it was undoubtedly the most powerful and bestmanaged financial institution the country had seen, and its effect was to supply a far higher degree of convenience and efficiency in making payments than had ever before been experienced. The Second United States Bank, however, like its predecessor, fell into difficulties because of political opposition. There was, as usual, the antagonism of the State banks, which were restive under the restraining authority of the overshadowing Federal institution and desired to see it done away with that they might get more business and be freer to do as they chose. Beside this there were large general influences of a political character militating against the bank, and the persistent opposition of President Jackson focused all this antagonism in an irresistible way. A re-charter was consequently refused, just as it had been in the case of the First Bank of the United States, and the result was that the bank obtained a charter for thirty years from the State of Pennsylvania in 1836, thus becoming a State institution and retaining its original \$35,000,000 capital. Up to this point the bank had occupied a sound position for many years, but it now found itself with too large a capital for the more restricted field in which it was compelled to operate. The result was that loans of a doubtful character were undertaken, and that the bank was finally obliged to suspend and go into liquidation in 1841.

DEVELOPMENT OF STATE BANKING.— While the Second Bank of the United States had been running its course, the various States had been experimenting with different kinds of banking systems, some successfully and others disastrously. In the course of this experience, almost every type of banking was attempted, and the result was the accumulation of a great fund of experience as to the best way in which not to conduct banking. Among the distinct types of banking systems, developed during

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the first half century of our National life, were the so-called New England system, the bond secured system of New York State which in some respects was copied by our later National banking system, the safety fund system of New York State in which there was a guarantee fund provided for the protection of bank note holders and bank depositors, subsequently limited to note holders only, and the "State Banks" (by which is meant banks owned and operated by State Governments or at all events very closely controlled by them). Of all these systems the one that stands out as having been most conspicuously successful was that established in New England. One great element in the success of the "New England banking system" was found in a plan which was not required of the banks by any law but was the result of voluntary cooperation on their part. This was the so-called "Suffolk System of Redemption." The banks had found it hard to maintain constant and steady redemption of notes, and had observed that the sounder institutions suffered from the practices of those that were willing to go as far as they could in evading prompt redemption and in resorting to more or less questionable methods. Under the principle of Gresham's Law, the notes of the weaker banks, that did not redeem their notes promptly, tended to remain in circulation while those of the stronger banks, that redeemed on demand were quickly withdrawn from circulation. The result was a desire to enforce prompt redemption of notes, and this was accomplished by the so-called "Suffolk System."

Under this system, the New England banks joined in establishing a redemption office in Boston, which was carried on by the Suffolk Bank. This bank was incorporated in Boston in 1818 and a substantial number of New England banks joined in a plan whereby they each made a permanent deposit with the Suffolk Bank and in addition kept on deposit such sums as were needed for the current redemption of their notes. At first the country banks were unwilling to join the system, but they were finally obliged to yield, and make the required deposit with the Suffolk Bank, which thereafter redeemed their notes at par when presented, charged them up to the banks that issued them, and sent them home whenever desired. This was tantamount to the establishment of a clearing house for bank notes. The Suffolk system thus furnished a striking object lesson of the good effects of prompt redemption of bank notes and was very influential in later banking legislation.

BANKING DEVELOPMENT PRECEDING THE CIVIL WAR.—The success of the First and Second United States Banks naturally led to the growth of imitations, and a number of State banks modeled upon the Federal institution were established. Thus the States of South Carolina, Ohio, Indiana, and some others created State institutions. Some of these institutions proved exceedingly successful, while others were failures. Out of all these conflicting systems, there developed a gradual tendency toward better banking conditions and wiser management. After the discontinuance of the Second

Bank of the United States, there ensued a severe panic, starting in 1837, due in part to unwise banking and the undue extension of credit upon improper or inadequate security. The result was to warn the banks against repetition of the practices which had led to inflation and disaster. There was a gradual improvement in methods between 1840 and 1860. But the evils of a decentralized, widely diffused and uncontrolled system of banking, or lack of system, continued to exist. At the opening of the Civil War, there were more than 1,600 kinds of bank notes in circulation. Counterfeits were numerous, and, except for voluntary arrangements made by groups of banks among themselves, there was nothing to compel banks to receive the notes of other banks. Redemption facilities were crude and inefficient throughout most of the country, and there was a strong feeling in favor of some change, in the direction of more powerful central control, that would guarantee a safer and more uniform note issue.

INDEPENDENT TREASURY SYSTEM.— Meanwhile the Government, discouraged and annoyed at the experience it had had after the discontinuance of the Second Bank of the United States, had established the so-called Independent Treasury System. Prior to the establishment of this system the deposits of the Government, formerly kept with the Second Bank of the United States, were distributed among a number of State banks. The panic of 1837 and the resulting suspension of payments embarrassed the Government and enforced the necessity

of getting some plan that would retain the funds under the real control of the Federal administration. After various expedients had been suggested, and their adoption had been unsuccessfully sought. Congress created the Independent Treasury System, making it permanent in 1846. This system existed down to the year 1920, when a law was passed providing for its gradual discontinuance and for the transfer of most of its functions to the Federal Reserve banks. The idea of the Independent Treasury System was that the Government should entirely disassociate itself from the banks and should pay and receive only coin, keeping its funds physically in its various subtreasuries, of which nine were ultimately established. With the passage of the National Banking Act however during the Civil War, the original independent system was greatly weakened and the Government inaugurated the policy of using National banks to a considerable extent as depositories of Government funds.

Commercial Banks

NATIONAL BANKS.—National banks had their origin during the Civil War, in the Acts of February 25, 1863, and June 3, 1864. Just then the Union Government was having a serious time in meeting the enormous expenses of the war, the paper money of the country, both the notes of State banks and the various issues of United State Government, were in a deplorable condition and had been at a discount in terms of gold since December 30, 1861. This

unfortunate condition of the currency, with gold and silver practically all driven out of circulation except on the Pacific coast, and with the United States notes ("greenbacks") greatly depreciated, was the strongest single reason for the establishment of the National banking system. This system, it was hoped, would give greater uniformity and stability to our currency. A second reason, almost equal in importance, was the fact that the new National banks were expected to create a market for United States Government bonds because each bank was required to invest a certain proportion of its capital in United States bonds, and all bank notes issued by National banks were required to be secured by such bonds in the proportion of \$100 in bonds (market value or par value, whichever was the lower) for each \$90 of bank notes issued. There were other reasons favoring the establishment of the National banking system, but these two were the most important. An act was passed in 1865 to go into effect in 1866 imposing a Federal tax of 10 per cent a year on all issues of State bank notes. This tax, which was contemplated when the National Bank Act was passed, was intended to force the State bank notes out of circulation, giving the National bank notes exclusively the field of bank note circulation. It succeeded in its purpose. From 1866 to the inauguration of the Federal Reserve System in 1914 National banks had a monopoly of the bank note issuing privilege. The National Banking Act, although frequently amended in minor particulars, has remained fundamentally unchanged down to the

present time except for the modifications wrought by the establishment of the Federal Reserve System in 1914.

NATIONAL BANK CAPITAL AND SUR-PLUS.—The National banking system is a system of numerous independent banks which (except for a few State banks retaining their branches when reorganized as National banks and for foreign branches of which a number have been established since 1914) are not permitted to have branches. Minimum limits are placed upon the amount of capital a National bank must have, the minima varying with the population of the city or town in which the bank is located. In places of 3000 population or under the minimum capital is \$25,000; in places above 3000 population and not exceeding 6000 the minimum capital is \$50,000; in cities above 6000 population and not exceeding 50,000 it is \$100,000; and in cities above 50,000 population it is \$200,000. The law requires every National bank to carry to surplus each half year one tenth of its net profits, before declaring dividends, until the surplus shall amount to twenty per cent of the capital stock. Banks frequently organize with this minimum surplus of twenty per cent paid in by the stockholders. Most National banks accumulate surpluses as soon as practicable in excess of this legal minimum. The great bulk of our National banks are banks of small capital and surplus. All National banks are required to be members of the Federal Reserve system, and to invest in the stock of the Federal Reserve bank of their district,

an amount equal to 3 per cent of their capital and surplus. An additional 3 per cent may be required by the Federal Reserve authorities.

NATIONAL BANK NOTES.—Any National bank may issue bank notes up to an amount not exceeding the amount of its capital stock, but these notes must all be specifically secured by a pledge of United States bonds of a market value of at least 100 per cent of the notes issued. These bonds are deposited in the Treasury of the United States, except where lawful money to the full value of the notes is deposited in the treasury in exchange for bonds and for the purpose of retiring the bank notes. For the redemption of National bank notes in Washington the issuing bank maintains on deposit in the United States Treasury an amount of lawful money not less than 5 per cent of its notes outstanding. The United States Government guarantees the redemption of National bank notes, and to enable it to do so. it has not only the United States bonds pledged with it to secure bank note issues, but it has also a prior lien on all the assets of the issuing bank, including the double liability of stockholders. Our National bank notes are therefore as safe as the United States Government itself. They lack, however, the important bank-note quality of currency elasticity, since the amount in circulation tends to vary inversely with the price of United States two per cent bonds, and not, as it should, with the demands of trade for circulating media. Since 1914 the elastic element in our bank note circulation is provided by Federal Reserve

notes. National bank notes are not legal tender except in payments from one National bank to another. They are receivable, however, for all public dues except customs duties, and are payable for all salaries and other debts owed by the United States to parties within the United States, except for interest on the National debt and in redemption of the national currency.

LIQUIDITY OF NATIONAL BANK AS-SETS.—National banks are preeminently commercial banks, and inasmuch as their liabilities are for the most part payable on demand or on short notice, it is desirable that their assets should consist entirely or chiefly of paper with short maturities, so distributed as to bring a continual and more or less regular flow of cash into the bank. For meeting abnormal calls for funds in times of emergency the bank should also carry a substantial percentage of its loans and investments in forms that can be turned into cash quickly and without appreciable loss by the process of rediscount or sale. To the end of keeping the assets of National banks reasonably liquid and safe, the law imposes certain restrictions. National banks cannot invest in stocks (except an amount equivalent to 3 per cent of their capital and surplus in the stock of their Federal Reserve bank), although they are permitted to accept stocks as collateral for loans, and, in case of non-payment of the loan, to hold the stock thereby coming into their possession a reasonable time in seeking a favorable market for its sale. Loans on real estate security are not allowed except, to the

extent of an amount equal to one-fourth of the bank's capital and surplus or one-third of its time deposits, on real estate located in the neighborhood of the bank or in its Federal Reserve district, and worth at least twice the amount of the loan. In no case can the period of such a loan be longer than five years. National banks in central reserve cities are not allowed to make real estate loans. Any bank to protect itself may take a mortgage on real estate as security or additional security for a debt previously contracted in good faith, but it is not permitted to hold real estate coming into its possession in this way or any other way for a longer period than five years. It may, however, hold permanently sufficient real estate for bank premises, namely, "such as shall be necessary for its immediate accommodation in the transaction of its business."

LOAN LIMITATION NATIONAL OF BANKS.—A National bank may not lend to any one person or concern an amount exceeding at any time ten per cent of the bank's unimpaired capital and surplus. This limitation does not apply to certain classes of two-name business paper, to "bills of exchange drawn in good faith against actually existing values," to notes secured by shipping documents, warehouse receipts and the like, and to notes secured by United States Government obligations. (Sec. 5200 of Revised Statutes as amended by Act of October 22, 1919.) A bank may not lend money on the security of its own capital stock nor may it purchase this stock "unless such security or purchase shall be necessary to prevent loss upon a debt previously contracted in good faith"; in which case the stock must be disposed of within six months. In the early days of American banking there were great abuses in connection with the making of loans to bank directors and other stockholders secured by the bank's own stock. Such loans weakened, and in many cases practically destroyed the protection to the bank's creditors supposed to be given by the bank's capital. Hence the foregoing restriction in the National Bank Act—a restriction that has been adopted in the banking laws of many of our states. The principles of commercial banking described in connection with National banks apply in general to state-chartered banking institutions.

STATE BANKS.—State banks are organized under the laws of forty-eight different commonwealths, and while such laws are simliar in many particulars, the differences are sufficiently great to make generalization inexpedient. Most State banks are preeminently commercial banks, although practically all receive savings deposits and in some the time deposits bulk larger than those payable on demand. As regards loans and investments, the restrictions imposed on State institutions by the laws of most States are less exacting than those imposed on National banks by the Federal law. Loans on real estate mortgages play a much more important rôle in State banks than in National Banks. In many States State banks can be organized with a smaller initial capital than \$25,000, the minimum for National banks. In most States there are State superintendents of banks, or

other officers or commissions charged with the supervision of State banks. Minimum legal reserve requirements are found in most States, although they differ widely. A number of States (about one-fourth of the total) permit State institutions which belong to the Federal Reserve system to substitute the legal reserve requirements of the National banking law for those otherwise applicable to State institutions. Most States permit part of the legal reserve of State banks to consist of deposits in certain other banks, and some even include as legal reserve, within limits, certain kinds of high grade securities. The establishment of branch banks is usually greatly restricted when not prohibited, a fact due chiefly to the widespread fear of the monopoly powers that might be exercised by large banks with numerous branches.

Fiduciary Corporations

TRUST COMPANIES.— Formerly individuals were always appointed to act in trust capacities, but in the evolution of the business structure it became evident that individuals could not always be depended upon to act faithfully or intelligently while complications were often caused by their moving away or dying before the fulfillment of their trust. Such conditions made it apparent that corporations whose existence and location would be permanent, and under the management of men of integrity and proper training, would find favor with the public, and consequently such corporations were created. The various capacities in which trust companies ordinarily act

are as (1) executors of wills, (2) administrators of intestate estates, (3) trustees under wills and deeds of trust, (4) guardians of minors, (5) conservators or committees of incompetents, (6) agents for individuals, (7) transfer agents and registrars for corporations, (8) fiscal agents for governments, municipalities and corporations, (9) trustees under mortgages, (10) assignees and receivers for firms and corporations, (11) guarantors of surety bonds and real estate titles. While there are generally several departments in a representative trust company, the business really comes under but two headings, the banking department and the trust department. The banking department is conducted in general accordance with the methods used in commercial banks. The trust department has charge of all fiduciary matters. States where State laws permit, National banks may exercise the functions of trustee, registrar, executor and administrator by permission of the Federal Reserve Board. In a number of States, State banks are also empowered to exercise fiduciary functions.

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EXECUTORS AND ADMINISTRATORS.—An executor is a person named in a will by a testator, to carry out, after the death of the testator, the directions for the disposal of his property as set forth by the terms of the will. When a person dies intestate, that is, without leaving a will, his property must be disposed of in accordance with the law, and to do this the probate court appoints some one to act. The one thus appointed is called ad-

ministrator. Should the administrator die or resign the office before the estate is settled, the court appoints an administrator de bonis non, that is, administrator of the goods not yet administered. Should the one named as executor in the will decline to act, the court appoints some one to carry out the directions of the will. This person is called administrator cum testamento annexo, that is, administrator with the will annexed. Should an executor resign his office or die before the estate is settled, the court appoints an administrator de bonis non cum testamento annexo, that is, administrator with the will annexed of the goods not yet administered. The duties of executors and administrators are similar, viz., to settle the affairs of the deceased and distribute the property among the rightful heirs. Practically the only difference is that an executor has his course outlined in the terms of the will, while in the case of an administrator, there being no written instructions to carry out, he settles the affairs and makes a division of the property in accordance with the laws governing such matters.

TRUSTEESHIPS.—Any testator, instead of directing that the property be given outright to the heirs, may leave it in the form of a trust. That is, he may set aside certain sums or property, to be held for the benefit of the person or persons named, to whom the income only shall be paid, or to whom the distribution of principal shall not be made until some specified future date, or until certain events shall have come to pass. In such a case some one is

named in the will as trustee, and this person takes charge of the estate after the executor has completed his duties. The trustee's duties are, to care for the property, invest and reinvest the principal, collect the income and pay it over to the person or persons as directed in the will. The trustee is under the authority of the probate court, and must file at stated intervals a statement of assets and transactions. The fiduciary capacity thus described is known as a personal trusteeship. In these days of huge corporations, and the attendant issues of bonds, it is a right due the investing public that some responsible agent certify to the genuineness and regularity of such issues. It has accordingly become the practice for a corporation making an issue of bonds, to name a trust company as trustee of the mortgage securing the Acting in this capacity, it certifies that the bonds are genuine, and issued in accordance with the terms of the mortgage. It does not guarantee as to the value or payment of the bonds, or of the interest, when due, but in case of the default of the corporation that made the issue, it would foreclose on the property, and protect the interests of the bondholders. The fiduciary capacity thus described is termed a trusteeship under mortgage and is classified as a corporate trust.

GUARDIANS AND CONSERVATORS. — A guardian is one appointed to assume control over the person, or the estate, or both, of a minor. The guardian of the person of a minor has control over the habits, training, education and mainte-

nance of his ward. The guardian of the estate of a minor has charge of the property, collects the income and makes the expenditures for the support and education of his ward. The position of the guardian is of little less importance to the child than that of a parent, as he is largely responsible for the building of his ward's character, upon which much depends as to whether he becomes a good and useful citizen. A conservator (or committee) is one appointed by a court to assume control over the person, or the estate, or both, of an insane person, a spendthrift, an intemperate person, or one who is mentally incompetent. The duties are much the same as those of a guardian, except that he has charge of an adult instead of a minor.

AGENTS FOR INDIVIDUALS.—Acting as agent for individuals opens a wider field of duties than any other capacity in which a trust company may act. As executor, administrator, etc., where the appointment comes from a court, the duties ordinarily run along well-defined lines, as estates must be administered in accordance with the laws governing them. But in acting for an individual, the things which a company will be called upon to do are practically unlimited. This feature of the business appeals particularly to professional people, to those who are not familiar with business methods, to those in ill health who cannot attend properly to their own affairs, to those who spend considerable time traveling, and to those who do not care to be burdened with the details connected

with the management of their financial affairs. this capacity the company takes charge of whatever is intrusted to it, relieving the individuals of a part or all of their business affairs. It collects all forms of income, whether from securities or real estate, paying it over or holding it, as may be specified. It also reinvests principal, and attends to insurance, taxes and repairs connected with real estate. While certain of these agency duties do not require a written agreement between the trust company and its client, it is better practice to have such an agreement in all cases. When it is necessary that the company sign papers conveying title to securities and property of any kind, a power of attorney must be executed by the individual conferring specific powers to the company to act in such matters. This is a branch of business that is growing in popularity, because people are learning that a trust company, with is excellent facilities, can care for their financial affairs as satisfactorily as and oftentimes more so than the individuals themselves

TRANSFER AGENTS AND REGISTRARS.

—The great increase in the capitalization of corporations, as well as in the number of them, has opened up a very profitable field for trust companies to act as transfer agents and registrars. In fact the stock exchanges in some cities make it compulsory that corporations appoint such agents before their securities can be listed with them and dealt in upon their floors. In this way those dealing in such securities are

able to secure prompt deliveries of transfers, which otherwise would cause much inconvenience and loss of time were it necessary to send to the principal offices of corporations, which are to a great extent located at a considerable distance from the markets in which the securities are dealt in. The duties of transfer agent consist of keeping the stock books of corporations, passing upon the evidence in the change of title of the stock, and making such transfers as are in proper form, by the due recording of them and the issuing of new certificates to replace the ones cancelled. The same procedure is followed in the change of ownership of registered bonds, except that instead of cancelling the old bonds and issuing new ones, the original bonds are used, the names of new owners being noted in the spaces provided for such entries, after which they are returned to those presenting them for that purpose. The registrar's duty is to see that the stock and bond issues do not exceed the authorized limit. After a transfer has been made, the certificate is examined by the registrar to see that the necessary details in filling out have been complied with, and that the new certificate is for the same number of shares as the one cancelled, thus guarding against an over issue. In the case of registered bonds, such records are kept as will guard against an over issue of the series, while with an issue of bonds payable to bearer, the proper precautions are taken at the time they are put out, due records being made. In transferring stock, and in registering bonds, the signature of one of the trust company officials appears in order to authenticate the transaction.

FISCAL AGENTS. — As fiscal agent for governments, States, municipalities and corporations, the trust company undertakes to pay the principal of and interest on bonds or other obligations, when due, to handle the sale of bond isssues, negotiate loans, manage sinking funds, and perform special services of a financial character. also, if desired, takes charge of paying the dividends on the stock of corporations, relieving them of all responsibility connected with making out and mailing checks to stockholders, when such dividends become payable. This is a profitable business, because, in addition to receiving the regular fees for acting in these capacities, the company has the use of the money deposited to meet the obligations. This money, frequently being left in its hands for a considerable period of time, can be This department also loaned advantageously. handles the details connected with the reorganization of corporations. When the plan of reorganization has been decided upon, notices outlining it are mailed to the holders of the securities with the request that they deposit them with the trust company. When the company receives the securities, receipts are given, and when the reorganization has been perfected, distributes the new issues to the holders of such receipts. In the case of an assessment being made, the company receives the payments covering it, and if there are fractions connected with the new

issues of stock or bonds, the company adjusts them.

ASSIGNEES AND RECEIVERS. — As assignee the company takes charge of the affairs of insolvent business firms, realizing on the assets, and making proper distribution among creditors. As receiver it takes charge of the business of corporations which are in difficulty through financial embarrassment, or because of inharmonious relations between the stockholders and officers, due to unsatisfactory management. Receiving appointment in this capacity from the courts, it assumes control of the corporation, converting the assets into cash, paying off the creditors, and if anything remains, dividing it among the shareholders in proportion to their relative holdings of stock. The appointment of a receiver does not necessarily imply that the business must be liquidated. Instead, it frequently happens that the business is continued, under the management of the receiver instead of the officers, until such time as it is again on a paying basis, when the affairs are returned to the hands of the owners.

TREASURERS.—One capacity, the possibilities and profitableness of which trust company officials and the public do not yet fully realize and appreciate, is that of acting as treasurer of various forms of institutions, such as churches and other religious organizations, colleges, schools, and charitable, benevolent and fraternal societies. In the case of churches, the collections and donations are turned over to the company, and payments made by

it on orders drawn by the proper officials of the church. All investments owned by the church society are held by the company, and the income therefrom collected. Acting for schools, the company receives the appropriations made by the municipality, paying out the funds on orders signed by the district chairman or committee. It receives payments and donations to charitable and benevolent societies, making payments as authorized, and in the case of fraternal orders, it receives the payments made by the members covering their dues, and pays out the funds on the proper authority. The trust company is well adapted to act for colleges, as such institutions generally have endowments and funds that are invested in real estate and securities, and the various departments of a trust company, through the facilities offered, can relieve the college trustees and officials of all responsibilities in connection with the collection of income, care of real estate, reinvestment of principal, and payment of salaries and all other expenses.

INCIDENTAL FUNCTIONS OF TRUST COMPANIES.—Some trust companies conduct departments for insuring owners and mortgagees of real estate against loss through defective titles, liens and encumbrances. They also become surety for the faithful performance of contracts and obligations made by corporations, firms and individuals. Most trust companies operate safe deposit departments, often on a very extensive scale, and some-

times to the extent of providing a cold storage system for the keeping of furs and fabrics. class of people who deal with trust companies being so varied, information and advice regarding investments are constantly being sought. quently, many companies located in the large cities operate investment departments for the purpose of providing their clients with bonds, mortgages, etc., when they wish to purchase. A trust company conducting the usual number of departments is constantly being called upon to make the transactions necessary in the transfer of funds to and from foreign lands. A trust department handling any great amount of trust funds generally has beneficiaries who are traveling or residing abroad, and to whom income payments must often be made. In addition, letters of credit, travelers' checks, etc., are always in demand. It is accordingly a matter of convenience and profit for a trust company to have such connections that it can issue its own foreign drafts. Large trust companies generally find it necessary to place the handling of real estate matters in a separate department.

TRUST FUNDS.—The investment of trust funds is confined to a limited class of securities, the idea being safety of principal and regularity and permanency of income. The laws regarding trustfund investments are very strict in some States, limiting them to securities that are legal for savings banks. Such funds are generally invested in highgrade bonds, first mortgage loans on improved real

estate, and preferred stocks that have paid dividends regularly for a term of years. Some companies go outside these limits, and in many cases can do so with safety, but it is, of course, upon their own responsibility, and, should loss occur, they would be obliged to make it good. This refers only to investments made after the trust comes into the hands of the company for administration. When estates or trusts are accepted by a company, they frequently contain a wide variety of securities, and the institution cannot be held responsible for any loss coming to the fund through the failure of such investments. Registered securities belonging to trust funds are always put into the name of the company as trustee, or in whatever capacity it may be acting. way, in the event of the failure of the company, they cannot be held as a part of the assets to pay the creditors.

Savings Banking

THRIFT AND ECONOMY.—Savings banking is not confined to institutions known as "Savings Banks." In many communities the density of population does not warrant the establishment of more than one banking institution, which is generally a National bank, State bank or trust company. Such institutions, realizing the need of savings facilities for their communities, in many instances organize "savings" or "interest" departments. A savings bank is a corporation organized primarily to encourage thrift and economy in its patrons "receiving on deposit and

for safe-keeping such sums, usually small, as shall be offered, aggregating them and investing them for the benefit of the depositors as a whole, repaying such deposits on demand or on legal notice, with such interest as the profits of the corporation will warrant." In so far as organization and administration are concerned, savings banks are divided into two classesmutual or trustee savings banks and stock savings banks. Stock savings banks, as the name implies, have capital stock, upon which dividends are paid, and ownership and management are naturally vested in the stockholders. In the case of stock savings banks the shareholders also share the earnings, but in mutual savings banks all profits belong to and are held for the benefit of depositors. In all savings banks safety in investments is the paramount consideration and income only secondary.

SAVINGS BANK ACCOUNTS.—As a general proposition savings banks handle three classes of accounts: (1) single name accounts, (2) trust accounts, (3) joint accounts. The single name account, or an account in the name of one person, is most generally used, and is payable to the depositor, his attorney or his legal representative after death. Trust accounts as well as joint accounts are frequently opened to avoid the expenses of administration after death, or the making of a will. A real trust is not created by the opening of a trust account. It is termed a tentative trust or savings bank trust. In the matter of Totten, a New York decision, a trust account was defined as "A deposit by one person of his own money,

in his own name, as trustee for another, standing alone, does not establish an irrevocable trust during the lifetime of the depositor. It is a tentative trust merely revocable at will, until the depositor dies or completes the gift in his lifetime by some unequivocal act or declaration, such as delivery of the passbook or notice to the beneficiary. In case the depositor dies before the beneficiary without revocation, or some decisive act or declaration of disaffirmance, the presumption arises that an absolute trust was created as to the balance on hand, at the death of the depositor." Joint accounts are generally in names of two people, being payable to either or the survivor of them.

OPENING SAVINGS ACCOUNTS. - Upon opening an account with a savings bank, the depositor is asked to sign his name to the signature book or card, as the case may be, giving at the same time a description of himself for the purpose of future identification, which usually consists of the residence, occupation, date of birth, father's and mother's name, and sometimes the names of brothers and sisters of the depositor. In the event of the depositor not being able to write, note is sometimes made of the color of his hair and eyes, facial characteristics, etc., as a means of identification. These test questions may seem needless and savor of "red tape," but they often prove a protection to both the bank and the depositor. In spite of all these details as a method of identification, banks have been swindled by clever rogues, who, having become acquainted with the history of the depositor, and having obtained possession of the book,

have been able to successfully imitate the signature and answer the test questions. Unlike the bank of discount, which is bound in law to know the signature of its depositor and pays forgeries at its peril, the savings bank is but required to use due care to ascertain the identity of the depositor. The correct answer to the test questions, together with the signature that would pass inspection, has been held to be due care—provided there was nothing to excite the suspicion and inquiry of an ordinarily careful and competent bank official.

SAVINGS BANK PASSBOOKS.—At first sight it would seem that in signing the signature card, the depositor simply records his signature for future comparison. This is true in the bank of discount, but in the savings bank this act in law signifies assent to and agreement to be bound by the by-laws, copy of which is generally found in the passbook, and that portion affecting the depositors is in many States required to be hung in the lobby of the bank. When a depositor walks out with his book, he takes with him a contract, by which the bank has agreed to do certain things, and he likewise has agreed to do certain things, to which both are legally held. The passbook of a bank of discount is memorandum receipt merely, and is not intended to show the true state of the depositor's account until left for balance; but the savings bank book has been held to be in the nature of a voucher or evidence of the amount due, and is intended to show the correct balance at all times, aside from the accrued interest that may not have been entered, as in many States no payments are made without the book. If, in this contract, the bank agrees to use its "best efforts to prevent fraud" as many banks have done to their sorrow, the law will inquire if it has really used its "best efforts." If, however, it agrees to pay anyone who presents the book, this modification does not permit the officers to carelessly shut their eyes and pay any person presenting the passbook, but on the contrary they owe the depositor active vigilance in order to detect fraud and forgery. Even though the depositor does not read the by-laws, if he retains the passbook containing them he will be held by implication. The fact that he cannot read, or that the language is one he does not understand, will not be considered valid excuse in law; and if his deposits and drafts are continued over a considerable period of time, these transactions in themselves will be considered as an agreement to the conditions under which they were made.

SAVINGS BANK DEPOSITS.—After receiving his passbook upon opening an account, the depositor in making future deposits presents his book and money at the receiving teller's window, together with a deposit slip for the amount deposited. After verifying the amount named by the depositor, the teller makes out his ticket and enters the same on the passbook. Some banks pass the transaction through the hands of two or three men before returning the book to the depositor, in order that the entry may be verified, and also to prevent manipulation of the books. In one large bank in New

York no entries are made on the passbook by hand, all items being entered by a special adding machine, the totals being added in the machine and at the same time on the passbook and on a strip of paper which forms the basis of the cash proof. An excellent check on the passbook extensions is to list the balance as it appears on the passbook after the entry has been made, on the draft or deposit ticket, which is compared with the ledger balance when the item is posted. In some banks passbooks are compared at every transaction, and others make the posting on the ledger while the depositor waits. Savings banks generally endeavor to keep the accrued interest entered in the passbooks, although in some of the large banks, books must be left for this purpose.

SAVINGS BANK WITHDRAWALS.—Payments of money are made in a manner similar to deposits of money. The withdrawal receipt is filled out by the teller and handed to the depositor for signature. While he is signing, the book should be compared with the ledger account, and if any interest is due the amount is entered thereon. The test clerk then compares the signature with that in the files. The test questions are asked and if the transaction appears regular, the money is paid. Accounts of deceased persons, lost books, funds of societies, lodges, etc., joint and trust accounts, require more careful attention, and are usually referred to an official. Cash is generally used in making payments, but drafts are issued upon request, and for payments through the mails. When the funds are all drawn the book must be left at the bank, where it is carefully filed for future use, and rarely, if ever, destroyed. Cases are on record where suit has been brought twenty years after closing an account and the old passbook has been important evidence in tracing the history of the account and the terms under which it was opened.

LOST PASSBOOKS.—Whenever a passbook is reported lost or stolen and a new book is to be issued, one of three things (often a combination of two of them) is generally required: (1) Advertise the loss of the book for a certain length of time, calling upon any person having a claim to the book to present same before a time stated, at which time the book will be declared extinguished. This is to prevent books being assigned and reported lost and opening the door to frauds. (2) File an indemnity bond in an amount sufficient to protect the bank from loss in case the book turns up and a second payment is required. This is supported by sureties often difficult to obtain and is gradually being abandoned. Recently the courts have held that a bank has not the right to exact a bond in such cases. (3) Affidavit of loss which, besides setting forth the fact of loss, shall state that at the time of loss the book was not pledged as security for any loan. To advertise the loss and to make affidavit of loss are ordinarily sufficient for the issuance of a new passbook. Many of the books reported lost are merely mislaid and by requiring the depositor to wait a reasonable time or go to some trouble and a little expense, the book is generally found.

POSTAL SAVINGS BANKS.—The United States Postal Savings Act was enacted June 25, 1910. Postal savings banks, or postal saving depositories, as they are officially called, are thus a recently established institution in the United States, although they have existed in most European countries for many years. There was agitation in the United States for them as far back as 1871. Postal savings banks receive deposits in amounts from one dollar upwards. Deposits are evidenced not by entries in passbooks, but by postal savings certificates which are issued in various denominations from one dollar up to five hundred dollars. Certificates are not transferable. No depositor may have more than \$2,500 to his credit, nor may he have more than one account. Interest is paid on the minimum yearly balance at the rate of two per cent a year. The funds received on deposits in postal savings banks are either deposited by the Government in banks especially designated as postal savings depository banks at 2 1-4 per cent interest, or are invested in United States Government bonds. The administration of the postal savings system is under the control of a Board of Trustees consisting of the Secretary of the Treasury, the Attorney General, and the Postmaster General. The Third Assistant Postmaster General is Secretary of the Board. The administrative work is handled by the Postal Savings Division of the Post Office Department. This division is under the directorship of the Director of Postal Savings.

CHAPTER IV

Bank Operation

THE success of any banking institution depends primarily upon proper organization. Banking institutions in the United States may be incorporated under either National or State laws. National Bank Act and the laws of progressive States provide that the capital stock of every banking institution shall be fully paid in cash at the time of organization or soon afterward. In times past, under loose banking legislation, banks sometimes opened with little or no capital, simply accepting the notes of shareholders for the bulk of their subscriptions, and expecting to get funds through deposits by outside Such policy generally led to disaster, customers. because the concern was usually unable to collect the installments due on the notes of shareholders when funds were needed, or, what was frequently the case, the same bad judgment that permitted organization on a credit basis led to the making of bad loans and consequent insolvency. The early payment in full of capital stock in cash is a prerequisite to engaging in any sound banking business. The necessity of a proper start is now so thoroughly appreciated that in many if not most cases the subscription price of the capital stock of any new bank is made sufficiently high to include an initial surplus.

DIRECTORS AND OFFICERS.—Assuming the possession of sufficient capital and the existence

of ample business opportunities, the successful administration of any bank depends upon the character and ability of its directors, officers and employees. The administration of all banks, great and small-whether capitalized at \$25,000 or \$25,000,000—is scientifically identical. In studying bank administration attention should be centered upon the board of directors, in whom fundamental authority is vested. The duties and responsibilities of directors are alike in all banks. The delegation and distribution of authority among officers depend upon circumstances, but when the center of authority is comprehended, details may be readily understood. The by-laws of all banks should provide for (1) the appointment of an examining committee; (2) the appointment of a discount committee; (3) the approval by the board of directors at monthly meetings or oftener of all loans and discounts; and (4) the recording of such approval in permanent form. To what extent directors should participate in the details of administration depends largely upon local and personal conditions. Minutes of all meetings of directors should be kept in a suitable book provided for such purpose. Bank officers are chosen by the board of directors and actively superintend and direct its business affairs. The size of the bank, its location and the amount of business done determine the number of officers, although in every bank there are at least two, namely a president and a cashier.

DUTIES OF BANK PRESIDENTS.—The National Bank Act, as well as the laws of most States, requires that one of the directors of every bank, to be

chosen by the full board of directors, shall be named president of the board. The duties of such president vary considerably with the size of the bank, its location, and other factors in the situation. The president may be merely an ornamental figure, or he may be the actual working head of the organization looking after the details of its business, and in a large way directing what goes on. In any bank of considerable size his work is that of general superintendence rather than that of particular attention to given transactions. Within recent years, the duties of the president have, however, become much more clearly defined by the courts than they formerly were. "When he is the active head of the bank, he has all the authority which law and custom confer on the head, regardless of the name of the office." A bank may have one or more vice-presidents, who may act successively in the absence of the president or of other vice-presidents. Their legal status is not precisely the same as that of the president, depending in part upon the by-laws of the institution as well as upon its customs. The National Bank Act provides definitely for only one vicepresident, giving to the board of directors the power "to appoint a president, vice-president, cashier, and 'other officers,' "

DUTIES OF BANK CASHIERS.—The duties of the cashier of any bank are in general to keep a record of the directors' meetings, sign certificates of stock, checks drawn on other banks, and drafts and notes that need endorsement, before sending them away to another bank for collection. The cashier is

also heavily burdened in the larger banks with the general conduct of the bank's correspondence. Besides this, he has general oversight of the internal affairs of the institution, the payment of expenses, and the condition of depositors' accounts. It may be advisable to give the cashier the aid of one or more assistant cashiers, who are then subordinate to him. and take over such portions of the work as he may entrust to them. In most trust companies, the officer called cashier in a bank is known as treasurer. The cashier is primarily responsible for all the actual transactions after lines of policy have been blocked out by the board of directors who are legally responsible for the operation of the bank. He passes on all new deposit accounts, signs drafts for the disbursement of funds, and is custodian of the company's assets and the securities contained in the vaults. In trust companies, there is usually an officer called secretary who performs the functions of a bank cashier in keeping the minutes of board meetings and attending to correspondence.

DUTIES OF OTHER BANK OFFICERS.—
The "other officers" referred to in the National Bank Act as appointees of the board of directors, are various, depending on the business needs of the bank. Their titles are not uniform everywhere, although vice-president, assistant vice-president, and assistant cashier ordinarily seem to be most acceptable. Their duties depend altogether on the conditions existing in the institution with which they are connected. Next in rank to the foregoing officers come the department

heads who rank as follows: The paying teller, whose duty it is to disburse funds upon demand and the receiving teller, who takes in deposits and performs other duties. In larger banks, there is also a note teller who has charge of promissory notes liquidated at the bank. In some banks, a discount clerk is employed. although in the smaller institutions he usually is identical with the note teller. These various officers may have large staffs under their direction, the size of such staffs depending upon the business of any bank and the extent and rapidity of its operations. Whether their staffs be large or small, however, or whether the work in each division be done practically by one man, the fact remains that the type of organization is the same. Subordinate to these officers are a number of employees who facilitate their work. Probably the most important of such subordinate divisions is the bookkeeping department, which is usually in charge of a head bookkeeper, assisted by such subordinate workers as may be needed. There may be various other departments, such as a credit bureau and a collection department. This is largely a matter of individual organization and depends upon the size and scope of individual institutions.

BANK ACCOUNTING.—Banks are judged by statements of the condition of their resources and liabilities. The substance of the statement of condition of any bank is the criterion of its management. The form of the statement of condition is the basis of its system of accounting. The purpose of bank accounting is to show (1) what assets are in the

possession of the bank and (2) to whom such assets ultimately belong. Methods are good or bad in direct proportion to the accuracy and economy with which they accomplish the desired results. Obviously it is not necessary that all banks use the same bookkeeping methods, and the task for the student of banking is first to determine the essentials on which all banks agree and then to study amplifications of detail which meet different conditions. Accounting principles are the same for the country bank with a few thousands of deposits and for the metropolitan institution with hundreds of millions. The primary essential of any system is that there must be a permanent and accurate record of all transactions. Bank accounting is based upon the general principle of double-entry bookkeeping. Every transaction must be recorded in at least two accounts—one a debit and the other a credit—and all records must be in such form that information required concerning the condition of any account may be immediately available. Books of accounts, whatever may be their typographical or mechanical form, are classified as "journals" and "ledgers." A "journal" is a daily record of transactions. A "ledger" is a chronological record of the transactions in each account. A "balance book" is a statement of the net debit or credit balance of each of the general ledger accounts. Any two of these books may be combined into one, or in fact all three of them may be combined into a book of the type of the "Boston Ledger." Whether records are kept in bound books, loose-leaf ledgers or on cards, by longhand or machine methods, is of little consequence, so long as the system produces the desired results with the greatest degree of accuracy and the least expenditure of time and money.

Bank Statements

OFFICIAL REPORTS.—Banks are semi-public institutions inasmuch as a large portion of the public entrusts them with funds for safe keeping, and banking laws provide for the control and regulation of such institutions. No uniformity of laws prevails among the various States, but all conform to sound banking principles and in many respects are similar to the Federal laws as codified in the National Bank Act. Without exception the banking laws provide for periodical reports of condition to the supervising authorities and for the publication of these reports so the public in general and bank depositors in particular may have some information regarding the condition of financial institutions. At least five times each year the United States Government calls for a statement of condition at an unexpected date in order that the figures will represent a normal condition of the bank's business, unaffected by any attempt at "window dressing" on the part of the management for the purpose of making a temporarily good showing. For statistical purposes and for convenience in the examination of banks, uniform reports are made up by all National banks on a form prescribed and the forms used by the various State banking departments are designed to obtain pertinent facts of the same general character. Detailed information is sought which will enable governmental authorities to judge whether the business of each bank is conducted in compliance with the law and for the protection not only of the depositors but also of the stockholders. The reports are not published in full, as they contain much information of a confidential nature, but in all cases the statement of condition is required to be published in a newspaper, and it is the practice of most banks to give it wide circulation by printing it in condensed form for public distribution. The following synopsis of the form of report prescribed for National banks illustrates in a general way the information required by National and State authorities.

RESOURCES

1. (a) Loans and discounts, including rediscounts (except those shown in b and c); (b) Acceptances of other banks discounted; (c) Customers' Liability account of acceptances of this bank purchased or discounted by it. Deduct (contingent liabilities); (d) Notes and bills rediscounted with Federal Reserve Bank, other than bank acceptances sold; (e) Notes and bills rediscounted other than with Federal Reserve Bank, not including bank acceptances sold; (f) Acceptances of other banks sold with indorsement of this bank; (g) Foreign bills of exchange or drafts sold with indorsement of this bank, not included in Item d, above.

2. Overdrafts, secured and unsecured.

3. (a) Customers' liability account of "acceptances" executed by this bank, and by other banks for account of this bank, and now outstanding; (b) Liability of foreign banks and bankers for drafts and bills accepted by this bank to create dollar exchange and now outstanding.

4. U. S. Government securities owned: (a) Deposited to secure circulation (U. S. bonds par value); (b) All other U. S.

Government securities.

5. Other bonds, stocks, securities, etc.

6. Banking house and furniture and fixtures.7. Real estate owned other than banking house.

8. Lawful reserve with Federal Reserve Bank.

9. Items with Federal Reserve Bank in process of collection.

10. Cash in vault and amount due from National banks.

11. Amount due from State banks, bankers, and trust companies in the United States.

12. Exchanges for clearing house.

13. Checks on other banks in the same city or town as reporting bank (other than Item 12).

14. Checks on banks located outside of city or town of

reporting bank, and other cash items.

- 15. Redemption fund with U. S. Treasurer and due from U. S. Treasurer.
 - 16. Other assets, if any.

LIABILITIES

17. Capital stock paid in.

18. Surplus fund.

19. Undivided profits: (a) Reserved for interest and taxes accrued; (b) Reserved for other purposes; (c) Less current expenses, interest, and taxes paid.

20. Circulating notes outstanding.

21. Amount due to Federal Reserve Bank (deferred credits).

22. Amount due to National banks.

23. Amount due to State banks, bankers, and trust companies in the United States and foreign countries (other than included in Items 21 or 22).

24. Certified checks outstanding.

25. Cashier's checks on own bank outstanding.

DEMAND DEPOSITS SUBJECT TO RESERVE (26 to 31)

26. Individual deposits subject to check.

27. Certificates of deposit due in less than 30 days (other than for money borrowed).

28. State, county, or other municipal deposits secured by pledge of assets of this bank.

29. Deposits requiring notice, but less than 30 days.

30. Dividends unpaid.

31. Other demand deposits.

TIME DEPOSITS SUBJECT TO RESERVE (32 to 35)

32. Certificates of deposit (other than for money borrowed).

33. State, county, or other municipal deposits secured by pledge of assets of this bank.

34. Other time deposits. 35. Postal savings deposits.

36. United States deposits (other than Postal savings), including war loan deposit account and deposits of United States disbursing officers.

37. U. S. Government securities borrowed.

Bonds and securities other than United States bor-38. rowed.

39. Bills payable, other than with Federal Reserve Bank.40. Bills payable with Federal Reserve Bank.

41. Letters of credit and travelers' checks sold for cash

and outstanding.

42. (a) "Acceptances," executed by this bank for customers and to furnish dollar exchange; less (b) acceptances of this bank purchased or discounted.

43. Acceptances executed by other banks for account of

this bank.

44. Liabilities other than those above stated.

ANALYSIS OF RESOURCES

LOANS AND DISCOUNTS (Item 1).—This item in bank statements represents the amount the bank has loaned to its customers and in the open market through the purchase of commercial paper. Loans to clients are either on their own unsecured notes which are discounted, or are secured by collateral, the former designated as "discounts" and the latter usually classified as "loans." In a small country bank the loans might be handled by the combination receiving and paying teller, who would enter them in his blotter and hand the new notes and the tickets representing payments to the general bookkeeper to be itemized in the general ledger.

OVERDRAFTS (secured and unsecured) (Item 2).—As a rule no overdraft account is carried in the

general ledger but the amount is reported by the individual bookkeepers. The general ledger account "individual deposits" represents net deposits (individual balances less overdrafts), and as the daily statement must show total liability to depositors, the overdrafts must be shown on the resource side of the statement and the general ledger total of individual deposits increased by the same amount. Overdrafts are, of course, temporary advances, usually without security and are discouraged by governmental authorities. They are frequently caused, however, by discrepancies between the accounts of customers and banks or by remittances delayed in the mail, and banks may occasionally permit them in moderate amounts, charging interest for the use of the money, rather than injure the customer's credit by "turning down" his check.

CUSTOMERS' LIABILITY (account of acceptances and letters of credit) (Item 3).—The amount of these guaranties is contra to the bank's liability on the acceptances and letters of credit (Items 42 and 43). Bills drawn by foreign banks to create dollar exchange may also be accepted and these amounts are included in the total of this item.

INVESTMENTS (Items 4 and 5).—United States Government securities owned are divided into various classifications. Bonds to secure circulation and those used to secure Government deposits are deposited with the Treasurer of the United States. Premium on bonds represents the amount paid in excess of the par value and from time to time this amount

may be charged off out of earnings. Bank examiners are careful to see that securities are carried on the books as close to their marketable value as is possible. Under Section 11-K of the Federal Reserve Act, National banks which act in fiduciary capacities are obliged to comply with the State laws, some of which require deposit of securities for the protection of such trusts. This section also provides that trust funds shall not be used in the bank's business until United States or other approved bonds have been deposited with the trust department. Under the present provisions of the Federal Reserve Act National banks may invest in the stock of certain kinds of international financial corporations up to 10 per cent of their capital and surplus. The investment by member banks in the capital stock of the Federal Reserve Bank is compulsory. An approved form of a stock and bond record is shown in figure 1.

BANK BUILDING AND REAL ESTATE OWNED (Items 6 and 7).—Imposing or distinctive quarters are sometimes an advantage to the bank from an advertising standpoint, but the amount invested in bank building and fixtures should not be excessive. A National bank may not hold real estate except for its own use, unless taken to secure loans already made to protect itself against loss, and then it must sell such real estate within five years or obtain an extension from the proper governmental authority. A National bank may, subject to certain restrictions, and if not in a central reserve city, also loan on bond and mortgage covering improved property or on farm

Stock and Bond Record (Fig. 1)

NAME OF SECURITY Chicago Cleveland Cincinnati & StLouis R.R.

PRINCIPAL DUE July 1.1929 DEBIT 2222 PRINCIPAL DEBIT PAYABLE J.+J. 10000000 RECEIVED DELIVERED BALANCE PAR VALUE 652 10 000 INTEREST 6% DESCRIPTION Jan. 1 DATE 132

Bond and Mortgage Record (Fig. 2)

MORTGAGOR John Jones

000000	ACCOUNT OF	INTEREST PAYMENTS		INSURANCE	CE		
Amcunt, \$ 7000		When Due AMOUNT Date of Pay't No. of Policy	No. of Policy	COMPANY	Date of Expitation		AMOUNT
Interest rate 6 %; Accrues from 9/1/19	(Trust Dept.)	Mar. 1 20 150 00	98420 Act	98420 Aetha Fire Ins. Sept. 1 1922	Sept. 1 1	11	6 000 000
Interest Payable March + September 1 12							
Mortgage date 9/1/9 ; Principal due 3yrs							
Extended to	GANDA AND DITTO WAS						
Promises Location	Year Assessed Value Xear Assessed Value						
Description	1920 9 500						_
Lucation; Sec. Blook Lot							_
Dimensions; Land Building							
Appraised value; Land \$ 5.000 22 8							_
Building 6.000 00	_					_	_
Total, \$ 11.000 29							
Appraisor Name							
Date of Appraisal 8/1/19		-					
Present Owner							
						_	_
	MORTGAGE RECORDED ASSIGNMENT RECORDED					-	
	Date Sec. Liber Sec. Liber Page Page		_				

lands. An approved form of a bond and mortgage record, used in many progressive banks, is shown in figure 2.

ACCOUNTS WITH FEDERAL RESERVE BANK (Items 8 and 9).—Member banks are obliged to maintain their legal reserve with the Federal Reserve Bank without interest. Checks and other items deposited with the Federal Reserve Bank for collection cannot be used as reserve until the proceeds are available to the Federal Reserve Bank in accordance with a time collection schedule, and Item 12 is a transit account representing items in process of collection.

CASH (Items 10 to 14).—This is the bank's cash reserve as distinguished from its legal reserve and includes not only the actual cash carried in the bank's vault, but it also includes balances with other banks, and checks and other cash items for collection by hand, through the clearing house and correspondent banks.

FIVE PER CENT REDEMPTION FUND (Item 15).—Each National bank having circulating notes is required to deposit with the Treasurer of the United States five per cent of its authorized circulation in lawful money for the redemption of its notes. National bank notes presented for redemption are charged against this fund and the bank notified, and since the law requires that it must always be maintained at five per cent of the circulation, the bank must immediately replenish it by depositing lawful money.

ANALYSIS OF LIABILITIES

CAPITAL ACCOUNTS (Items 17 to 19) .-Subscriptions to capital stock must be paid in cash and are held as a liability to stockholders to offset at the opening of the bank the corresponding debit to cash on the resource side of the statement. Surplus and profits are accumulated from the earnings, but a portion of the surplus fund is frequently paid in with the capital, the stock being sold at a premium. Thus each stockholder may pay at the time of organization, \$125 per share of a par value of \$100; the par value is represented on the books as "capital" and the extra \$25 per share is credited to "surplus." Current expenses, taxes paid, interest paid, etc., carried on the general ledger as "resources," are deducted from the accumulated earnings (interest received, etc.) which have not been transferred to "surplus" and the net amount shown as "undivided profits." A bank usually adopts certain periods to perform this operation usually March 31, June 30, September 30 and December 31. Between these periods the accounts of "expense," etc., are carried as assets, and "interest received," "discount received," etc., as liabilities merely to show the analysis of the bank's earnings and charges for the period.

NOMINAL ACCOUNTS (Items 19A to 19C).— The amount of taxes, interest, and salaries to be paid out at any given future date can usually be estimated with a fair degree of accuracy, and for the guidance of the management a reserve for the purpose may be set aside from the earnings each month. If the bank has any doubtful assets it usually sets up a reserve for them out of profits, as well as any necessary reserve for bond depreciation, "Unearned discount" is the amount of interest deducted by the bank at the time an advance is made and is based on the number of days the note has to run and the rate at which the discount is taken. Such discount is deducted before it is earned, and any bank crediting such amount to "interest earned" would not be showing a true statement of condition. For this reason the discount is credited to the "unearned discount" account and transferred from this account to "interest earned" as it is actually earned over the period. In order to do this properly a record of the amounts of the notes at various rates must be kept. Each day, on the basis of this record. the auditor figures one day's interest or earnings and transfers this amount from the "unearned" to the "earned" interest account.

CIRCULATION (Item 20).—A National bank is permitted to issue, up to the amount of its paid-in capital, circulating notes secured by, and not exceeding the par value of United States bonds deposited with the Treasurer of the United States (Item 4). Circulation may be secured only by registered bonds of the following issues:

2% consols. of 1930;

4% bonds of 1925;

2% Panama Canal bonds.

National bank notes secured by the 2% bonds are subject to a semi-annual tax of $\frac{1}{4}\%$ per annum and a semi-annual tax of $\frac{1}{2}\%$ is levied against notes se-

cured by bonds bearing a higher rate. In addition to this tax the bank must pay for the plates as well as the incidental expenses of redemption. It must also keep a deposit of 5% of its circulation with the Treasurer, on which no interest is received (Item 15). If the bonds are purchased at a premium a sinking fund must be set aside periodically in an amount which will absorb the premium, as the Government will redeem the bonds at maturity at par. Thus the profit to be derived is the amount which would be received from lending the circulation plus the coupon rate of the bonds, minus the expenses and the interest obtainable from lending the cost of the bonds.

DUE TO BANKS (Items 21 to 23).—This item includes deposits of other banks, except those for which certificates have been issued. The general ledger account "due to banks" shows balances less bank overdrafts. Hence, to show total deposit liability in the daily statement, the amounts due to banks must be increased by the amount of bank overdrafts, and the amount of "overdrafts" increased accordingly.

DEPOSITS (Items 24 to 36).—This item is composed principally of "individual deposits subject to check," but includes also certificates of deposit, time deposits and unpaid dividends. Demand deposits are those payable within thirty days. Time deposits are defined by the Federal Reserve Act as "all deposits payable subject to thirty days notice of withdrawal, all savings accounts and certificates of deposit which are subject to not less than thirty days notice before payment, and all postal savings deposits." Individual

deposits are carried on the general ledger by alphabetical divisions corresponding to the individual ledgers, but in making the detailed statement they are reclassified. In a condensed statement the individual, bank, time, and savings deposits, public funds, certificates, unpaid dividends, cashiers' checks, and certified checks might all be totaled as "deposits."

BONDS BORROWED (Items 37 and 38).-Banks frequently borrow bonds for specific purposes rather than invest their own funds, and in consideration pay the owner a commission varying from perhaps 1/4 % to 2% for their use. This practice is resorted to for the purpose of obtaining United States bonds to secure circulation, or bonds acceptable to Government or State officials to secure deposits. At times it may be profitable to borrow bonds to use as collateral in order to obtain a lower interest rate on borrowed money. The premium paid the owner for their use is dependent on the income the bank can obtain by lending its own funds in excess of the interest the same amount of money will yield invested in the desired securities. Bonds thus borrowed are credited to "bonds borrowed" on the liability side and debited to the proper account (Items 4 and 5) in resources. Collateral may be furnished to guarantee return of bonds to owner or he may take bank's unsecured receipt.

BILLS PAYABLE AND REDISCOUNTS (Items 39, 40 and 1d, 1e).—Banks desiring to increase loanable funds to meet the needs of their customers or to replenish reserves on short notice may do so by one of four methods:

- (1) By calling demand loans, thus increasing the amount of "cash" or "due from banks."
- (2) By selling bonds. An outright sale is without recourse on the bank; accordingly the proper securities account is reduced by crediting with the amount sold, and "cash" or "due from banks" is increased by a debit, thus closing the transaction. It is possible at times to sell securities under a re-purchase agreement, by which the selling bank is obligated to buy them back, usually at the selling price, within a certain time. A sale of this kind represents a contingent liability.
- (3) By selling acceptances, or bills receivable or by the rediscount of notes. (Items 1d and 1e). One of the principal functions of the Federal Reserve Bank is to provide a rediscount market at all times and under practically all conditions. In periods of tight money banks are frequently required to borrow to meet the legitimate demand for loans from their customers and the rediscount privilege is available to members of the Federal Reserve System. Notes, in order to be eligible for rediscount, must be identified with some part of the production or distribution of goods or secured by U.S. Government war obligations, and must not have a maturity exceeding 90 days, except livestock paper, which may run for six months. If the notes are transferred by indorsement carrying full recourse, the bank assumes liability for their payment (see Item 1d). Non-member banks look to their city correspondents for accommodations of this character. Bills rediscounted remain on the books as as-

sets but a liability is set up on the general ledger as "notes and bills rediscounted" to which the proceeds of the transaction are credited, offsetting the debit to "lawful reserve with the Federal Reserve Bank" or "due from banks." The "interest paid" account is debited with the discount (on the rediscount) or it may be carried as a "discount paid in advance" asset, and a "discount paid" account charged each day with the amount actually owing the lending bank for that day's discount. Bills thus rediscounted may be collected by the lending bank or may be charged and returned to the borrowing bank for collection several days before maturity.

(4) By the issue of its own bills payable (Items 39 and 40) usually secured by collateral with sufficient margin or sometimes guaranteed by individual directors. Borrowings either by rediscounts or bills payable should be authorized by the board and accompanied by a certified copy of the resolution. The method by which a bank borrows is governed by conditions. The nature of its assets may be such that it would be in a position to offer prime collateral such as United States bonds, and thereby obtain a lower rate than would apply to rediscounts. This method gives the lending bank marketable collateral with a sufficient margin for safety in addition to the obligation of the bank. In the case of rediscounts there is no margin, the value being represented by the obligation of the maker, supported by the indorsement of the borrowing bank. Some banks borrow on certificates of deposit issued for a specified time bearing interest at the current loaning rate. Unless certificates of this kind are segregated from those representing bona fide deposits the statement will be misleading. The Federal Reserve Act allows 15-day advances secured by Government war obligations or eligible paper.

CONTINGENT LIABILITIES (Items 1f and 1g).—A contingent liability is one which is likely, but not certain to become a direct liability. A bank often buys foreign bills or domestic bills, and in either case, if it wishes for some reason to dispose of them, it may sell them outright—with indorsement—to some note broker. Such indorsements constitute a contingent liability. Sometimes a bank buys a bill only technically, simply supplying its indorsement and then making a technical sale, receiving a commission for indorsing the bill. This is done very often to provide a necessary member bank indorsement to an otherwise non-eligible acceptance—the non-eligibility being based, not on the underlying transaction but because the acceptor is a non-member or a foreign banker.

General Ledger

SUMMARY AND CORRELATION.—The purpose of the "general ledger" is to summarize and correlate the various accounting operations of the bank. It provides an account of what the bank owns, represented by assets or resources, and what it owes, as shown by liabilities, but deals with these amounts in aggregates rather than in detail. In addition to the accounts with depositors and borrowers, it includes capital accounts (or those with stockholders) and

nominal accounts such as earnings, expenses, and reserves for taxes and interest. In a small bank it can be conceived that a single set of books—a journal, a ledger and a balance book-would serve for all accounts. As the bank grows it becomes necessary to open a separate set of books for individual accounts, removing them from the general books and carrying them in individual ledgers. A single account representing deposits is substituted in the general ledger, in which the only entries are total deposits and total checks for the day as shown by the footings of the individual journal. Similarly, when a discount department is created, loans made and loans paid are itemized on the books of that department, and the totals carried forward to the general books. The accounts with the stockholders representing capital stock are itemized in the stock ledger and certificate book; nominal accounts are itemized in ledgers for the purpose; cashier's checks and certificates of deposit are entered as issued in the respective registers, and these accounts on the general ledger show only the total amounts outstanding. Thus all of the books of the bank are parts of the general books, each transaction being entered in detail in the records of the various departments. Only the totals are carried on the general ledger, which is posted at the end of the day from the figures resulting from departmental proofs, and the balances extended. Before entries are made in the general ledger, however, they must be journalized to provide a proof of the entire work of the bank for the day. The debits and credits to the

various departments are entered from the figures supplied the general bookkeeper after the departmental proofs have been completed. For example, total deposits as shown by the receiving teller's proof, total payments taken from the paying teller's proof, total loans made and loans paid, and discount collected by the discount department, drafts issued against accounts with correspondents, expenses paid, safe deposit rent collected, are all reported in total amounts for the day and journalized. The difference between the total debits and the total credits for the day equals the amount of cash on hand as shown by the paying teller's proof. After the journal is balanced the various debits and credits are posted to the proper accounts on the general ledger and the balance of each is carried forward. A small bank sometimes finds it more convenient to use a combined general journal and ledger, but this necessitates a voluminous book providing space in each account for the various items. In a system of this kind one double page of the ledger is devoted to each day's business, the debit page showing the bank's resources and the credit page the bank's liabilities. At the extreme left-hand side of each page is a column showing the balance of each account carried forward from the preceding day, a debit and a credit column on each page provide space for the day's total transactions in each account, and the difference is added to or deducted from the old balance to give the balance at the close of business for that day. The footings of these balance columns are the bank's total resources and liabilities respectively. When an ordinary loose leaf or Boston ledger form is used for the general ledger the new balances are combined as far as is possible and transcribed on a proof or perhaps on the daily statement itself and a proof is taken.

Bank Tellers

SMALL AND LARGE INSTITUTIONS.— The business of banking is concerned primarily with deposits and the increment therefrom, so accounting methods must be designed for handling efficiently all the work in connection with the receipt of deposits, and the subsequent withdrawal, and keeping these records in such a manner that the management may administer the business to conform with the law and sound banking principles, protecting and conserving the interests of depositors and of the owners of the institution—the stockholders. A study of bank accounting, therefore, must take into consideration, not only the actual bookkeeping, but the handling of deposits, checks, reserves, making of loans, and making reports and examinations, as well as the correlation of all the work of the bank in the general ledger, finally summarizing the bank's position in the statement of condition. The small country bank unit requires only a teller, a bookkeeper and a cashier. The latter may give part of his time to the work of both the teller and the bookkeeper, although the position of cashier does not theoretically include such work, and all bank accounting may be roughly grouped into these two general divisions no matter how large may be the institution. With only one teller all receiving and paying operations pass through his hands. As the bank grows and additional tellers are provided, a division of the work is made in such a manner as to secure economy for the bank and convenience for the customers. One teller pays checks, another receives deposits, another sells exchange and issues certificates of deposit, another makes loans on instructions of an officer and receives payment of interest and principal. All these tellers handle cash and checks, accounting to the head teller at the close of business for all the transactions of the day. All of the tellers are merely assistants to the head teller, and no matter how many divisions of the tellers there may be, the bank has only one cash account, for which the head teller is responsible.

BANK DEPOSITS.—Any bank's value to the community as well as its earning power would be greatly restricted without deposits. Although the capital stock is available for making loans, the profit from this source alone would not justify the investment, and since one of the principal benefits to the community is the ability to lend money for legitimate business purposes, the capital which is paid in at organization must be augmented by other funds if the bank is to be a factor. When an account is opened the depositor's signature is taken, usually, for convenience, on a card. If the account is in the name of a firm or corporation the card will bear the signatures of all persons authorized to draw checks. A copy of the resolution authorizing certain officers to open the account and to sign checks drawn against such account is also kept on file in the bank. There should be a clear understanding of the terms of the account, that is, the rate of interest to be paid, if any, and the line of credit established for the use of the customer. The rate of interest paid on deposits varies. Some commercial banks pay no interest on checking accounts, while others, especially where there is severe competition, are obliged to pay two, three, and sometimes four per cent to attract business. Time deposits —left for a specified period or requiring notice of withdrawal-bear a higher rate than those payable on demand. In order to avoid the payment of interest on checking accounts, some banks issue certificates of deposit for all such interest-bearing accounts. pass-book is issued to the depositor at the time the account is opened, if it be a checking account. This is the customer's receipt and is brought to the bank with each subsequent deposit so the customer has in permanent and convenient form a record of the bank's indebtedness to him.

Receiving Tellers

DUTIES AND RESPONSIBILITIES.—The receiving teller's department is the hopper into which is poured the deposits to be converted into credit on the bank's books. It is the duty of the receiving teller to receive, receipt for and prove the deposits, starting them and their component parts through the various processes by which the proceeds are made available to the depositor in the form of credit on the bank's books. The credits are entered in the pass-book and initialed by the teller from the ticket which accompanies each

deposit, and from which the amount is posted to the depositor's account on the ledgers. The deposit ticket should always be made out by the depositor to save the time of the teller and to avoid disputes. Should the customer discover later that an error has been made the original ticket may be referred to and if it is in his own handwriting there can be no mistake as to the responsibility. After posting, deposit tickets are filed for future reference.

DEPOSIT TICKETS.—The deposit ticket provides space for listing currency, specie, and checks. Only the totals of the first two items are entered, but each check is listed separately, and it is good practice to indicate opposite each check the bank on which it is drawn. This may be done quickly by using the A. B. A. Numerical System number, which is printed on the check and which represents the drawee bank, as every bank in the United States has a different number. Checks are received and credited by the bank subject to final collection, and many banks have printed in a prominent place in the pass-book, and frequently on the deposit ticket, a non-liability clause to this effect. Sometimes a collection item (sight or time draft, note or coupon) is included in the total, and if in the judgment of the teller there is a possibility that the proceeds will not be made available to the bank immediately, or if the customer has not arranged with the bank for immediate credit, it is deducted and "short extended"-entered on the same line in the book or sometimes in the back. Should a deposit be made without the pass-book the customer

is given a duplicate deposit ticket, which is retained as a temporary receipt until the amount is entered in the book. Entries from duplicate tickets should be made only by the receiving teller, or after consulting the ledger.

COUNTING AND CHECKING.—In receiving deposits the teller counts the currency and specie, checking them as the count is proved. By making this a practice there is little possibility that a package of currency or a roll of coins will remain in the pocket of the person bringing the deposit to the bank, either through thoughtlessness or otherwise. The money is scrutinized rapidly but carefully for counterfeits or mutilated coins. The amount in words and figures on the checks is compared and the teller guards against taking any post-dated or stale checks, or any showing signs of alterations. When the checks are not plainly written he avoids future errors by marking the proper amount in figures. He satisfies himself that all checks bear the indorsement of the depositor, and unless the bank is so large that the volume of work will not permit, he examines the checks on his own bank for forgeries, and in the case of doubtful accounts he assures himself that the balance is sufficient to cover the check. Checks on out-of-town banks subject to an exchange charge are noted and the amount of exchange is collected from the customer. If the amount of these exchange charges is large it is entered in the back of the pass-book or is perhaps computed by the transit department, and collected monthly. Where the volume of deposits is

large it is of course physically impossible for the tellers to handle all of these details, and much of this work is left to an assistant, the teller's time being required to count the currency and specie, and enter the deposit in the pass-book. Where this is so, no attempt is made to prove the addition of the ticket nor to examine the checks except for indorsements, until the block system handles the deposit, after which the checks, etc., should be scrutinized. The money is placed in the till and a slip of paper representing the cash is placed with the ticket and checks, the whole transaction being proved later by the block system.

BATCH OR BLOCK SYSTEM.—In that part of accounting which is done by the receiving teller three objects are kept in view: (1) to prove the deposit ticket; (2) to subdivide the checks into convenient groups for final settlement by other departments of the bank; (3) in accomplishing the first two results, to handle the checks as few times as possible. This is best accomplished by the "batch" or "block" system, which proves the teller's work in sections during the day. By this method errors may be located and corrected promptly, and the items put through the work as early in the day as practicable, thus feeding the other departments and relieving the teller of the work of proving the entire business of the day after the window is closed—a slow and difficult process. Thus deposits are proved in groups depending on the number of checks in them and the items are sorted into their proper channels and a control is established against which the bookkeeping, transit, and other departments receiving items from the teller, can prove their work.

SORTING CHECKS.—The widest division is made of those checks deposited in the greatest number. In some banks the transit items are sorted into classifications on a geographical basis, or perhaps those collected through the Federal Reserve Bank, those collected through correspondents, and those collected in other ways. In others the exchanges or checks collected through the clearing house are divided into sections; while "self-checks," or those drawn on the bank in which they are deposited, may be sorted into groups corresponding to the ledger subdivisions. Miscellaneous collection items such as -"sights" (items which will be paid on presentation, documentary sight drafts, coupons, etc.), are sorted to the collection department to be presented by hand. General items, such as certificates of deposit, cashiers' checks, certified checks and those which are entered directly in the general ledger, are sorted together and charged to the general bookkeeper. In small banks where the loans and discounts are handled by the receiving teller instead of by a note teller or the loan and discount departments they are sorted together and charged to the general bookkeeper as "loans and discounts" or "bills receivable." The interest collected on these items is credited to the general bookkeeper as "interest and discount." Each group or classification of the items are machine listed and recapitulated on the block sheet. The deposit tickets are listed and the total of all the credits included in the block should

prove with the total of the debits, including the cash slips. If the totals do not agree it is evident that an error has been made and it is necessary to locate it before the block can be passed on to the departments. The listing is checked for errors and if none is discovered the deposit tickets are "footed" for errors in the addition. Should the error not be found here it is necessary to check the individual debit items against the entries as shown on the tickets—a laborious task. When the block is proved the various packages are sent to the proper departments and the teller retains the recapitulation to be used in making up his final proof for the day. A specimen teller's proof is shown in figure 3.

SETTLEMENT SHEET.—When the window is closed for the day the last block is run and the final proof is taken on a settlement sheet. This may be in bound book or loose-leaf form with a debit and credit column, provision being made for all the various classifications of items. The receiving teller turns his cash over to the paying teller after he has "balanced" or before the bank opens for business the following morning. In either event the cash is charged to the paying teller, as he is theoretically responsible for all the bank's cash whether it be kept in his own vault compartment or that of the receiving teller.

BANKING BY MAIL.—The volume of deposits received by mail is large and even in small country banks the practice of "banking by mail" is growing. These "cash letters" and other letters enclosing collections may be handled by a mail teller in large in-

Teller's Proof (Fig. 3)

CREDITS	
DEBITS	
	Individual Deposit Ledger No. 1. """" 4 Country Banks Ledger No. 1. """" 2. General Accounts Ledger. Clearing House A. M. Transit Department (All Out-of-Town Cash Items) Cash Over and Short Total

(The foregoing form may be used for receiving teller, discount teller or collection teller.)

stitutions and in some city banks it is necessary to employ a night force to prepare the mail items for the regular working staff. In cities where the exchanges are made at the clearing house in the morning it would be a physical impossibility to sort and prove the mail in time for clearing unless the work were begun long before the regular force arrived. Where the bank's business is not so heavy as to require night work the mail is sent to the receiving teller's department and before the bank opens for business the tellers and assistants and as many additional clerks as are necessary are busily engaged sorting and proving these letters so that the work may be distributed to the various departments without delay. The collections are entered in a blotter and the mail deposits are classified into convenient groups such as transit items, self checks, clearing house, and miscellaneous, with as many subdivisions as desired. Credit tickets are prepared or the letters themselves may be used as credits in posting to statements. This work is proved by recapitulating the various sections of the debits against the total of the letters as outlined above, the credits being sent to the bookkeepers and the checks charged to the proper departments.

Paying Tellers

CONVENIENCE TO DEPOSITORS.—When the bank receives money on deposit it does not agree, except in the case of special deposits, to return the funds in the same form received, but only to return the same amount. The bulk of the deposits in commercial banks is subject to check and competition has caused banks to solicit active checking accounts on the basis of convenience to the depositor. In modern commercial banking the checking function is complementary to the deposit function and it is the duty of the paying teller to cash checks presented for payment over the counter. This is obviously a very responsible position, as checks are usually presented by persons who are not clients of the bank, and money paid in error frequently cannot be recovered. The fact that money is given in exchange for the check makes it practically impossible for the teller to prove an error in paying, or even to locate the discrepancy in proving his work at the end of the day. The bank will not cash checks for strangers, and unless known to the teller personally it is necessary to be identified. When the holder of the check is introduced by one known to the bank, the latter adds his indorsement, thus guaranteeing payment. Many people attempt to identify themselves to the bank by presenting business cards or letters addressed to them, and when the check is drawn on the teller's own bank and he is satisfied that it is in proper order he may be willing to pay the check on such identification, though not entirely satisfactory. If drawn on another bank, however, he has no means of knowing whether or not it will be paid, and he must require the indorsement of some person known to be good for the amount involved.

RESPONSIBILITIES IN PAYING.—Checks payable to "cash" or "bearer" do not legally require

indorsement, but it is the custom of most banks to obtain the holder's indorsement to provide a receipt. A bank is under no obligation to cash checks drawn on another institution, but as a business courtesy performs this service when the risk is not too great. When a check is presented for payment the teller must be satisfied (1) that it is genuine and that the signature is authorized (when check is drawn on another bank this is impossible, and thus it is a matter of greater risk for the paying teller to cash such checks), (2) that the amount has not been altered—"raised" and that the words and figures agree, (3) that it is not "post-dated"—dated ahead of the day on which it is presented—or "stale"—a check presented an unreasonable time after its date, (4) that payment has not been stopped or a court attachment has not been placed against the account, (5) that the drawer's balance is sufficient to cover the check, (6) that the person presenting it is known to him, (7) that the last indorsement is that of the holder, and (8) that the attached voucher, if any, is signed. When it is considered that the teller must pass on all these requisites within a few seconds, something of his responsibilities can be realized. He is also called on to pay bank drafts, postal and express money orders, travellers' checks, coupons and other instruments. In addition to those checks which are received for deposit by the receiving teller, and those which are paid over the window by the paying teller, the bank also pays a large volume of checks on itself through the clearing house. It is, of course, necessary to take the same precaution in paying the exchanges, as the last group is called, as those paid over the window, and before they are sent to the bookkeepers to be charged to the drawers' accounts they must be examined by the paying teller, an assistant, or by a special signature department, to see that they are in proper order.

CLEARING HOUSE SETTLEMENTS.—The settlement of the clearing house balance is one of the teller's duties and this balance is paid in cash or by draft on the clearing house or one of the bank's correspondents. In those cities where a Federal Reserve Bank or branch is located, however, it is now possible to settle the balance by means of transfers through the Federal Reserve Bank. The clearing house sends to the Federal Reserve Bank a memorandum showing the balance due from the debtor banks and those due to the creditor banks, and these amounts are charged or credited, as the case may be, to the accounts of the clearing banks. In the case of a member bank which has paid through the clearing house a larger amount of its own checks than those on other banks which it has sent to the clearing house for payment, it has a debit balance to be settled, and the teller credits the amount to "lawful reserve with Federal Reserve Bank" on the general ledger. When the amount of checks sent to the clearing house is larger than the amount of his bank's checks received in the exchanges, the teller has a credit balance and debits the Federal Reserve Bank on his ledger to correspond with the credit to his account on the books of the Federal Reserve Bank. Thus the annoyance and risk of paying

these large clearing house balances in cash and transporting the money through the streets is eliminated.

CHECKS PRESENTED AT THE WINDOW. -The checks presented at the window and paid by the teller are of two kinds, those on his own bank and those on other banks, and he disposes of them by routing to the other departments of the bank to be collected or charged to the drawers' accounts. Checks on other banks in the same city, which can be collected through the clearing house, are sorted and prepared for clearing by the "rack" department, but as these cannot be exchanged until the following day it is the practice of some banks to send them to the city collection department or receiving teller, to be held overnight and sent to the clearing house "rack" early the next morning. Those on other banks in the same city, which are not payable through the clearing house, must be collected by hand, and they, too, are sent to the city collection department. Cash items on outof-town banks are sent to the transit department where they are made up into "cash letters" and forwarded to the bank's correspondents for credit or remittance. In some banks all transit and miscellaneous items are sent through the receiving teller or collection department to be distributed to the proper departments, as relatively few of these are handled by the paying teller. General items such as certificates of deposit, certified checks and cashier's checks are sent to the general bookkeeper. The checks drawn by the bank's depositors against their accounts are, of course, charged to the bookkeepers to be posted to

Paying Teller's Proof (Fig. 4)

CREDITS	Cash A. M	Indiv. Dep. Ledg. No. 1 " " 2 " " 3	Country Bks. Ledg. No. 1 " " 2 General Accts. Ledger Over
	Cash A. M. From Reser	Indiv. Dep. " " " " " " " " " " " " " " " " " " "	General Acct
DEBITS	To Reserve Safe	Transit Department (All Out-of-Town Cash Items) Indiv. Dep. Ledg. No. 1 " " 2 " " " 3	Country Bks. Ledg. No. 1 " " 2 General Accts. Ledger Cash P. M Short

the individual ledgers, and in order to simplify the work of proving for both the teller and bookkeeper, they are sorted into ledger subdivisions, such as A to E. F to K. etc. Before allowing them to pass from his hands, however, the teller lists the items, charging the totals to the various departments on his settlement sheet. At the close of business the day's work is proved by "balancing" the cash. Inasmuch as the paying teller pays out cash practically all his items are debits. The amount of checks cashed and sent to the clearing house, bookkeepers, and other departments, plus the cash on hand at the close of business, should equal the amount of cash with which he began the day, plus the amount received from other tellers and the exchanges from the clearing house. The foregoing items are embodied in the paying teller's proof, a specimen of which is shown in figure 4.

COUNTER AND RESERVE CASH.—Theoretically the paying teller is the custodian of the bank's cash, but in practically all banks the cash reserve is separated from the counter cash and kept in separate compartments of the vault which are usually under the care of the cashier or other officer. Thus the responsibility is divided as an additional safeguard. The larger banks having assistant tellers frequently divide the total cash into three parts—the reserve, which is seldom disturbed, the paying teller's cash for ordinary requirements, and the counter cash which is taken into the assistant tellers' cages during the day and from which checks are paid. The vault compartments may have two combinations or a combination and key lock,

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charging the account of the drawer, segregating the amount in a "certified checks" account on the general ledger. Certification renders the bank primarily liable for payment to a bona fide holder and while it does not extend to indorsements, nor guarantee the genuineness of the body of the check, it does guarantee the drawer's signature. If the drawer has the check certified before delivery to the payee the drawer is not discharged, while if it is certified on presentation by the holder or payee that fact discharges the drawer. When the certified check is presented for payment it is charged to the general ledger account and returned to the drawer. The practice arises from a desire on the part of the public to have the check verified both as to genuineness of signature and amount, and such checks are used extensively in stock exchange transactions and in connection with sealed bids to guarantee performance of the contract. The large volume of stock exchange transactions in New York has led to the practice of over-certification, although it is a misdemeanor under the National Bank Act to certify a check unless the drawer has a credit balance sufficient to cover it at the time of certification. While many banks will not under any circumstances certify a check without a sufficient balance, others, having among their clients stock exchange brokers whose business requires the certification of large amounts daily, arrange to extend a temporary credit pending the deposit of funds, usually securing themselves by holding collateral. The broker will be required to make many deposits during the day, thus

reducing the risk, and at the end of the day when his last deposit is made the bank has been placed in funds to cover all checks which it has certified. In addition to checks, notes may also be presented for certification on the day of maturity to be collected through the exchanges the following day and returned to the maker.

SIGNATURES OF DEPOSITORS.—The paying teller also keeps a record of the authorized signatures of the bank's depositors. The most convenient form is on cards, filed alphabetically, and a duplicate set may be kept by the bookkeeping department. In the case of corporations, firms and banks the cards contain the signatures and titles of all persons authorized to check against the account, and corporation signatures are supported by a resolution, properly Institutions having many accounts and certified. handling thousands of checks daily find it desirable to relieve the teller of this responsibility by having a signature department where all checks and notes are examined carefully before being charged to the accounts. This department assumes the duties of keeping resolutions and cards and handling the details of procuring signatures of new officials, authorizations, powers of attorney, receiving stop-payment instructions, etc., but the teller must in all cases be supplied with a set of cards to enable him to avoid forgeries and other irregularities. Other duties of the teller include the making up of payrolls for the bank's customers as well as that of the bank itself, and he may be charged with the responsibility of adjusting the bank's legal reserve, charging the account of the drawer, segregating the amount in a "certified checks" account on the general ledger. Certification renders the bank primarily liable for payment to a bona fide holder and while it does not extend to indorsements, nor guarantee the genuineness of the body of the check, it does guarantee the drawer's signature. If the drawer has the check certified before delivery to the payee the drawer is not discharged, while if it is certified on presentation by the holder or payee that fact discharges the drawer. When the certified check is presented for payment it is charged to the general ledger account and returned to the drawer. The practice arises from a desire on the part of the public to have the check verified both as to genuineness of signature and amount, and such checks are used extensively in stock exchange transactions and in connection with sealed bids to guarantee performance of the contract. The large volume of stock exchange transactions in New York has led to the practice of over-certification, although it is a misdemeanor under the National Bank Act to certify a check unless the drawer has a credit balance sufficient to cover it at the time of certification. While many banks will not under any circumstances certify a check without a sufficient balance, others, having among their clients stock exchange brokers whose business requires the certification of large amounts daily, arrange to extend a temporary credit pending the deposit of funds, usually securing themselves by holding collateral. The broker will be required to make many deposits during the day, thus

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maintaining at all times sufficient cash on hand to meet the legal requirements, or in case of a member bank, making deposits with the Federal Reserve Bank to cover deficiencies in the reserve balance, where such deposits are made in currency.

Unit Tellers

PERSONAL CONTACT WITH CUSTOM-ERS.—It is generally recognized that as the bank grows in size it becomes more and more difficult to maintain that close personal contact with customers so essential to banking relations, which characterizes the business of the small institution. For this reason some large banks have adopted the plan of unit tellers, that is, having all the tellers receive deposits and pay checks. This is accomplished by arranging the tellers' cages by alphabetical divisions. Thus one cage will handle all the bank's accounts from A to E, another from F to K, etc. Under such a plan each teller receives deposits for and pays checks against a limited group of accounts and he has an opportunity to become acquainted with them and with the depositors themselves, and is not obliged to familiarize himself with the signatures of all the bank's customers nor to keep constantly in mind all stop-payment orders or the condition of all doubtful accounts.

TELLERS' BLOTTERS.—Each teller keeps a column ruled blotter, one side for debits and the other for credits. The checks to be charged to each individual bookkeeper will be entered in one column on the debit side. In another column he will list all debits

sent to the general bookkeeper, such as certificates of deposit and cashier's checks paid. In another will be listed all country cash items sent to the transit department, and in another will be entered all exchanges for the clearing house. The credit side of the blotter is divided in the same manner, deposit tickets for the different bookkeepers, drafts, certificates of deposit and cashier's checks issued and exchange collected being listed in separate columns. At the close of the day each teller turns over to the head teller all cash and cash items in his hands, and renders to him a memorandum of the footings of the various columns of his blotter. From these figures the head teller makes up a summary of the business of the day in his "cash book" showing the total amounts charged to each bookkeeper or department, and each must prove his work with the head teller's figures. In a bank having only one teller it may be desirable to have separate columns for the more important divisions of the general ledger, especially as many small banks use a combined general journal, ledger, and statement, in which the items are posted in detail instead of totals. and thus both the debit and credit sides will have a column for loans and discounts, one for certificates of deposit, one for cashier's checks, etc.

BALANCING CASH.—To balance the cash (including the exchanges and cash items held over), the cash of the previous day is added to the total credits shown by the summary and the total debits are deducted. The difference should be the same as the actual amount of cash on hand. The same result is

obtained by adding the "old cash" to the total credits and the "new cash" to the total debits. If the grand totals of both debits and credits are the same the teller's cash is in balance. A memorandum is then sent to the general bookkeeper for the daily statement showing the amount of "checks and other cash items," "exchanges for the clearing house," and "cash in vault" as classified in the form prescribed by National and State authorities.

Individual Ledgers

RELATIONS WITH DEPOSITORS.—That part of bank accounting which has reference to the relations with depositors is the work of keeping the individual ledgers, including not only the balance ledgers themselves, but also rendering an account to the customer. The bank numbers among its customers firms and corporations and perhaps other banks and trust companies, and inasmuch as these accounts present the same general problems as those of individuals, the same accounting principles and practices will apply. In any bank the essentials of good bookkeeping are the same. Perhaps the most important is accuracy, with speed, caution and neatness of relative value. For the protection of the bank as well as the depositor it is important that the bookkeeper exercise particular care in posting his checks and credits to the proper accounts. He must be on the look-out for forgeries and other irregularities, should be ever mindful of stop-payment orders, and should have overdrafts approved by an official. A wide-awake

bookkeeper can be of great assistance to the management by calling attention to changes of consequence in his accounts, such as increased or decreased balances, large deposits or withdrawals which might have some bearing on the conduct of the depositor's business or investments, or any questionable transactions such as check "kiting."

INDIVIDUAL LEDGER FORMS.—The form of ledger used is of little consequence so long as it meets the bank's requirements. The old fashioned cumbersome bound book with a page or half-page for each account was supplanted many years ago by looseleaf ledgers. The principal advantage of the looseleaf system lies in the fact that only current accounts need be kept in the binder, and its use eliminates the necessity of transferring the accounts to a new ledger periodically. By this method a full sheet is devoted to each account and the sheets themselves are arranged in alphabetical order, doing away with the use of an index. The Boston ledger is still popular in many banks where it is best adapted to existing conditions. The form provides six daily columns on each page, with horizontal lines down the middle for the names of the accounts and a debit, a credit and a balance column, for each day. Space is left for new accounts which may be opened, and the ledger may be bound with sufficient sheets for any number of months. In recent years, however, the posting machine has been brought to a high state of perfection, and it offers so many advantages over the pen posting method that it has been adopted by thousands of banks. Its use does

(Fig. 5)

Boston Form of

		MONDAY		TUESDAY		WEDNESDAY		
Date of Settlement	No.	DEBIT	CREDIT	DEBIT	CREDIT	DEBIT	CREDIT	
	1							

away with the balancing of pass-books, which is always burdensome as most customers leave their passbook to be balanced at the end of the month when the bank's daily routine is unusually heavy. Instead of balancing the pass-book the machine posting method provides the depositor, even in the very small bank, with a neatly printed statement of his account for the month, and the pass-book is used only as a receipt book in making deposits. The statement is posted daily so that at the end of the month it is necessary only to take the cancelled checks from the file and return them to the customer, who gives the bank a receipt for the returned checks, and at the same time acknowledges that the balance as shown by the bank's books is correct. If any discrepancies appear the exceptions to the bank's figures are noted on a reconcilement sheet which is returned for adjustment. specimen form of the Boston ledger is shown in figure 5.

GROUPS OF ACCOUNTS.—The individual accounts include those of firms and corporations, and in a large bank may be divided into "personal" and "com-

Individual Ledger

(Fig. 5)

	THU	THURSDAY FRIDAY		SATURDAY		
DEPOSITORS DEBIT		CREDIT	DEBIT	CREDIT	DEBIT	CREDIT
		-				

mercial," while the bank accounts are usually grouped as "National," "State," and "Trust and Savings," each classification divided among as many ledgers as necessary. Individual accounts are carried alphabetically by surname and the bank accounts alphabetically, usually by cities. Bookkeepers are assigned to alphabetical divisions with a view to giving each man as many accounts as can be efficiently handled, but no uniform rule can be followed, as some accounts are more active than others. Each bookkeeper is responsible for his ledgers and in a small bank may be required to prepare his items for posting, file checks and balance his pass-books, as well as post and prove the ledgers. In a larger institution, however, the actual bookkeeping usually occupies all of the bookkeeper's time, and the work of sorting and journalizing the material is performed by check clerks or an entire department called the "check-desk." Whenever possible pass-books are balanced by someone other than the bookkeeper to provide a check on the bookkeeper's work.

BALANCING.—Balance bookkeeping includes

three distinct operations, (1) sorting and journalizing the checks and deposit tickets, etc., (2) posting the accounts, and (3) proving the work. It is desirable to post the ledger directly from the items. Credits include the deposit tickets received over the window. cash letters received through the mail, and the miscellaneous credit tickets received from various departments. The debits are principally checks paid over window, through the clearing house and those received in the mail deposits, but matured notes are also charged direct to the account of the maker if presented at maturity, and a miscellany of debits comes from other sources in the bank. Care must be taken to post the deposits and checks to the proper account, and not to one with a similar name, as an error of this kind would not affect the proof of the posting and, if not found by the statement posting clerks, might remain undiscovered for some time, ultimately causing a loss to the bank.

ACCURACY.—Deposits and other credits are of course added to the old balance, debits must be deducted, and the new balance extended. When it is considered that an account may have several credits and debits, necessitating rapid mental calculation involving more than one addition and subtraction, and that all this must be done in a few seconds, the importance of extreme accuracy may be realized. The use of the bookkeeping machine eliminates errors of calculation. Credits are usually posted separately, but debits against a single account may be listed in a subsidiary ledger, only the total being entered in the

regular ledger, which total is indicated by a symbol denoting that it is a list total. Letters and symbols are used extensively in bookkeeping; the proceeds of a discount may be indicated by D, mail credits by C/L (cash letter), interest credits by INT, and in posting to bank accounts the number of a draft is invariably set opposite the amount.

STATEMENT OF ACCOUNT.—When the bookkeeper has finished posting the ledgers the items are turned over to the statement clerk and a duplicate record is made on the depositor's statement of account. In this case, however, each item is posted separately, as this is sent the customer with the cancelled checks. Whenever practical the statement is posted from different material than that used in posting the ledger, as an additional precaution against error. For example, the bookkeeper posts deposits from the deposit ticket, while the statement clerk might post from a window sheet furnished by the receiving teller. Mail credits are posted to the ledger from credit tickets made out when the mail is opened and the statement from the letters themselves.

METHOD OF PROOF.—After the debits and credits have all been entered and the balances extended it is necessary to prove the posting. Some banks take a trial balance of the entire ledger, proving the total against the general ledger. Others list the old balances and the new balances of those accounts which have been posted, and in this case the difference between both totals should equal the difference between the total debits and total credits as shown by

the journal, regardless of the aggregate of either. A method in use with the Boston ledger is to add the credits of the day to the total of the old balances, deduct the debits, and prove the amount against the total of new balances—the result being proved to the general ledger figures. When the posting machine is used a proof may be taken by calling back the ledger balance of each posted account against the balance as shown by the statement. The ledger and statement having been posted by different persons at different times and the calculations performed automatically by the machine, if no errors are found in either posting, the work is assumed to be correct on the theory that two persons will not make the same error. Even in this method, however, the human element, which is never infallible, is not entirely eliminated. However, a combination of the last two mentioned methods is found to give an accurate proof.

Loans and Discounts and Acceptances

LOAN METHODS.—Before a customer brings his note to the discount or loan window, he has had the official approval of his line of credit, and the actual borrowing is started by the presentation of his note—with collateral, if required—for the loaning officer's initial of final approval. He then takes his note to the window and presents it, together with his passbook. If commercial paper is purchased from a note broker, a check is given him for the proceeds instead of the item being entered in the pass-book. If a discount, the amount of discount is figured and deducted,

and the proceeds entered in the customer's pass-book. The teller usually enters the transaction on his discount blotter (a memorandum of the day's work at the window) and turns the note over to the register clerk. If a collateral loan has been made, it would be entered . in the customer's book after the collateral had been checked. The teller would have entered the transaction on his blotter and handed the collateral and note to the collateral clerk and a memorandum of the note to the register clerk. The collateral clerk would make out a collateral card as shown in figure 6 and then file the collateral with the note in an envelope under the customer's name, and would file the card in like manner. Substitution of collateral must be accounted for by substitution slips and the record card changed. Collateral values must be carefully watched.

DISCOUNT METHODS.—The register clerk usually takes both discounts and loans—though in many large institutions separate registers are kept for loans—and enters them. He also makes out a credit ticket for each customer, showing the amount of the note, the discount, and the proceeds actually credited. These tickets are turned over to the receiving teller who puts them through his proof sheet (or the register clerk may have a proof sheet of his own), turning over the tickets to the bookkeepers for posting. The debit of the tickets is charged against "loans and discounts," and the two credit totals—"unearned discount" and "individual ledgers" are the offsetting entries, the general ledger keeper taking the unearned discount figures from the receiving teller's proof, and

Loan Card (Fig. 6)

\$

No.		
	19	
Jan.	Apr. July July July July July July July July	Oct.
Feb.	May Aug.	Nov.
Mar.	June Sept.	Dec.
===-!	COLLATERAL	J II
	Received all collateral to the above-mentioned to	211

Received all collateral to the above-mentioned loan

New York,..... 19

the individual ledger figures being grouped with the total of all other credits sent to that department. At the end of the day the register clerk can check his own figures by running up his notes and also adding his register figures. Both of these should balance with the total of both the discount and loan blotters and also with the amount charged against loans and discounts on the receiving teller's proof sheets. When the notes prove, they are then sorted alphabetically and posted to the liability ledger or bill book which shows the amount borrowed by each customer, whether on his own note, a note of some one else indorsed by him, or whether he is contingently liable as maker or indorser on the note of some other borrower in the bank. The amounts of the notes on which the customers actually received the proceeds, when totaled, should prove with the amount carried on the general ledger against loans and discounts. In this way, provided the ledger has been posted accurately (and the entries should be checked daily), a correct record may be kept of all borrowers' liability to the bank on loans and discounts. A specimen form of the discount register is shown in figure 7.

MATURITY TICKLER.—After having been posted to the liability ledger, the notes are then sorted according to maturity (the maturity having been checked by a second person) and then entered in the tickler or maturity record on the day they are due. They are filed under maturity when they will automatically come up for payment. Demand notes are filed according to name and so kept until payment is called for.

Discount

Date	Num- ber	Borrower	Maker	Collateral or Endorser	Place of Payment

ESSENTIAL RECORDS.—There are many upto-date systems which, by the use of a typist, may perform two or more of the operations mentioned here; but the operations, whether abbreviated or not, must take place. No system has yet been invented satisfactorily to take the place of a well-kept liability record or bill book as shown in figure 8.

FOREIGN COLLECTIONS.—If a note is due out of town, it is taken out of the files about two weeks in advance and sent to the collection teller, who enters it for collection and sends it to a correspondent bank which will present it at maturity. The collection teller also takes items direct from customers and sends them out for presentation and collection, receipting for them in the back of the customers' pass-books, and when payment is received, crediting the customers' accounts. The manifold form, shown in figure 9, is an approved, up-to-date collection record.

Register (Fig. 7)

Date Ti	me Due	Rate V	Dis- counted Bills Bill Coun Eligi	Time Loans ea ted Liberty I ble Bonds co	Jn- Indi- rned vidual Dis- De- posits	

Seven copies of this form are printed with one operation of a typist. They serve the following uses:

Original-Letter to the collecting bank.

Second—Acknowledgment from the collecting bank, which, upon receipt, is noted on the third copy and filed away for future reference.

Third—Permanent record which is filed under the name of the collecting bank until paid and then under the depositor's name. All notations as to disposition of item, etc., are made on this copy.

Fourth—Debit to the collecting bank when item is paid.

Fifth-Credit to customer's account.

Sixth—Advice to customer. (Numbers four, five and six are filed under the customer's name until payment is received.)

Seventh—Record of original entry which is filed under the number given the collection.

The foregoing records are conclusive for present day needs and provide a record of each item which leaves no loophole for loss of items, except, of course, loss through the mail.

COMMERCIAL LETTERS OF CREDIT AND ACCEPTANCES.—When a commercial letter of

Liability

LIN	IE GRANTED			
	NVN ENDORSED	BUSINESS	• • • • • • • • • • • • • • • • • • • •	
ОТ	HER	ADDRESS		-
DATE	MAKER	ENDORSER OR	COLLATERAL	Rate

credit is issued, a separate record is made, showing as an asset the amount due from the customer, the same amount being shown as the bank's liability to the beneficiary of the letter of credit. When an acceptance is made under the letter of credit, the amount of the bank's liability under the letter of credit is reduced and a new liability for the acceptance outstanding is set up. The arrangement is usually made that the customer shall deposit funds to meet the draft a day before it matures, and the money is entered as a debit (increase) to cash and a credit (decrease) of the customer's liability to the bank—or as a debit to cash and a credit to "anticipation account," to which account the acceptance is charged when it is paid, the entry

Sheet No.....

Record (Fig. 8)

Due Date	Liability	y as Endorser of ted for Own Acco	r Dis- ount	Liability on Paper Dis- counted for Others			
Date Paid	Own Paper	Other Paper Date	Balance	Maker	Endorser or Guarantor	Balance	

then being a debit to "anticipation account" and a credit to whatever account payment was made from. The "due from customers" and the "acceptance outstanding" records are then adjusted by a per-contra entry. While the letter of credit and the acceptance are in force, a record is kept of the customer's liability to the bank on the form shown in figure 10 which also shows the terms under which the letter of credit was drawn.

Figuring Reserves

PURPOSE OF RESERVE.—A bank reserve is the fund which experience has taught should be the limit beyond which a bank should not extend its loaning operation. In other words, while serving as an

AMOUNT

Depositor's

Collection Record (Fig. 9)

THE INSTITUTE NATIONAL BANK

OF NEW YORK

DATE SENT

WE ENCLOSE FOR COLLECTION

MAKER OR DRAWEE

OUR NUMBER

DEPOSITOR

PAYABLE AT

DATE

Items Marked X No Protest

Number or Letter Date

60

SPECIAL INSTRUCTIONS

PLEASE ADVISE PAYMENT OF EACH ITEM SEPARATELY GIVING OUR COLLECTION NUMBER AND LETTER DATE. UNLESS SPECIALLY INSTRUCTED CORRESPONDENTS ARE NOT AUTHORIZED BY US TO DELIVER ANY DOCUMENTS EXCEPT ON PAYMENT OF ITEMS.

YOURS RESPECTFULLY EXCEPT ON PAYMENT OF ITEMS.

emergency fund to a certain extent, its real value lies in that it is the barrier beyond which further expansion by a bank must halt, unless reinforced by the proceeds of rediscounts for which the banker must pay the rates set by the Federal Reserve Board or by his city correspondent, if he is not a member of the Federal Reserve System. This fact has been recognized by the various authorities and both National and State laws have been passed calling for certain minimum reserves The actual figuring of the reserve is a rather automatic process. The form prepared by the Federal Reserve Board for the computation of reserve to be carried by member banks with Federal Reserve banks follows:

Net Demand Deposits	
1. Deposits payable within thirty days, not inc	luding:
(a) U. S. Government deposits.	ŭ
(b) Certified checks outstanding.	
(c) Cashiers checks outstanding	\$
2. Balance due to banks other	
than Federal Reserve \$	
2A—Balance due foreign	
banks\$	
3. Cashiers checks outstanding \$	
4. Certified checks outstanding \$	
Total \$	
Less:	
Deductions of the following items are permitted	
only from the total of Items 2, 3 and 4. Should	
the total of Items 5, 6, 7 and 8 exceed the total of Items 2, 3 and 4, both groups must be omitted	
from the calculation.	
5. Balances due from banks	
other than Federal Re-	
serve Banks\$	
6. Items with Federal Reserve	
Bank in process of collec-	
tion \$	
7. Exchanges for clearing-house \$	
7. Exchanges for clearing-house \$	

Letter of Credit

CHARGI										
COLLEC	T FRO	M								
COLLAT	TERAL									
SPECIA	L INST	RUCTIO	NS							
COMMI	SSION									
		OCUI	VI E. I	JTS	REG	CEIV	ZED			DESCRIPTION OF
ETC	DATE		1				1	1	Date	=====================================
Docu- mentary	New Fork ei	or- Fron	n B/L	Cons.	Coml Inv.	Mar. Ins.	War Risk	Various		Marks, Numbers,
Number	TOTKE	gn	-	1		!	1	l	Del a	
					1					
		1								
8.	Checks									
	the	same j	olac	e	 (The	\$	·			
	1	otal de 5, 6, 7	auc	uon R b	(Ite	ms		\$		
9.]	Net ba							Ψ	\$)
	Total N								9) \$	<u> </u>
	Deposi									
11.	Saving									
thirty days' notice before payment \$										
12. Certificates of deposit (subject to not less than thirty days' notice before payment) \$										
chan thirty days notice before payment, ϕ										

Record (Fig. 10)

	AMOU			DRA	WINGS	BALANCE			
	DRAV	VINGS	BALANG	CE					
MERCHA	ANDISE								
and Kind	Shipped Per Vessel	STATEMENT							
		Amount of Draft	Rate	Dollar Amount	Due Date	Paid			
	Sailed From	Com- mission							
1	Date	CHARG	ES BY CC	RRESPONDE	NT Rate	Dollars			
	Date				210.0				
				Firsts	S	econds			
		Documents Examined							
14. F	ostal S	avings D	eposits.	ly after thir		\$ \$			

RESERVE REQUIREMENTS.—The reserve requirements for various institutions under State supervision differ in some respects, but the underlying principles are the same as those stated in the pre-

and 14).....

ceding paragraph. The Federal requirements are that certain reserves must be kept against the demand deposits and time deposits. These requirements follow:

	Demand	Time
In Central Reserve Cities	13%	3%
In Reserve Cities	10%	3%
Elsewhere	7%	3%

The law also provides that when a bank is located in the outlying districts of a central reserve or reserve city the Federal Reserve Board may, on affirmative vote of five members, instruct the said bank to maintain reserves as if located in a city under a lower classification—i.e., either 10% and 3%, or 7% and 3%, as the Board may direct. The State laws in some cases have been amended so that they allow State institutions to carry a part or all of their reserves with the Federal Reserve Banks.

EXPLANATION OF RESERVE ITEMS.—In view of the fact that forms are supplied and that the reserve required is a matter of multiplying the "net demand" and "total time" deposits by the required reserve percentages, it may be interesting to state briefly what is required in the Reserve form. Explanation of Items 1 and 11-15 is unnecessary. Items No. 2, 2a, 3 and 4 represent the gross "due to banks." Cashiers' and certified checks are included because the greater majority of these are in the exchanges of other banks and are collected the next day through the clearing house or by hand. Items 5, 6, 7 and 8, are the gross "due from banks" other than the Federal Reserve "reserve account." Exchanges and cash

items are included as these are also due from banks on the next day. Gross "due from banks" are deducted from gross "due to banks" and the net amount (Items 9) added to Item 1, making a total "net demand deposits" (Item 10). If "due from banks" is greater than "due to banks," the items are entirely eliminated and the required reserve percentage on demand deposits is used as the multiple of Item 1 to ascertain the amount of reserve required in terms of dollars. This method of calculation is based on the theory that "due from banks," being so many actual dollars in reserve—though not legal reserve—may be offset against the "due to banks," the reserve to be figured only on the net liability plus the demand deposits (Item 1).

CASH.—Cash in vault is not allowed, either as a reserve or a deduction from deposits, as such an allowance would defeat the plan for automatic retirement of Federal Reserve notes. This plan is based on the fact that the banks naturally protect their own interests, and when notes, if not required to meet daily business needs, begin accumulating in the bank's vaults, it is certain that the banker, not being able to count excess cash as a reserve, will see to it that it is shipped, either to the Federal Reserve Bank of his district, or if he is not a member of the system, to his city correspondent by whom it will eventually be sent to the Federal Reserve Bank. Federal Reserve notes may not be paid out by any but the issuing bank, so notes deposited with any Federal Reserve Bank will automatically find their way either to the

issuing Federal Reserve Bank, or, on its order, to Washington for redemption. If notes are no longer required by the issuing banks to supply members, due to the lack of demand for them from member banks to meet currency requirements, the Federal Reserve banks will retire them by presenting to the Federal Reserve Agent a given amount and receiving from him a like amount of collateral which has been deposited when the notes were issued. The Federal Reserve System provides for both automatic increase and decrease of notes based on the business needs of the country, and both have worked as planned.

Bank Auditors

AUDITOR'S RESPONSIBILITIES.—Federal and most State laws put the responsibility for operating a bank squarely up to the board of directors of the These directors appoint officers who are in charge of the various parts of the operation explained in other chapters of this book. It is impossible for the board to keep a close check on all that goes on in the bank, although legally they are expected to do so. While banking laws generally provide for periodical directors' examinations, in which the directors are usually assisted by a firm of auditors or accountants, it is obvious that, if the board wishes to maintain active observation of operations it must have a representative in the bank at all times. This should be the position of the auditor in any bank, for as soon as he becomes responsible to some officer also in charge of operations the check on such operations which the

board should have, is nullified. Whether the particular title given the man who performs the task thus described is auditor, or comptroller or vice-president, matters not so long as he is directly responsible to the board of directors and makes his reports to it. No important change in the system of the bank should be attempted without the cooperation of the auditor as the representative of the board of directors.

WORK OF AUDITING.—All bank reports, income tax reports, etc., are made out by the auditing department. All reports of loans, discounts, acceptances, etc., are also checked by this department before they are presented to the board of directors. Periodical audits of each department of the bank are made without notice to the department that such a check is to be made.

AUDIT OF LOANS AND DISCOUNTS.—In the loans and discounts department a run-up of the notes is made and proved to the general statement. Collateral is checked and if necessary, verified to the customer, though this is usually left to the bank examiners or outside auditors who assist in the directors' examination. In some banks the auditors maintain a joint control of the collateral. A check is usually made of the discount deducted on notes and the proceeds and discount items are followed through to the individual and general ledgers.

EARNINGS AND EXPENSES.—Earnings accounts on the general ledger are footed to avoid the possibility of tampering by any employee. In some banks a daily check is made of the earnings and ex-

pense accounts by a representative of the auditing department. In other banks schedules of earnings and expenses are kept in duplicate in the auditing department so that the possibility of embezzlement in this direction is eliminated. All accruals of interest are also checked as well as payments of interest.

AUDIT OF INVESTMENTS AND OTHER SECURITIES.—All invoices for investments are refigured and the securities themselves are checked into the vault under the auditing department control. If the bank is large, a vault man is employed who represents the auditing department on all securities entering or leaving the vault. On all securities held for safe-keeping or by the trust department a similar control is maintained, so that no one can enter or remove any securities from the vault without the presence of a representative of the auditing department who makes an entry of each "in" and "out" to be posted on the auditor's control record of securities held. On such securities as are left in control of the security clerk an examination is made periodically. auditor checks the accrual figures made by the securities department or his department makes all accruals. The system used depends on the bank and its requirements. Bonds and mortgages, real estate deeds, etc., are usually kept under separate control and subject to the same restrictions when entered or delivered.

AUDIT OF ACCEPTANCES AND LETTERS OF CREDIT. When a letter of credit is signed by an officer, a slip showing the name of the beneficiary

(the bank's customer), the amount and the number of the letter of credit should also be presented, and as the officer signs the credit he also should initial the slip and put it in a small locked box in his desk. The same procedure should be followed with regard to drafts or certified and cashier's checks or acceptances. The auditing department, upon collecting these slips from the various officers, is provided with a check on all of these various items issued, as the numbers and amounts on the initialed slips must compare with the book records of payments made.

AUDIT OF CASH. An examination of the tellers' cash is made at irregular intervals. The reserve cash is almost always under the auditor's control, so that an examination of this reserve cash is usually unnecessary, as access to it can be had only by the paying teller and a representative of the auditing department.

AUDIT OF DEPOSITS.—Depositors' ledgers are footed occasionally and statements or pass-books are balanced by the auditing department or by the statement department under the supervision of the auditing department. Certificates of deposit, cashier's checks, certified checks and bank drafts are all controlled similar to "acceptances." Analysis of depositors' accounts are also made from time to time to show the amount of free balance, or to show, in many cases, that an apparently large average balance is really an overdraft when taking into consideration the number of checks always in process of collection. In many banks this is corrected by having the interest

due on the account run only from the approximate date of the payment of the checks by the drawee banks. It often happens, when the matter is followed up closely, that the customer may be owing money to the bank for drawings against uncollectible funds instead of the opposite being true.

AUDIT OF BILLS PAYABLE AND REDIS-COUNTS.—These items are usually checked by the auditing department when an examination is made of the loans and discount department or the securities department, as either discounts or securities are usually pledged and in order to verify the assets it is necessary to verify also the amount held by the lending bank as collateral to its loan.

AUDIT OF DAILY PROOFS.—The daily proof sheets made by the various departments are consolidated either by a department organized for that purpose and checked by the auditors or by the auditing department itself. Each department is then directed to turn over its individual proof of the day's work to the auditor, who checks it with the combined proofsheet of the work of the same day. In this way a control on all "strikes" by departments is made daily and by regular departmental audits the correctness of any one department may be determined. After the daily proof has been checked the combined figures are compared with the entries made in the general ledger, and if they agree the daily proof is complete.

AUDITING METHODS DEPEND UPON CIRCUMSTANCES.—In the brief description of the work of the auditor a medium sized bank of about

\$30,000,000 in deposits is used as an illustration. The methods used and the detail of the control maintained must all be subject to the general conditions surrounding the needs of each bank. In some banks an attempt is made to distribute costs among the various departments to show their net earnings, but this has met with rather indifferent success, as it is very difficult to apportion costs and earnings in the ordinary bank. An auditor is, however, a necessary fixture in any bank where the board of directors wishes to maintain a close observation of operations.

Bank Supervision

ESSENTIALS OF BANK EXAMINATION.-Since a bank is a semi-public institution, employing the money of its depositors as well as its own in conducting its business, it follows that there should be a certain amount of supervision on the part of the civil authorities. The duties of a bank examiner may be likened somewhat to those of the physician who interviews his patient on the assumption that the latter may be ill. Hence the bank examiner not only certifies as to the correctness of the accounts, but he must also be on his guard against possible irregularities. The duties of examiners vary as the Federal and State laws vary, and similar distinctions exist in their personalities and methods of solving problems. evidence available compels the conclusion that nearly all examiners do their duty as best they understand it. They are all agents of some department of the Government or State and are charged with the execution of law. The duties of an examiner are to ascertain:

- 1. That the institution is solvent.
- 2. That the management is honest.
- 3. That the policies and tendencies are safe and sound.
 - 4. That it is not violating the law.
- 5. That the facts are accurately reported to his superior officer.

DETAILS OF EXAMINATION.—Based on these requirements are many responsibilities and duties of detail whose ramifications are numerous and complex. This vigilant examiner has a topical list of the duties he considers essential to a thorough investigation, and although the method is frequently changed, a synopsis of the details would be about as follows:

- 1. Count the cash on hand and verify the amount with the ledger. Obtain explanations for all cash tags and memoranda. Verify and list the cash items held in lieu of money, items to be collected and returned items. Inquire if a petty cash fund exists, and, if so, examine carefully. Verify details of the day's exchanges and drafts sent in or out on balances.
- 2. Scrutinize, list and classify loans and discounts; carefully examine collateral; be sure all notes are signed; record past due paper and arrearages of interest payments; be sure no loans exceed the legally prescribed limits. In most States savings banks are not permitted to loan on commercial paper, or unsecured loans.
 - 3. Count and examine the bonds and securities

and verify book values with the general ledger. Calculate the market value and compare with book value, noting appreciation or depreciation.

- 4. Inspect and list mortgages; be sure taxes are paid; that title insurance, appraisal certificate, assignment and insurance policy are on file; that the mortgage is not in excess of the legal percentage of the appraised valuation; and that the mortgage has not been foreclosed.
- 5. Real estate owned—examine deed, tax receipts, title guarantee, appraised, assessed and book values. Is the insurance sufficient?
- 6. Carefully investigate overdrafts and if uncollectible have them charged to profit and loss.
- 7. Investigate the liability of directors and officers on loans and overdrafts.
- 8. Be certain that furniture and fixtures figures are not excessive.
- 9. Become familiar with the hidden assets (reserves) in the above accounts.
- 10. Foreign Department. If shown on balance sheet as separate item, verify all assets and liabilities of this department, being sure to note contingent responsibilities. Send for statements from all foreign banks closed at approximate mailing time after examination. Acceptances and letters of credit are usually verified by letter to the customer for whom they were issued.
- 11. Capital stock should be verified by proving issues, cancellations and outstandings. Look for over-issues. Where bank has a registrar, out-

standing shares may be checked with its records.

- 12. Verify amounts due from banks and bankers, asking for statements as of date of examination.
- 13. Make thorough test of individual deposits, examining dormant accounts, etc.
- 14. Make tests of interest calculations and classify interest bearing accounts.
- 15. Verify total of outstanding certificates of deposit. Be sure the old ones are cancelled and that partial withdrawals are recorded on the stubs. Prove total with controlling figure of the general ledger.
 - 16. Verify cashier's checks in a similar manner.
- 17. Verify certifications with the certification book and if in doubt let the receipt for returned vouchers be produced.
 - 18. Verify cotton, coffee and produce margins.
 - 19. Verify provident accounts.
- 20. Search for hidden profit and loss items which may frequently be found in the individual ledgers.
- 21. Verify revenue and expense accounts leading to correct profit and loss and surplus figures and analyze them.
- 22. Contingent liabilities should be carefully investigated.
- 23. Prove all accruals, whether receivable or payable, and all unearned discount.
- 24. Prove last published statement, and reconcile it with the general ledger.
- 25. Carefully scan the minute book and note any changes of policy.
 - 26. Verify all bills payable or rediscounts.

GENERAL PLAN OF EXAMINATION .-One of the first duties of an examiner upon beginning an examination is to place seals upon all the vaults or safes containing cash or securities, and keep them under seal until the verifications are completed. By this means all the securities held are under control simultaneously. The seals may not be broken by the officers or employees of the institution, otherwise their purpose would be defeated. By the proper use of seals the substitution of securities is prevented. Having safeguarded the substitution of securities the examiner counts the balance of cash on hand and scrutinizes the cash items carefully. Transfers from one teller to another or the sending out for cash to conceal defalcations, etc., should be immediately detected by means of a distribution of the staff of examiners. Clearing house and collection items are either sent out by the examiner himself, or are properly confirmed by the members of the clearing house and correspondents. The examination of demand loans and collateral is one of the most important branches of the work, and many defalcations have been hidden by the failure to indorse partial payments. The only absolute way to ascertain the correctness of these loans and collaterals is to send out a memorandum to each borrower setting forth the amount of loans and collaterals held as on the day of the commencement of the examination. If such a thorough proof is considered necessary in the case of the institution under investigation, the customer's confirmation should be returned addressed to the examiner. As a matter of fact, however, a test is very often

considered sufficient. The possibilities of raised stock certificates must be borne in mind. Amounts may be changed from a small number of shares to a larger number and used for fraudulent borrowings. thorough examination of a trust company must embrace the trust, safe deposit and other departments which may be conducted by the company under inspection. The examination of the securities in a trust department is as important as the examination of the banking department. Often the market value of investments is largely in excess of the book value. Real estate owned, and furniture and fixtures are also often carried at less than their actual value. Such conservative figures hide secret reserves which are favored by careful bankers. Nevertheless, the abuse of secret reserves must be guarded against despite the fact that a balance sheet is not, and does not pretend to be a statement of officially determined facts. It is merely a conservative estimate of a financial condition which by its very nature cannot possibly be accurately determined

THOROUGHNESS OF EXAMINATION.—
It was formerly considered that if an examiner had verified the assets of an institution and found them as stated, he had ascertained that the institution was solvent, and that he had completed the work required of him. However, examiners are no longer satisfied unless they have also verified the liabilities. The accounts with other banks have to be verified by correspondence, and the replies are mailed direct to the examiner, or verifications are sent to the department's

offices where certain examiners effect the reconciliations. Deposit accounts are a fertile field in which to detect wilful as well as inadvertent wrongdoing, because defalcations and also false balance sheets are the results of manipulations of the individual deposit accounts. The dormant accounts should receive especial consideration, and, if the examination is to be a thorough one, letters should be sent to obtain the passbooks of all the prominent accounts and their balances should be verified. It is not possible in an ordinary examination to verify all the individual pass-books for several reasons, the principal ones being the volume of work such a method would require and the inadvisability of arousing depositors' suspicions and injuring the bank's patronage by asking to have all the books sent in. The pass-books of the larger depositors should be frequently balanced. By keeping a list of the books inspected during the course of an examination, it is possible during a period of years to examine all of the accounts. The examiner should assure himself that an internal system of auditing prevails in an institution. The method of preparing monthly statements of depositors' accounts is superior to the passbook settlement, because it enables the examiner to verify all depositors' balances on the same day from the confirmation of the correctness of the accounts received from the depositor himself, this being the best method of insuring accuracy. The rudimentary precautions of an effective system of checking records may be formulated in the following three fundamental rules:

- 1. No clerk should have access to the books recording entries which go to check the entries made by that clerk, i. e., tellers should not be permitted to keep or assist in keeping any of the ledgers or checking off of trial balances thereof.
- 2. The clerks should be shifted about at intervals, so that fraud, even if committed, may be easily detected by a different clerk going over the same account.
- 3. That no cash entries (transfers, for example) should ever be made without especial authority, confirmation of which is usually evidenced by the initials of the officer authorizing the same.

COMPETENCY OF EXAMINERS.—The test of an examiner's competency is his ability to judge of the correctness of items by an executive testing-not necessarily of the items themselves, but of their totals. The responsibility of verifying the bank's books rests not only with the safeguarding of the interests of the stockholders, but in offering to the public a guarantee of the accuracy of the records. Precaution must be exercised to discover the existence of duplicate passbooks. In some institutions the old custom of use of duplicate deposit slips and the writing of the details of the checks drawn (i. e., numbers, dates, etc.) in the pass-books is an effectual preventative of this kind of fraud, notwithstanding that such a system largely increases labor and is too cumbersome to find favor upon the stress of business of a large modern bank. the foregoing sketch of an examiner's duties it may be seen that the solvency of an institution and its obedience to the laws and the honesty of the management and employees are thoroughly tested during the examination by each phase of the investigation. In order that the examiner may convince himself that the policies and tendencies of the institution are for the maintenance of the principle of safe and sound banking, he must not only have a broad comprehension of the affairs of the institution, but must have detailed information on numerous subjects.

CATEGORICAL QUESTIONS. — Arranged categorically and regardless of a seeming repetition of topics, answers to questions similar to the following enable the examiner to form a just opinion of the administration of the bank:

- 1. Were loans made during the period to the directors (or trustees), officers or employees?
- 2. Are there any advances either direct or indirect upon shares of the stock of the institution?
- 3. What is the value of the notes which are past due?
- 4. What is the estimate of the value of single name obligations?
 - 5. Are there any excessive lines of credit?
- 6. Have latest financial statements been obtained from borrowers?
- 7. Are there acknowledgments in writing admitting the validity of large borrowings made by the makers or indorsers?
 - 8. Are the reserves always maintained?
- 9. Are the securities carried at a figure in excess of actual market value?

- 10. Are the margins on loans sufficient?
- 11. Are the margins within conservative and the legal percentages of appraised values?
- 12. Are the officers and employees under sufficiently heavy bonds?
- 13. Are the directors (or trustees) and committee meetings regularly attended?
- 14. Do the minutes of the institution indicate that the law is being obeyed and that its provisions have been enforced?
- 15. Do the expense accounts accurately reflect the salaries and other financial operations?
 - 16. Are the disbursements properly vouchered?
- 17. Was the last closing of the profit and loss account on a uniform basis with previous bookkeeping?
- 18. Is the income upon loans and investments at the rates shown by the ledgers?
- 19. Are the safes secure, and are the premises properly sentineled by watchmen?
- 20. In case of disaster requiring outside financial help, are there any resolutions on the minutes providing for such assistance?
- 21. Does the bank have the necessary books, and are they well kept?
- 22. Are the bookkeepers and clerks frequently changed from one position to another? Is the bookkeeping properly divided among the employees?
- 23. Are daily cash balances and frequent trial balances made?
- 24. What is the nature of the accounts of the employees which are kept in the bank.

- 25. What is the security upon overdrafts?
- 26. Are the officers careful of the small things which count for good banking practice, such as proper filing, proper cancellation and pasting of stock certificates, paid certificates of deposits, paid officers' checks, indorsement of partial payments on loans, etc.?
- 27. Are the computations of interest properly verified by another clerk?
- 28. Are chemical or knife erasures on the books very frequent?
- 29. What is the method for requisitioning supplies, particularly such items as loose-leaf sheets or cards?
- 30. What supervision exists over the custody of pass-books?
- 31. Are the signature cards occasionally checked against the names on the individual ledgers, with the purpose of disclosing fictitious accounts?
- 32. Is there official written authority for the important acts of the employees of the bank?
- 33. Do the officials receive departmental reports?
- 34. Are the original slips which furnish the authority for debit and credit entries author-initialed?

SAFETY AND SOUNDNESS.—An examiner, when preparing to report upon an institution, must have ascertained the general character of its business and the personnel of its officers, and neither the officers nor employees should know when the examination is to be made. A bank should be so organized

that it welds together the different classes and conditions of the community. To limit the making of loans either to friends or enterprises in which the bank's officers are interested would be a great weakness in the management of a bank resulting in a loss of deposits, nor is it possible for bankers to be too careful with the investments of their trust funds. The funds of a commercial bank should always be loaned upon short time. Notes carried by a bank and continually renewed should be scanned with suspicion by the examiner, lest the makers can not pay when so requested. Every bank should insist upon the payment of a part of the debt on each renewal, unless the loan be collateraled by ample security. Past due notes or loans and overdrafts are neither indicative of a healthy nor prosperous condition. Successful bankers and bank examiners are opposed to past due notes, overdrafts or cash items of long standing.

Bank Publicity

SERVICE AND PROFIT.—Banks are organized with the two-fold object of (a) making money for their stockholders, and (b) serving the community. In order that a bank may achieve this two-fold object, it must obtain customers. After a bank has been established, almost the very first thing that is necessary is that public announcement be made that the bank is organized, and is fully equipped and ready to transact business. And the various means employed to spread this news is known collectively as "bank publicity." Now the ultimate purpose of all bank publicity is to

persuade potential customers to become actual customers. But bank publicity alone cannot accomplish this purpose. The bank itself must possess certain essential characteristics which will entitle it to the patronage of the community. These characteristics can be classified as follows: (a) Strength, evidenced by ample capital and surplus, with liquid and well secured portfolio; (b) Clean history; (c) Good personality, evidenced by officers and employees of good character, ability and judgment; (d) Adequate equipment, meaning attractive building, well appointed offices and modern facilities; (e) Service, which is ability and disposition on the part of officers and employees to give at all times agreeable and satisfactory service. Equipped with the above characteristics, a bank is justified in seeking business by every legitimate means.

PERSONAL WORK.—The primary method and one which produces the most substantial results is personal work. In order to accomplish the maximum in building the business of the bank, personal work should be carried on continuously by all the various folks who are more or less directly interested in the success of the institution. These folks naturally divide themselves into five groups: stockholders, directors, officers, clerks, customers. Obviously, the contact which is possible by means of personal work is limited, and right here is where bank publicity steps in and does its part. The word "publicity" as popularly employed, is a broad term which may include all of the various methods that are used in communicat-

ing with the prospective customer; thus we have "direct" advertising which includes personal letters, booklets, pamphlets, blotters, novelties, calendars, etc., and "indirect" advertising which is publicity directed in a general way to the public at large through magazines, newspapers, street car cards, painted bulletins, etc.

DIRECT ADVERTISING.—The officers of a bank, who more than anybody else are charged with the responsibility of building the business of the bank, cannot devote all of their time to the personal work of soliciting business, and so some substitute must be found. Experience has shown that by far the best and most effective substitute for personal work is the personal letter. In order that the largest possible results may be accomplished, the personal letter should be prepared with consummate care, should be actually signed by an officer or with an officer's name, and should be sent out according to a reasonable system and to a carefully selected and corrected list of prospects. The booklet is another form of direct advertising which is a substitute for personal work. A logical group of booklets would include: (a) one which in a general way is descriptive of the entire institution, its official and clerical organization, its departments and its various forms of service; (b) specific booklets covering respectively each form of service offered by the bank, or descriptive of each one of the various departments. Such booklets need not necessarily be sent out to prospective customers, but would better be held to be given out in response to inquiries. A popular method of handling booklets like these is by means of newspaper advertisements which treat of the special form of service described in the booklet, and which carry an invitation to write or call for the booklet. By this method the bank can be sure that each booklet will get into the hands of a prospective customer who has interest sufficient to ask for it.

INDIRECT ADVERTISING.—Banks that are seeking domestic or international business from outof-town customers can use to advantage the various magazines that circulate nationally. Banks located in the reserve cities and who seek business from out-oftown banks can place their facilities before the banks of the country by advertising in the various banking and financial journals. Such advertising, however, should consist of real, meaty talks, rather than the formal stilted cards such as are now used by many of the banks. (See figure No. 11.) Advertising cards in street cars evidently have established their value as is evidenced by the large number of banks now employing this form of advertising. The painted bulletin, provided it carries brief copy such as the name of the bank and a slogan, gives continuous publicity to a very large and constantly changing audience. Too many banks, as well as other advertisers, however, make the mistake of crowding the space with a lot of copy which the passerby in the automobile, or the street car, or on the sidewalk cannot possibly have time to read. By all means should the message on the painted bulletin be brief enough to be comprehended at a glance.

NEWSPAPER ADVERTISING.—According to its popularity and the demonstrated results which it can obtain, the local newspaper undoubtedly provides the best medium for indirect advertising. And the extent to which the banks of the country are using the newspapers today confirm this opinion. The purpose of newspaper advertising, as often has been stated, is (a) to attract attention; (b) to excite interest; (c) to convince; (d) to create action.

Dress.—In order to begin to achieve this purpose, care and attention must be given to the appearance and location of the advertisement. It must be simple; should ordinarily employ but one type family in its composition, and as a rule carry not more than two display lines. (See figure No. 12.) The story should be set in plain Roman type, large enough to be easily read. The location, or position, if possible, should be top of column next to reading matter, and, where the practice of the paper permits it, on the front page or next to the locals on an inside page.

The Message.—After the appearance and location of the advertisement have been taken care of, the next thing to consider is the nature of the message, or the wording of the advertisement. By all means this should be simple, direct, brief, and, as a rule, should consider but one point or feature at a time. Many banks make the grievous mistake of trying to tell the entire story of the institution in one advertisement, with the result that the prospective customer simply will not read it.

Continuity.—Advertisements in local newspapers

should run regularly and frequently. If daily newspapers are used, advertisements should run at least once a week, and two or three times a week if possible; in weekly papers, every week.

Change of Copy.—The message should be changed, if possible every time an advertisement appears, on the theory that the advertising columns of a paper must compete with the news columns, and, therefore, always must contain new matter.

Timeliness.—Advertisements frequently can make use of timely subjects such as the passage of laws affecting customers, local and national celebrations, holidays, local events of importance, etc., by which means the advertiser takes advantage of the publicity given such subjects in the news columns of the same paper. (See figure No. 13.)

Size of Advertisement.—The size of an advertisement should be determined largely by the nature of the message. It is safe, however, for banks not to use too large space. Some banks make the mistake of taking entire pages when smaller space, well handled, is quite as effective. A good size for the average advertisement is five or six inches in depth, by two or three columns in width, and if for any reason it is desired to dominate the page, five columns in width by twelve in depth will accomplish this result, assuming, of course, that enough white space is allowed on all sides of the advertisement inside of column rules.

How to Determine Which Papers to Use.—In a small community, as a rule all the newspapers should be used, for obvious reasons. In larger cities those

papers should be used which circulate among the people that the bank desires to reach. The bank should insist on the newspaper making an exact statement of its circulation.

Records.—An exact record of all orders given for advertising, bills paid, etc., should be kept. All advertisements should be checked for insertion, position, appearance, etc.

Files.—The bank should keep a complete file of all advertisements used in the newspapers. These advertisements should be alphabetically arranged according to subject matter, or chronologically.

Co-operation Between Banks and Newspapers.— The bank should co-operate with the newspaper by giving authentic news stories concerning the bank, always with the understanding, of course, that the newspaper will be the sole judge of the news value of the story. A bank is always more or less a potential source of news, because people are naturally interested in the chief commodity which the bank handles-money. The election of new officers, an increase in capital or surplus, the declaration of a dividend, the organization of a new department, the erection of a new building, an unusual growth in deposits—any, or all of these, can serve as the basis for an interesting news story which most newspapers are glad to get, and which inevitably can assist in making the bank well known in the community.

CONCLUSION.—Banks before advertising their business should have the five fundamental essentials of strength, clean history, good personality, adequate

Serving America's Second Sea-Port

New Orleans, the gateway to Latin America through the Mississippi Valley, is second only to New York in its volume of international business.

The city is destined to continue its growth as a great American port.

This bank has grown with New Orleans since 1870, and because of its long experience and broad service, is well prepared to handle *your* Southern business economically and efficiently.

Institute Bank & Trust Co.

Member American Bankers Association

Gold and Bond Streets

New Orleans

Banking Service To Exporters and Importers

Because of the abnormal conditions prevailing at this time, the details connected with the conduct of foreign trade are now more complex than at any previous time in our history. In spite of this fact, a tremendous volume of foreign business is being done, and there is much more to follow.

We offer our service to exporters and importers, and shall be glad to help solve their overseas business problems. Our Foreign Department has facilities for the extension and

handling of international trade.

Our services include the financing of exports and imports; the furnishing of information as to the credit of foreign firms and foreign business conditions; the purchase and sale of foreign exchange; the bringing together of buyer and seller; and advice and assistance in connection with the observance of war-time export and import regulations.

We invite your inquiries as to how our facilities will best meet your particular require-

ments.

Institute Bank & Trust Company

Gold and Bond Streets

New York

Resources more than \$100,000,000

Member American Bankers Association

The New Revenue Law

The New Federal Tax Law affects individuals, corporations and partnerships.

Our new booklet on the subject contains the full text of the law, a concise exposition of its various provisions, and a complete alphabetical index.

Our Trust Department is prepared to furnish you with a complimentary copy of the booklet, and will be glad to assist you in the preparation of your income tax return.

We also have on hand a supply of the necessary forms upon which incomes must be reported.

Trust Department

Institute Bank & Trust Co.

Gold and Bond Streets

New York

Resources \$100,000,000

Member American Bankers Association

equipment and satisfactory service. With these essentials as a basis, business can be built up by (a) personal work, (b) direct advertising, (c) indirect advertising. If a bank possesses the fundamentals and keeps them concealed, it does not deserve to grow. There is no legitimate reason why a strong bank, with a clean history, a good personality, adequate equipment and satisfactory service should not make those features known to the community. And when a bank does this by intelligent personal work, and dignified, continuous publicity, it not only deserves but is quite likely to achieve permanent success.

New Business

SPIRIT OF SERVICE.—Almost every bank endeavors to increase its deposits and other profit-producing business. Its activities in this direction come under the heading of new business, handled by the "new business department," the dimensions of which will vary from the desire of the cashier of a one-man bank to build up his bank as best he can, to the large city bank with its well-organized department of scores of people. It is no longer necessary to prove the desirability of making an organized effort to increase a bank's business. Additional deposits and new depositors are a necessity to any bank wishing to keep pace with the procession. Comparatively little worthwhile business will come to the average bank unsolicited. The more business a bank obtains from its own customers, and from other persons and concerns in good standing, the more profit it should make, and,

with increased profit it can better afford to extend its facilities for service. It is necessary for any bank which solicits business to create good will towards itself. The bank must be strong, and possess a satisfactory history. The management must be in good hands, and the spirit of service must be reflected not only among the officers but down to the very least of the employees. Good service is essential at all times and a bank's position is worse when it has lost a recently acquired account than if it had never obtained that business in the first place.

METHODS OF SOLICITING.—There are various ways of soliciting business. Some banks designate certain officers to handle the bank's business with certain industries which, of course, enable the designated officers to become closely familiar with those particular lines of business. Other banks divide their business into States or other geographical divisions and designate certain officers to handle the business in those territories, which permits the banks to become well acquainted with the principal business men and bankers in any given territory. Every department of a bank can cooperate with the men in charge of obtaining new business. Many opportunities arise daily to disclose some individual or company whose business the bank should be able to obtain. The growth of some banks can be traced almost directly to its list of directors. It is apparent that a director ought to use all of his influence to direct business to his own bank. Every officer, no matter how busy, should act as a member of the new business department and by his courtesy and tact, if nothing more, make people feel that his bank is a good one to deal with. Of course, the old saying that "a satisfied customer is the best advertisement" is certainly true and a bank should not overlook opportunities to get its customers to work in its behalf. A most important thing to remember is that only desirable business should be solicited. Aimless solicitation leads only to opportunities for trouble in the acquisition of much business that is distinctly unsatisfactory or unprofitable. Every bank, especially in a city, should keep a record, based on credit standing and reputation, of the people whose business is desirable, and solicitation should be confined to those names.

FAIR BASIS.—Business should be obtained on a fair basis, fair to both customer and bank. It does not pay to buy accounts nor to offer unusual concessions which are not being given to present good customers who have been depositors for a long time. It is also considered unwise to solicit business which cannot be handled satisfactorily. Ambition is a good thing but the solicitation of business must be predicated on belief equivalent to knowledge that the business can be handled satisfactorily. In soliciting business the needs of the prospective customer should be considered and solicitation made along those lines which would seem to be the most logical. There are certain times when people are more open to approach along particular lines than others, and this should be borne in mind. Then, too, any reasonable use of the personal element should be encouraged.

SOMETHING MORE THAN SALESMAN-SHIP.—The new business man should be a banker first. He should be something more than a salesman. It is not always wise to sell goods which will not be used, and if a prospective customer cannot make practical use of the services of a particular bank, the bank in obtaining this account cannot be sure the relationship will be lasting. Solicitation in person is always more satisfactory than when done by mail or in any other impersonal way. One should be certain that the solicitation is directed toward the proper man in a company, and while, of course, it is necessary to adapt the argument to the understanding of the man called on, yet the talk should be concise and end sufficiently early to avoid becoming tiresome. Undue haste is not desirable. but follow-ups should be made at regular and reasonable intervals, either personally or by a booklet or some worth-while communication which serves to keep the bank in the man's memory. In the solicitation of business, unusual facilities should be emphasized, but of course all other services should be outlined too. In the banking business, as in all businesses, it does not pay to knock competitors directly or indirectly. When a city bank solicits business in other cities or in country towns, it should be careful to work with the banks in those places and not compete with them for business which the local banks are capable of handling.

DEFINITE QUALITIES.—There are certain definite qualities which would be valuable for one to have in working for a new business department. The

representative must be enthusiastic, not prone to exaggeration or the promising of impossibilities; should lean more towards under-statement than otherwise. He should, of course, be entirely familiar with his subject, know the bank's routine and services, and possess dignity, tact, and perseverance, which last should not lead him into becoming tiresome or obnoxious. In correspondence, letters should be real and not haphazard, and preferably should be as close as possible to a face to face conversation.

DEVELOPING OLD CUSTOMERS.—A bank should concentrate a large part of its efforts to developing the business on its books. This is less expensive than soliciting business elsewhere, results are easier to get, and the benefits to the bank are much greater. It is necessary that a bank make good on the promises it has made to its customers and it should pay a great deal of attention to finding out the causes, and discussing with the customer, when desirable, any markedly increased or decreased balances. It would pay a bank to keep a record of the services which it can place at the disposal of its clients, emphasizing their use, or neglect. Most banks which keep records of this sort revise such records every three or four months. Banks divide the services which they can extend into "gratuitous services," producing no direct recompense, and "earnings services," which are profitable or at least self-sustaining. In the former class would come the furnishing of credit information, holding of securities in safe keeping without charge, and the various other services which a bank has to render. Under the earnings services could be listed foreign exchange transactions, travelers' checks, letters of credit, and all of the various trust functions for which a bank may properly make a charge. In addition to this list of services, the record would, of course, include the name of the depositor, his address, his business, a description of the basis on which the account was secured, and all other important details, such as balances, and loans, especially including a record of the affiliations of the company or its principal officers.

CHAPTER V

Collections

HE growth of industry and commerce has greatly increased that lecting the proceeds of checks, bills of exchange, promissory notes, bond coupons, and other instruments of indebtedness. Although not expressly conferred in the National Bank Act nor in most State banking laws, a National or State bank has the undoubted power to undertake collections and incur liability for any violation of duty in that regard. This power is universally recognized by the courts. relation which the collecting bank assumes to its depositor or principal is held by some courts to be that of bailee, and by others agent. The undertaking is not gratuitous, for the general profits derived from handling the business, and the advantage from rates of exchange, constitute a sufficient consideration. The duty of a bank in making collections is to use due diligence. What constitutes due diligence depends on the particular circumstances surrounding each individual case. In a general way it may be said that "a bank must use reasonable care and skill, keeping in mind the best interests of its principal." In the collection of out-of-town items the principal duty is in the selection of a correspondent. In the United States it is held to be negligent for a bank to send a check to the bank on which it is drawn, or a note to

the bank where made payable, provided there is another bank in good standing in the same place; and in some States the sending bank is held negligent although the payer to whom the items are forwarded is the only bank in the place.

DEFAULT OF CORRESPONDENTS.—The question whether or not a bank is liable for the default of its correspondent or sub-agent in the collection of an item, is one in which there is conflict of decision. Some authorities hold that the contract of a bank is "to do the thing"; others that the contract is "to procure it to be done," and out of these fundamental distinctions arise divergent views held by courts of last resort in the several States. The Supreme Court of the United States lays down the general rule of law to be that "the initial bank is liable for such damages as had been sustained by the negligence of its sub-agent or collecting bank." This rule is modified in many of the States and is as follows: "The initial bank, if it selects as an agent one who is competent and worthy of trust, and transmits the paper to him, its duty is done, and the owner of the collection must look to the sub-agent for any default of which he is guilty."

EXPRESS AGREEMENT.—A bank may vary its contract by express agreement, which banks seek to do by printing notices on deposit tickets, or on pass books, to the effect that the bank assumes no responsibility for the collection of any item beyond due care and diligence in the selection of collecting agents, and that items are taken at the risk of the customer, and

that the bank will not be responsible for any loss through failure or default of the bank's agent.

PROMPT RETURNS. - Prompt returns are often a matter of importance to bank customers. There are cases where a merchant or manufacturer has held a shipment of goods ordered by a customer, awaiting returns or advice of payment of a previous collection long past due, and which should have been either remitted for or returned unpaid. Delay in a case of this kind may arise from a number of causes. The fault may be the tardiness of the collecting bank, or it may be that the initial bank has sent the item by a circuitous route, or, perhaps, the item or its advice has gone astray in the mails. There are cases on record where banks have been held to be negligent in sending items for collection by an indirect route. The fact is that it is good business policy to forward items by the quickest route, or at least to adopt some means of getting prompt advice of payment. Some banks handling a large collection business attach a self-addressed postal card to each item which is sent indirectly, requesting the collecting bank to give prompt advice as to the payment or nonpayment of such item.

CLASSES OF COLLECTIONS.— Items left with a bank for collection, where the items are few in number, are entered in the customer's bank book "short." It is usual to give the name of the payer, amount, date of maturity or sight, as the case may be, and whether protest or no protest. These entries are sometimes made in the back of the deposit book in a

space reserved for that purpose, or if the number of items is large, a separate book is generally used. At the time of receipt of collection items, instructions should be carefully noted, whether taken subject to protest, and in regard to delivery of bills of lading attached to drafts. If instructions are not given, they should be asked for. When the item has to be forwarded for collection, these instructions should be sent to the collecting bank for its guidance. Collections naturally divide into two classes, city and foreign. City collections include all paper received from customers or from correspondent banks or business houses in other places, payable or collectible in the city or town in which the collecting bank is located. Foreign collections are those which must be sent to out-of-town correspondents to be collected. In a small bank the records of both city and foreign collections are frequently kept by the same clerk, the payments for notes, drafts, etc., being made to the receiving teller. Larger banks have separate departments, in charge of competent heads for each class of items.

OBEDIENCE TO INSTRUCTIONS. — In making collections care should be taken to follow the instructions of correspondents. This particularly applies to the protesting of sight and time paper, and if the instructions are to protest, such items should be given to the notary whether or not there is an endorser or drawer to be held. In the absence of instructions, paper with a drawer or endorser who would be released without protest, should also be protested.

In the event of non-payment or non-acceptance of collection items, if possible get reasons for such refusal and transmit the answer to your correspondent. A popular device is a printed slip to be returned with the item and containing a list of the possible reasons for refusal, the correct one being designated by a check mark.

PRESENTMENT FOR PAYMENT. - The presentment of paper for payment or acceptance is another duty requiring due care and diligence. The courts hold it to be the duty of a bank which receives a time draft for collection to present it at once for acceptance, and that the bank will be liable for any loss which occurs from failure to perform this duty. In the presentment of paper for acceptance the requirement of the law seems to be more exacting than it is concerning paper presented for payment. In the first case presentment is required to be made "to the drawee or some person authorized to accept or refuse acceptance on his behalf." In the second instance, presentment must be made to the person primarily liable on the instrument, or, if he is absent or inaccessible, to any person found at the place where the presentment is made. So in handling drafts or bills forwarded for acceptance the obligation seems to be on the bank to exhaust every reasonable means of locating the drawee, or his authorized agent. The drawee of a draft for acceptance has twenty-four hours in which to decide whether or not he will accept, and he can demand that the draft or bill be left with him for that length of time,

METHOD OF PAYMENT.-A matter requiring discretion and judgment is in the acceptance of uncertified checks in payment of notes and drafts, as after the surrender of paper to the payer the collecting bank is liable for any default in connection therewith. Under strict rules of law, a collecting bank is authorized only to receive actual money in payment of a collection item, but some courts have held the bank justified, by custom, in receiving a certified check, and not responsible where such check is dishonored. But the authority to surrender collection items in exchange for certified checks is not yet universally established. Regarding notes made payable at banks, the practice varies in different cities according to the rules established by Clearing House Associations in such places. In the absence of special arrangements for clearing this class of items, such notes should be presented at the counter of the bank where made payable, for payment or certification.

BILLS OF LADING.—Where a draft with bill of lading attached is received for collection payable "on arrival of goods," or "on arrival of car," the practice in some well-managed banks is to make daily inquiry of the agents of the line by which the shipment has been made, thus securing prompt notice of the arrival of the goods. This course insures prompt presentation of the draft, thus avoiding any liability which might arise through any delay in its presentment. In the event of paper subject to protest remaining unpaid at three o'clock, and especially if there is reason to believe that such non-payment is

the result of an oversight, it is good business policy to notify the payers, thus giving them an opportunity to save their paper from protest, and thereby protect their good names and credit. The bank by following such a course may make a friend and add to its popularity.

DELIVERY OF BILLS OF LADING. - A bank receives a time draft with bill of lading attached. On the acceptance of the draft, shall it deliver the bill of lading? Delivery of the bill of lading is, in most cases, the delivery of the goods which it describes, and cases have arisen where banks have surrendered the bill of lading on the acceptance of a draft, and the draft has been dishonored at maturity. In the absence of specific or implied instructions as to whether or not the bill of lading is to be surrendered on the acceptance of a time draft, the rule as given is as follows: "In the case of a time draft where the bill of lading runs in the name of, and by its terms the property covered by it to be delivered to, the party on whom the draft is drawn, then the bill of lading is to be delivered on the acceptance of the draft. Should the collecting bank refuse under these circumstances to deliver the bill of lading, then the maker and the endorser of the draft are released and the collecting bank becomes responsible for the amount of the draft. If, by the terms of the bill of lading accompanying the time draft, or if by indorsement it should appear that it did not run to the person on whom the draft is drawn, then it must not be delivered until payment of the draft."

EXCHANGE CHARGES.—A custom much more frequent in the past than now, and one which has always been frowned on by banks, is that of drawing drafts or bills payable "with exchange." By this means the drawer of a draft or bill seeks to have the drawee pay the difference in exchange between the places of residence of the two parties. In the past the question has been raised, "Does the use of these words on an instrument render it non-negotiable because of uncertainty as to the amount to be paid?" While it has been definitely settled that the use of these or similar words does not impair the negotiability of an instrument, yet the better way is, if the drawer is to pay the exchange, to include this in the amount for which the draft is drawn. In collecting drafts of this description, in the absence of special instructions to demand exchange, or unless the amount be quite large, it is common for banks to ignore the matter altogether. Instead of "with exchange" the form is sometimes "in exchange" or "in New York Exchange." In the latter case if the collecting bank is long on New York funds it usually makes no demand, but if it is short on such funds it will request a New York draft, usually receiving a draft issued by one of the local banks on its New York correspondent.

CHARACTER OF EXCHANGE.—The drawee may elect, however, to pay the cost of exchange in cash, giving a check on his local bank, or he may tender in payment his own check drawn on a New York bank or banker, should he carry a balance in

that city. In respect to this last feature of the matter, a bank officer of long experience makes this pertinent comment: "If the collecting bank attempts to discriminate regarding the character of the exchange on New York that is offered, and raises the question whether or not the tendered exchange is of good repute, it may find itself in an unwelcome controversy with the payer, and it may, in the end, be difficult to say who has the right to decide upon the repute of the exchange tendered. This consideration, coupled with the question of responsibility in the acceptance of the kind of exchange offered, is good reason for a bank declining to handle paper drawn in this way. Furthermore, some courts have made a distinction between "in exchange" and "with exchange," and in the former case held the paper not negotiable, because not payable in money but in a commodity, namely, a bill of exchange. This is an additional reason for declining this class of paper.

RESTRICTIVE ENDORSEMENTS. — The question of endorsements is one of importance. Up to 1898 the restrictive form of endorsement was used on all items, whether taken as cash or for collection, the form generally reading "Pay to the order of receiving bank for collection, for account of sending bank," but a case came before the courts of New York which materially changed this custom. It was held that the receiving bank of paper endorsed to it "for collection" was a mere agent and not responsible for genuineness after payment of the proceeds to its principal. The rule adopted by the New York Clearing

House and substantially followed by the other clearing house associations throughout the country, excluding all restrictively endorsed paper unless guaranteed, applies only to items collected through the exchanges. Usually these items represent cash, having been received on deposit and credit given therefor, or the cash paid out at once, by the initial bank; the exceptions being collection items pure, in the form of a note or an acceptance made payable at a bank, or an occasional check.

RESPONSIBILITY OF WARRANTY .--While the strict language of the resolution adopted by the New York Clearing House Association limits the operation of the rule to items collected through the exchanges, yet in all of the principal cities where banks are located that do collecting for other banks, such collecting banks have quite generally set their faces against restrictive endorsements, for the reason that they wish to be protected in any contingency which might arise, by the warranties that go with a general endorsement. Some authorities insist, however, that a bank in acting as agent in the collection of items should never assume the warranties of a general endorser. This contention would more naturally appeal to country bankers, and an argument in support of the restrictive form of endorsement is given briefly, as follows: "It is a settled principle of law that in the absence of an indication to the contrary, the form of the endorsement controls the title or ownership to negotiable paper. The title to or ownership of an item left with a bank for collection remaining

in the customer, and the bank's relation being simply that of an agent, this form of endorsement gives to all parties through whose hands it passes, notice of this ownership, and that the collecting bank or its agents acquires no title therein."

RIGHT OF LIEN.-Where a collecting bank has notice that the prior bank has no interest in an item transmitted for collection, and that it is acting merely in the capacity of an agent, the collecting bank cannot under any circumstances retain the proceeds as against the true owner. But where the collecting bank has no such notice, and the prior bank is indebted to it in general balance, in the event of the failure of the prior bank, it is generally held that the collecting bank can hold the proceeds of a collection against the true owner. The right of lien rests upon the further consideration that in the case of negotiable paper, one who successfully enforces a lien must be a holder for value and without notice. In most of the States, in fact, in all of the States which have adopted the negotiable instrument law (Wisconsin excepted), an antecedent or pre-existing debt constitutes value. The qualifications without notice expressed in full is "without notice of equities existing between prior parties."

CITY COLLECTION RECORDS.—The note teller frequently has charge of city collections, making the records as well as receiving payment for these collections. Time paper is entered in the "City Collection Register," a book of convenient size, in which are entered in columns appropriate to the purpose,

(1) the number of the item given by the collecting bank, (2) the name of the payer, (3) due date or sight, as the case may be, (4) sender's number, (5) name of party or bank for which the account is collected, (6) the amount, and (7) the explanation column. In this last column may be entered "Protest" or "No Protest," as the case may be, and the final disposition of the item. These entries follow each other across the paper on a single line. Such columnar headings are simply typical. The other principal book used is the "City Collection Tickler." This book is divided into spaces for each day of the month for the twelve months of the year or longer. The record in this book under the proper due date of each item is (1) the number of the item given by the collecting bank, (2) the name of payer and (3) the amount. These items are then arranged in a wallet according to maturities. When city collection items fall due, the note teller makes a record of the name of the account to be credited with the proceeds thereof, together with the name of payer and amount. Sight items received the same day are recorded in the same way and given to the messenger or runner to present and collect. At the close of the day's work this record shows the disposition made of an item, whether paid, returned or protested, and is the medium through which credit is given for collections paid. The modern transit manager, in order that his department may function to the fullest extent, should know how to develop the collection of out-of-town checks at the least cost and with greatest possible despatch, and also to use care

and judgment in the selection of satisfactory correspondents that will efficiently handle the items forwarded to them for collection; he must have a good knowledge of transportation routes and also of the Federal Reserve inter-district collection system; and, further, he must at all times keep himself posted upon matters pertaining to changes in the methods of collection of checks.

Foreign Collections

TRANSIT DEPARTMENTS.—The transit department of a bank receives its name from the class of items it handles. Transit items are those drawn on other points which have been received as cash and must be collected through the mails. Such collections are otherwise known as "foreign items" and "collection items." The value of the term "transit items" is manifest, as it draws a sharp distinction between items that have been credited to a customer's account upon receipt, and those that are taken for "collection only" subject to final payment. In this latter mentioned class are truly "collection items," being those taken by the bank solely to be forwarded for payment, and not credited to parties from whom received until actually collected. Then again, the term "foreign items" may be a sufficient distinction for such items in a small town or city other than those dealing in foreign trade. In such banks, however, this term would be confusing. Bills of exchange, checks that are drawn on points abroad, etc., are generally termed "foreign items." The foregoing distinction is made because of the use of the term "transit department," which, while in use for several years, has not yet been universally adopted. Its value, however,

is apparent.

FOREIGN COLLECTION RECORDS. - In the foreign collection department there are several general methods of keeping the record of out-of-town items sent to correspondent banks for collection. Whatever the method, however, the common aim is, upon the advice of payment of a given item, to readily locate the name of the party or bank for whose account the collection has been made, so that credit can be given without delay, and the work of the department carried on with dispatch. Some banks use the "Foreign Collection Register." The description of the "City Collection Register" will fit this book if we add a few columns, one for the name of the bank to which sent, one for the name of the place where payable, and columns with the headings "When Received" and "When Sent." The numbers given to items by the sending bank appear on the foreign collection register in consecutive order, and where this system is used the numbers play a most important part, correspondents being requested to advise payment by number. For this purpose a printed slip is usually attached to the item to be collected. Some banks use the method just described for miscellaneous collections, while for a regular correspondent the items for such correspondents are entered under a separate heading, the register being spaced off as a ledger would be, with a number of pages for each collecting bank. In some banks no books are used. The entire record is made and the appropriate credits and charges in other departments are given through the use of slips. A white slip is used for credits and a pink one for charges, each showing the name of the payer, where payable, the due date and the date sent. (See Fig. 9.)

GOLD SETTLEMENT FUND.—Sections 13 and 16 of the Federal Reserve Act provide that Federal Reserve banks shall receive on deposit from their respective members, and from other Federal Reserve banks, checks and drafts drawn upon any member of a Federal Reserve bank or upon any Federal Reserve bank, and further, that the Federal Reserve Board may require the Federal Reserve banks to perform the functions of a Clearing House. The Federal Reserve System also provides that the Federal Reserve Banks. under the par collection system, may receive checks and other items for collection from any non-member bank that agrees to keep on deposit with the Federal Reserve Bank of the district a sum sufficient to cover outstanding items. The Federal Reserve Board under authority conferred by these two sections, has established a plan of clearing and settlement of balances through a central fund in the hands of the Federal Reserve Board at Washington, D. C., known as the "Gold Settlement Fund." When this plan was established, every Federal Reserve bank was required to deposit with the Federal Reserve Board gold or United States gold certificates of one million dollars in excess of the net balances then due from it to other Federal Reserve banks. Each Federal Reserve bank carries on its books, in its relations with each of the other Federal Reserve banks, two accounts, "Due To" and "Due From," also an account known as the "Gold Settlement Fund Account," and at the close of business each day wires to the Federal Reserve Board advice as to the amount then "Due To" and "Due From" each of the other Federal Reserve banks. The Board tabulates the balances so reported and effects a clearing, using the telegraphic advices as a basis, and upon the same principle as that followed by regular Clearing Houses in making their daily exchanges. The net balances arising from such clearings are settled by book entries in the gold settlement fund account. Theoretically transfers are made of certificates representing the amounts of the balances involved. After each clearing the Federal Reserve Board advises each Federal Reserve bank by wire as to the results. These telegraphic advices serve as authority for making entries against the accounts. All telegrams are sent over private wires and are confirmed by official advices through the mails. The plan obviates the necessity of transferring immense sums of gold and other lawful money. The balances resulting from the clearings average less than 7% of the amount cleared.

COLLECTION BY FEDERAL RESERVE BANKS.—Prior to July 15, 1916, the Federal Reserve banks operated clearing or collection departments through which checks and drafts on certain members and on the Federal Reserve banks were handled.

These departments were operated under rules which varied widely. In one district, items not bearing the endorsement of any bank located outside of that district were taken for immediate credit, at par, when drawn upon a member bank or a Federal Reserve bank. In other districts, items were taken when drawn upon member banks that had, through vote of their respective boards of directors, agreed to maintain with their Federal Reserve bank balances in excess of their required reserves in sufficient amount to cover such items, and further, to permit their Federal Reserve bank to debit such member banks' accounts with the amounts of the items on the day they are received by the Federal Reserve bank. Some of the Federal Reserve banks took the position that the law did not contemplate that they should actually clear or collect a large volume of items, but that they should serve only as regulators of exchange.

FEDERAL RESERVE PAR COLLECTION PLAN.—Aside from the knowledge and experience gained, little was accomplished through these operations up to July 15, 1916. On that day, under orders from the Federal Reserve Board, a practically uniform plan of clearing and collection was established in all the Federal Reserve banks. Under this plan each Federal Reserve bank operates a clearing or collection department.

CLASSES OF CORRESPONDENTS.—Correspondents to whom transit items are sent may be divided into three classes: (1) Banks with which the sending bank has accounts, such as those in reserve

cities; (2) those that have accounts with the sending bank; (3) those banks in towns where the sending bank sends items for payment by remittance. The first-mentioned accounts are mostly general-ledger accounts, banks which the sending bank would draw on. The second class are those whose accounts are kept on the "Banks and Bankers" ledger. They are credited with what they send and debited with what they would draw on the sending bank. The third class of correspondents are those with which the sending bank has really the most to do. The transit department will, therefore, if in a large city, receive the greatest portion of its work from its bank accounts. They will send in by far the greatest number of transit items. The next largest supply will be received from individual depositors, and the other items will be picked up from the various departments of the bank in comparatively small numbers. In a country bank, however, conditions are just the opposite. The larger number of outside items would be received from depositors, as its bank customers would be fewer

UNIVERSAL NUMERICAL SYSTEM.—The Clearing House Section of the American Bankers Association has devised a numerical system which simplifies transit work. Numbers from one to fortynine, inclusive, are used to designate the reserve cities, each city being provided with a number of its own to be used as a prefix in numbering the banks in these cities. The Clearing House numbers in each of the cities are used to designate the Clearing House

banks and additional numbers provided for banks which have no Clearing House numbers. Numbers from fifty to ninety-nine, inclusive, are used to designate States. The State numbers are used as a prefix for numbering banks which are located outside of the forty-nine cities already provided for. In numbering the reserve cities Brooklyn is included with New York City; Kansas City, Kans., with Kansas City, Mo., and South Omaha with Omaha. As there are fifty reserve cities this left two numbers not used. These numbers have been given to Buffalo and Memphis. Buffalo was selected because it was the tenth city in population and by giving Buffalo a number of its own the Clearing House numbers can be used for Rochester, whose population was 218,000, the next largest city in the State. Memphis was selected owing to the scarcity of reserve cities in the South and on account of its importance as a collecting center and also to permit the use of Clearing House numbers for Nashville, with a population of 110,000, the next largest city in the State, and which is also an important collecting center.

METHOD OF NUMBERING.—The forty-nine cities have been numbered according to population as shown by the census of 1910, so that the largest cities have the small numbers. This plan reduces the labor of registering items in the transit department to a minimum as a large proportion of items are drawn on these cities. For example, a certain New York bank may be designated 1-8, a Chicago bank 2-1, a Philadelphia bank 3-39. Thus every bank in the

United States is assigned a distinctive number, the prefix denoting the geographical location and the second or suffix number denoting the name of the bank. These numbers, read directly from the face of the check or endorsement stamp, are substituted for names and adresses in making transit or other records. The extent to which the numbers may thus be used is a matter for each individual bank to determine for itself in accordance with its accounting system. It is imperative, however, that all checks, drafts and endorsement stamps should show the numbers, so that every bank that cares to do so can make use of this time and labor-saving system.

CLEARING HOUSE NUMBERS.—By the use of individual numbers for the forty-nine cities the banks in forty-eight other cities can be designated by their Clearing House numbers. For instance, in New York State three cities have been given numbers of their own, namely, New York No. 1, Buffalo No. 10 and Albany No. 29. The next city in the State, according to population, is Rochester, which is the first city numbered with the State prefix, which is number fifty. The Rochester banks are numbered 50-1, 50-2, etc. The system, therefore, permits the use of Clearing House numbers to designate banks in ninety-seven of the principal cities of the country. The Treasurer and Assistant Treasurers of the United States and the postoffices in the reserve cities have been given numbers. Numbers have not been provided for express companies, railroads or mercantile firms.

STATE NUMBERS.—The State numbers have been divided into five sections as follows:

Eastern	. 50	to	58
South Eastern	60	to	69
Central	. 70	to	79
South Western	.80	to	88
Western	.90	to	99

The States containing the principal collecting centers, namely, New York, Pennsylvania, Illinois, Missouri and California, have been given the first numbers in their respective sections: 50-60-70-80-90, to facilitate the listing of items on adding machines, as only one key is used to print these numbers, and also to indicate that the following nine numbers in each section represent the States in the same territory. Numbers 59 and 89 are left blank and can be used in the future should it become necessary to number the banks in our Island possessions and Alaska. The system of numbering the States in groups according to territory should also prove to be of advantage in memorizing the State numbers. With the exception of five States representing each section the States are numbered in alphabetical order in each section.

NUMBERS DESIGNATED.—The numbers of the different cities and States are as follows:

CITIES

1.	New York City.	7.	Baltimore, Md.
2.	Chicago, Ill.	8.	Pittsburgh, Pa.
3.	Philadelphia, Pa.	9.	Detroit, Mich.
4.	St. Louis, Mo.	10.	Buffalo, N. Y.
5.	Boston, Mass.	11.	San Francisco, Cal.
6.	Cleveland, O.	12.	Milwaukee, Wis.

13.	Cincinnati, O.	32.	Dallas, Tex.
14.	New Orleans, La.	33.	Des Moines, Ia.
15.	Washington, D. C.	34.	Tacoma, Wash.
16.	Los Angeles, Cal.	35.	Houston, Tex.
17.	Minneapolis, Minn.	36.	St. Joseph, Mo.
18.	Kansas City, Mo.	37.	Ft. Worth, Tex.
19.	Seattle, Wash.	38.	Savannah, Ga.
20.	Indianapolis, Ind.	39.	Oklahoma City, Okla
21.	Louisville, Ky.	40.	Wichita, Kans.
22.	St. Paul, Minn.	41.	Sioux City, Ia.
23.	Denver, Colo.	42.	Pueblo, Colo.
24.	Portland, Ore.	43.	Lincoln, Neb.
25.	Columbus, O.	44.	Topeka, Kans.
26.	Memphis, Tenn.	45.	Dubuque, Ia.
27.	Omaĥa, Neb.	46.	Galveston, Tex.
28.	Spokane, Wash.	47.	Cedar Rapids, Ia.
29.	Albany, N. Y.	48.	Waco, Tex.
30.	San Antonio, Tex.	49.	Muskogee, Okla.
31.	Salt Lake City, Utah.		

STATES

New York	72.	Iowa
Connecticut	73.	Kentucky
Maine	74.	Michigan
Massachusetts	75.	Minnesota
New Hampshire	76.	Nebraska
	77.	N. Dakota
Ohio	78.	S. Dakota
Rhode Island	79.	Wisconsin
	80.	Missouri
	81.	Arkansas
Pennsylvania	82.	
	83.	
	84.	Louisiana
	85.	Mississippi
		Oklahoma
		Texas
		California
	92.	Idaho
Indiana	93.	Montana
	Connecticut Maine Massachusetts New Hampshire New Jersey Ohio Rhode Island Vermont Pennsylvania Alabama Delaware Florida Georgia Maryland N. Carolina S. Carolina Virginia W. Virginia Illinois	Connecticut 73. Maine 74. Massachusetts 75. New Hampshire 76. New Jersey 77. Ohio 78. Rhode Island 79. Vermont 80. 81. Pennsylvania Alabama 83. Delaware 84. Florida 85. Georgia 86. Maryland 87. N. Carolina 88. S. Carolina 89. Virginia 90. W. Virginia 91. Illinois 92.

94. Nevada 97. Utah

95. New Mexico 98. Washington

96. Oregon 99. Wyoming

SUBSEQUENT NUMBERING.—Numbers are provided for all of the banks in the forty-nine numbered cities and also in the forty-eight other cities showing the numbers for the first city in each State numbered with the State prefix. The remaining banks of the country are to be numbered according to the following plan: The first numbers to be given to the banks in the largest cities and to be continued in the relative order of the population of the cities in each State. Each bank to be numbered in consecutive order according to seniority in each city. When there is only one bank in a town the banks are to be numbered in alphabetical order according to towns, the one-bank towns to be numbered last. Blank numbers are to be left only in cities of 5,000 population and over. The blank numbers to be left as follows: Population of 5,000 to 25,000, two blank numbers; 25,000 to 50,000, three blank numbers; 50,000 to 100,000, five blank numbers; 100,000 and over, six blank numbers.

NO-PROTEST INSTRUCTIONS.—The Clearing House Section of the American Bankers Association has devised an improved plan of conveying "No-Protest" instructions. Any bank that receives from its customer—corporation, firm, individual or bank—a check or draft on a bank which it desires to have handled as a "No-Protest" item can convey such instructions through several intermediate banks to the final paying bank by means of an

inexpensive rubber stamp. To do this an impression of the stamp should be made on the face, and as near the right-hand end of the item as is possible. The stamp should be $\frac{1}{2}x\frac{7}{8}$ of an inch in size, and should contain the letters "N. P." and the universal numerical transit number of the bank, and should be of the following design:

N. P. 83-164

The instructions on the cash letter accompanying the item should include the following:

N. P. 83-164 Protest all items over \$20, not bearing this stamp or similar stamp containing transit number of a preceding bank endorser.

The teller will place an imprint of such stamp on every item of over \$20 that passes through his department and which is to be handled as "No-Protest." When this plan is in complete operation the clerks who handle the incoming and outgoing mail in subsequent banks will be relieved from examining carefully such items, and comparing the items with the letters in order to determine what items are to be treated as "No-Protest." If the cash letters read as above indicated the instructions will be automatically conveyed. Some banks may for their own convenience want to continue the practice of making a special record on

their outgoing cash letters as to what items are to be handled as "No-Protest." This may be done by placing the letters "N. P." or such other notations as are satisfactory either to the right or left of the amounts of the items to which they apply. A somewhat similar stamp has been devised for telegraph non-payment of any item consisting of a divided circle ¾-inch in diameter, within the circumference of which are inscribed the words, "Telegraph Non-Payment," and in the center of which appears the transit number of the bank, banker or trust company issuing such instructions. When this symbol is used the impression should be made in a conspicuous place on the face of the item. The instructions on the cash letter accompanying the item should include the following:

Telegraph non-payment on items of \$500 or over bearing this stamp or similar stamp containing the transit number of a preceding bank endorser.

The use of this symbol eliminates the inconvenience so often caused by tags and slips pinned or loosely attached to items and will at the same time prove of inestimable value in facilitating the handling of such items.

Clearing Houses

The idea of the Clearing House, like many other important inventions and scientific discoveries, had its origin in an accidental way. In the early seventies of the eighteenth century, the banks of the City of London, England, employed walk clerks, or

runners, as they would be termed in this country, whose duties were to go from bank to bank and collect the actual cash to cover checks, drafts and credits of a like nature that accumulated in the day's business. Two of these boys, representing banks located in opposite sections of the City of London, met in a downtown coffee house, and while visiting and lunching together discovered that each held a like amount of checks and drafts against the other's bank. The thought of trading these checks and drafts, thereby saving themselves a trip half-way across the city, suggested itself to these young men. They not only traded, but agreed to meet in the same place on the following day for the purpose of again trading. The news of what these two boys were doing spread to the other collectors, and within a very short while practically all of the collectors of the banks of the City of London were meeting in this coffee house, and making trades daily and paying cash to cover the differences. Some of the officers of the banks of London. on hearing what these boys were doing, criticized them severely. Others saw merit in the idea, and it resulted in a conference at which it was agreed to hire a room in the down-town section, where the boys might meet each day and trade checks and drafts. Errors resulting from these trades made it necessary to install a system of records, and to place a man in charge; and from that developed the London Clearing House, which is one of the largest, if not the largest, Clearing House in the world. The idea came to America in the year 1853, at which time the New

York City Clearing House was established. It was later taken up by Boston, Pittsburgh, Philadelphia, Chicago and drifted on westward to the Coast; and now every city of any size or commercial importance has a Clearing House of some description.

CLEARING HOUSE FUNCTIONS. — The rapid development in all lines of industry, and the great growth of financial affairs throughout the country, have made further cooperation necessary, and as a result many additional functions have been taken on by Clearing Houses. The objects and purposes of a modern Clearing House Association may be stated as follows:

- (1) To facilitate the handling of business between its members.
- (2) To facilitate the handling of business between these institutions and banks and trust companies of other localities.
- (3) To foster and encourage conservative, safe and sound banking methods and banking practices.
- (4) To use its influence in matters of common interest to its members, and for the general good of the community wherein it is located.
- (5) To perform such other services as are agreed upon by its members and which are not in contravention of Federal or State laws.

The performance of such functions is generally undertaken through three separate departments, namely, (1) the City Department, (2) the Country Department and (3) the Examination Department.

CITY DEPARTMENT.—The original func-

tions of the Clearing House, namely, the exchange of items and settlement of resulting balances, are conducted through what is commonly termed "The City Department." On organizing a Clearing House, each member is given a number, under which its business is transacted. These numbers are generally assigned on the seniority basis—the oldest bank member being assigned No. 1, the second oldest No. 2 and so on. When a new member is taken in it is given the next highest number not in use. Each member maintains in its office a department known as its Clearing House Department, and to which is charged by the several departments all items drawn on or payable at the offices of the other members. These items are usually recorded in the department where they originate and on reaching the Clearing House Department are inspected as to signature, dates, etc., and are endorsed with a rubber stamp, showing the name and Clearing House number of the clearing bank and the date of clearing. They are next sorted—all items drawn on or payable at the office of each member being placed in a separate pile. When the sorting is completed and the clearing hour approaches, each pile of checks is taken to an adding machine and a list thereof is made and a total is taken. The items are then done up into packages, the list covering each package being placed on its face, and the Clearing House numbers of the members on which the items are to be cleared are marked on the respective packages with pen or pencil. The lists on the packages are indorsed with the regular Clearing House indorsement stamp. The

packages are then sealed or bound up with rubber bands.

CLEARING HOUSE STATEMENTS.—Each member is supplied by the Clearing House with statement blanks which are in duplicate form and which show at the top the name and number of the member using the same. The blanks used in different places are not uniform, but essential features are indicated in the accompanying illustration. Along the left margin of each statement appears, in regular order, the names and numbers of all the members. Immediately to the right of these names and numbers are several columns, the two principal ones of which are headed "On Clearing House" and "From Clearing House." The total shown on each package of items is entered in the column "On Clearing House" and directly opposite the name and number of the bank on which the items are to be cleared. When all totals have been entered, the statement is footed, and if the work has been correctly done the footings thus obtained will prove against the combined total of all charges made by the several departments to the Clearing House Department. Assuming they do so prove, the packages are placed in a satchel or chest and the Clearing House Clerk and messenger take the satchel or chest and statement and make a mad rush to the Clearing House. The reason for this rush is that the clearing hour is fixed, and any member not represented at that hour is fined; and if tardy over a certain number of minutes, the member is shut out of the clearing for the day.

METHOD OF MAKING EXCHANGES.—The exchange room at the Clearing House is equipped with a cage or desk for each member, and a manager's desk. The cages are usually arranged in parallel rows and in numerical order with reference to the numbers of the members. On arrival at the Clearing House the clerks enter their respective cages and the messengers pass around and deposit their packages of itemspackages No. 1 being deposited in cage No. 1, packages No. 2 in cage No. 2, and so on down the line. When all clerks and messengers have arrived at the Clearing House and all deposits have been made, each clerk has on his desk a package of items from each member, and he enters on his statement in the column headed "From Clearing House" and opposite the respective names and numbers of the members the amount shown on the package received from each. packages when thus entered are dropped into a receptacle from which they are taken by the messengers, who rush back to the banks so that the items may be quickly distributed to the bookkeepers, who pass upon the genuineness of signatures, etc., all items being cleared subject to being returned at a certain hour if found not good for any reason. Each clerk foots his statement when all totals have been entered. and if he finds he brought a greater volume to the Clearing House than he received from the members he carries his "From Clearing House" footings to his "On Clearing House" column and makes his deduction, showing the amount due his bank from the Clearing House, or his credit balance, as it is termed.

Should the amount received at the Clearing House exceed the amount brought to the Clearing House, the operation would be the reverse, and he would show the amount due the Clearing House, or his debit balance. A duplicate of each statement is passed to the manager, who enters on the Clearing House records the net debit and credit balances and the "On Clearing House" and "From Clearing House" totals. He then foots the balances and if they prove the clerks are dismissed and return to their respective banks. The statements are filed as a record of the transactions between the several members, and the manager foots the "On" and "From" Clearing House columns; and if they agree it is conclusive evidence that the work has been correctly done. The "On Clearing House" column represents the items brought to the Clearing House and are the figures that are reported in the newspapers and financial journals as the bank clearings. Where an average of ten millions of dollars worth of items are cleared daily the resulting balances run about six hundred thousand dollars; so by the operation the amount of cash necessary to handle ten millions of dollars' worth of business is reduced from ten millions of dollars to six hundred thousand dollars.

MANNER OF SETTLING BALANCES.—Perhaps the most scientific way of settling balances is the method used by the New York Clearing House. After the exchanges have been made, balances struck and footing proved, the manager forwards a certified copy of the statement daily to the Federal Reserve Bank, where the balances of the member banks' ac-

counts are adjusted in accordance with the statement rendered. After this has been accomplished, the certified copy is returned to the manager of the Clearing House duly signed by an officer of the Federal Reserve Bank and the transaction is completed. The banking law in some States has been amended to allow non-member state institutions to keep a certain portion of their legal reserve requirements with the Federal Reserve Bank, for the purpose of settling clearing-house balances. This method, of course, can only be operative where Federal Reserve banks or their branches are located, but the simplicity and efficiency of the method can readily be seen. To encourage promptness, care and accuracy on the part of clerks, fines are imposed for errors in lists, wrong clearings, missing indorsements, errors in statements, misconduct, etc.. These fines range from ten cents to five dollars, and are assessed against banks whose representatives are the offend-The proceeds usually go toward defraying the general expenses of the Association. To get an idea of the convenience and saving that result from the daily exchanges at the Clearing House one need only to consider the number of clerks that would be required to go from bank to bank and collect and handle the actual cash represented by ten millions of dollars' worth of items, then compare that process with the clearing of a like amount of items and the settlement of balances resulting therefrom.

GENERAL CLEARING HOUSE FUNC-TION.—One of the important functions of the City Department has been the issuance of loan certificates and scrip during times of stringency, but with the passage of the Federal Reserve Act it is hoped that this function is forever eliminated. It was by co-operation through this department, that the banks of New York, Philadelphia and Boston were able to protect the credit of the nation during the early years of its existence. The City Department, or in the larger clearing house associations, the clearing house committee, handles the general business of the Association. It is of a legislative and administrative character. Through it rules and regulations regarding exchange and collection charges and interest rates allowed on balances are formulated and enforced. It provides for uniform counter checks, uniform advertising, service charges, and looks after matters of common interest to the member banks, and the general good of the community. Small banks that do not feel justified in joining the Clearing House arrange with some member to act as their agent and to clear for them, for which they pay a small fee to the Clearing House.

CLEARING HOUSE EXAMINATIONS.—Clearing House examinations include, in addition to verification of the assets and liabilities of the bank, a thorough examination into the workings of every department. They are not intended to be a careful audit of all the accounts. That is left to the bank's own auditor and to special auditors who are called in from time to time. Following each examination a duplicate detailed report is made, giving a description

of the loans, bonds, investments, and other assets. This report shows, under a special schedule, loans both direct and indirect, to officers, directors and other employees, as well as to firms and corporations in which they may be interested. It further covers the conditions that are found in every department of the bank. One copy of this detailed report is filed at the Clearing House, and is open to the examiner and manager only, except in special instances where it is necessary that it be brought before the Clearing House Committee. The other copy is filed with the President of the bank examined, and the directors are notified and requested to call at the office of the President and inspect the report. The examiner requires an acknowledgment of this notice from each director, with a promise on the part of the director to call and go over the report. This encourages closer attention to the bank's affairs, and makes certain that every director has opportunity of knowing the bank's true condition. A skeleton of this report, setting forth in a general way the character of the bank's assets, and giving a list of the loans to employees, officers and directors, and to firms and corporations in which they may be interested—also giving a special schedule of all of the excessive and important loans, and making mention of the irregularities, bad conditions and dangerous tendencies and practices that exist in the institution—is brought before the Clearing House Committee by the examiner. The Clearing House Committee goes over the report carefully and considers fully the examiner's views and recommendations. Then the committee calls in the managing officer of the bank examined, and gives him the benefit of these views, and makes such suggestions as may seem expedient. The advice of the committee is generally heeded, and whatever the trouble may be, it is corrected. Lack of respect for suggestions from the Clearing House Committee may result in the dismissal of the offending bank from membership in the Association.

CHAPTER VI

Loans and Discounts

TOANS AND DISCOUNTS are based upon the same principles of credit, regardless of the amounts involved or the size or location of institutions where they are made. The word "discount" as used in banking refers to interest deducted or collected in advance. While the word "loan" is a word of broader meaning than "discount," as the terms are generally defined in dictionaries, banking practice has resulted in the application of the word "discount" to practically all loans to customers on commercial paper, and the term "loan" is generally restricted to demand and time loans secured by collateral. The National Bank Act and the laws of most States restrict loans to be made by any bank to any one individual or interest to a limited amount of the bank's capital. The idea of such limitation is that loans should not only be presumably secure in themselves, but that the additional safety of the law of averages should be applied to all. In other words, no bank should be permitted to put too many eggs in one basket. Perhaps the worst weakness that any banker can possess is lack of ability to clearly distinguish between his own money and the money of his depositors. Such discrimination requires something more than conscience. It requires appreciation of difference betweeen tangible and intangible assets, between crops and land,

between manufactured products and manufacturing plants, between commercial credit and invested capital, between lending money and going into partnership. Whatever may be proper transactions for savings banks and trust companies, it is the sole province of commercial banking to bridge over the period between seedtime and harvest, to facilitate the transformation of raw material into finished products and to provide the connecting link between mercantile sales and collections. It is not the province of commercial banking to own mortgages on farms, however fertile; to be partners through overloans or otherwise in manufacturing and merchandising, however profitable; or to control mines, however rich. There should be clear distinction between banking and promotion. Both are useful and honorable, and both are harmless when kept apart, but when mixed they make an explosion. Disaster follows defiance of this inexorable law of financial chemistry.

LIQUIDNESS OF ASSETS.—Liquidness of assets enables a bank to meet the actual needs of its depositors for money and also by giving confidence serves to limit withdrawals to actual needs. This is with most people, and properly should be, the fundamental basis for confidence in a bank. To serve the purposes just mentioned the same degree of liquidness in all assets is not required. Immediate convertibility into cash of a portion of the assets of a bank is sufficient for the building up of reserves depleted on account of unusually large requirements on the part of depositors, or even for the exceptional contingency

of a run upon the bank. Experience shows that a bank all of whose assets can be converted into cash within a few months without loss is altogether unlikely to be disturbed by lack of confidence, and should it be subjected to unfounded rumors no difficulty is experienced in securing the necessary funds from other banks.

LINES OF CREDIT.—The investments which best meet the peculiar requirements of commercial banks are loans payable either on demand or within a few months, seldom more than six months. With a reasonably large number of short time loans, so selected that some of them will be maturing daily or at least nearly every day, and all of them within a six months period, it might seem at first sight that if a bank adopted the simple means of refraining from making new loans, the payment of these loans would automatically provide a bank with funds to meet all ordinary requirements. But the problem which confronts the banker is not of this simple character, because there are other considerations which must be given weight in handling the loan account of a bank. If a bank is to continue as a going concern engaged in profitable business it cannot entirely discontinue the making of loans. It holds its business depositors largely through its readiness at all times to furnish them a reasonable amount of accommodation. Within limits of safety determined by the character of the depositor, the nature of his business, the size of his account and the size of the bank, lines of credit have been agreed upon. These agreements clearly place a

part of the lending power and consequently a part of the assets of the bank outside the field of practical every day liquidness. For a bank regarded as a going concern, therefore, a considerable proportion of its resources are unavailable as a means of strengthening itself for the purpose of meeting ordinary requirements. Further, unless borrowers have in general already fully utilized their lines of credit, the bank is subject to the possibility of additional demands for accommodation, which it cannot refuse to grant, and which may come just at a time when it is meeting unusually heavy payments to depositors either directly or through unfavorable balances with other banks. Even in periods of acute monetary stringency it must be prepared to create new deposit liabilities by making new loans. Striking instances are found in the case of those banks which have accounts of stock brokers who ordinarily borrow on the market, or of business firms which place their paper with many banks through note brokers. It is a common practice, and one dictated by sound business policy, for such borrowers not to borrow from their own banks. Lines of credit are kept open to fall back upon when, as may happen, it becomes difficult, if not impossible, to borrow in the open market. The borrower has thus an anchor to windward. But, on the other hand, banks that have such accounts have incurred obligations to extend credit just when it may be most inconvenient for them to do so.

LIQUIDNESS OF LOANS TO DEPOSITORS.—Clearly then a bank should have assets more

liquid than its loans to its own clientele of business depositors. The conclusion should not be drawn, however, that the loans made to such regular customers need not possess the quality of liquidness. The analysis in the preceding paragraph was concerned altogether with these loans taken as a class. The individual loans within this class must be liquid to enable a bank to extricate itself from threatened failure or suspension, contingencies which would inconvenience borrowers far more than the refusal to allow them accommodation agreed upon under lines of credit. Moreover, there is another and even more important reason for insisting upon liquidness in the case of these loans. A large part of the loans made by banks is based upon personal security alone, promissory notes with or without indorsements. The underlying security rests largely upon the uses made by the borrower of the proceeds of these loans. If the transaction in connection with which the proceeds of the loan are used will be completed during its life the loan may be said to pay for itself. It is to be presumed also that borrowers will use the proceeds of loans which they are to repay in a few months more wisely than might be the case if the payment were indefinitely deferred. Moreover, conclusions based upon the analysis of the statements of borrowers and upon other information are a basis for short time credit only, since over a long period conditions may change radically for the worse. Unsecured loans must therefore as a rule possess that quality of liquidness which comes from short maturities to make them a proper investment for banks or indeed for any lender. One common method of seeking not only to make certain that the loans made under lines of credit shall be liquid, but also to determine whether credit may be safely continued, is to insist that all borrowing be cleaned up at least once a year. This is often an effective requirement, though it may be more nominal than real, since borrowers may simply allow accounts payable temporarily to pile up against them. The supply of credit which the banks are in position to lend is, however, so large that the banks quite generally do lend more or less continuously to many borrowers. Concerns whose business is growing and which show good earning power are a reasonably safe basis for such loans pending a time when they may be expected to secure additional capital by means of more permanent obligations, by an issue of additional capital stock, or by the gradual process of putting profits back into the business. Firms engaged in a few lines of business may perhaps be regarded as satisfactory borrowers even though they continue to rely indefinitely upon banks for a part of their working capital. In such cases it is essential that the firm shall be engaged in a business the products of which are in constant demand and therefore readily saleable for cash.

COLLATERAL LOANS TO DEPOSITORS.

—Based upon knowledge of the amount of loans made in former years, the future needs of regular commercial depositors can be fairly well determined; but, as in the case of the requirements of depositors for cash, the estimate cannot be exact, and for short periods may be wholly at fault. Evidently if it is regularly to keep its funds fully employed, a bank must invest a part of them in other ways, in assets which can be converted into cash without disturbing valuable relationships. The banker may have made a considerable number of collateral loans to his depositors. The greater part of such are made on the security of stocks and bonds; and, leaving out of view those made to depositors who are engaged in the business of marketing securities, these loans can be allowed to mature and new loans can be refused with less danger of loss of accounts than in the case of regular commercial borrowers. This is because the proceeds of collateral loans are largely used to enable borrowers to pay for purchases of securities and for other purposes outside their regular business. Moreover, the borrowers whose loans are based on readily marketable collateral, can arrange to borrow from other banks more readily than is generally true in the case of the commercial borrower.

COMMERCIAL PAPER.—There are two classes of loans insistence on payment of which, together with the refusal to make new loans, does not subject a bank to the danger of the loss of any business advantage. These loans are commercial paper purchased from note brokers and collateral loans made to stock brokers and investment bankers who are not depositors of the lending bank. Note brokers are resorted to by business concerns whose borrowings are large, often too large to be granted by one or more

banks, even by those of the largest size. Banks purchasing this paper incur absolutely no obligation to take additional paper in the future. They may buy regularly or intermittently, as suits their own convenience; the relation between borrower and lender is absolutely impersonal. Commercial paper purchased from note brokers has for many years been a favorite avenue for the employment of a considerable portion of the secondary reserve of the banks. banker is indeed less likely to know intimately the character of this paper than that of loans made to his own depositors. Here, however, the note broker, if wisely selected, is a valuable safeguard. It may be said without qualification that the losses of banks from commercial paper purchased from note brokers of high standing have been far less than those from loans to their own depositors, and immeasurably less than those from purchases of paper from distant borrowers made directly in order to save the broker's commission. The notes which are sold to the banks by note brokers are generally in round amounts of \$5,000 and in multiples of \$5,000. Only very large banks will have sufficient funds invested in this way to provide them with a steady succession of maturities. For the small bank, therefore, commercial paper is rather a means of employing surplus funds which are not likely to be needed during the continuance of the loan. In this connection it should be noted that there seems to be a tendency to lengthen the average maturity of this class of loans, owing to the fact that the borrower ordinarily pays the same commission whether the paper is to run for three or for the maximum period of six months. This longer average maturity lessens the value of commercial paper to most banks as a liquid asset for ordinary working purposes.

LOANS ON SECURITIES.—The favorite investment for funds which may be needed at any moment is the collateral loan to stock brokers and to banking houses engaged in marketing securities. A part of these loans is on time and has very much the same utility as a means of employing banking funds as commercial paper purchased from note brokers with the further advantage that a greater range of maturities is available. There is a broad market for collateral loans maturing all the way from one month to six months. A large part of the total of collateral loans also is payable on demand. Stock exchange dealings and the marketing of securities are unlike all other kinds of business in that they can be in part conducted on the basis of call loans. The quick saleability of the commodity handled makes this possible; consequently, we have here a demand for loans under such conditions as to enable banks to make full use of their lending power right up to the limit set by their reserve requirements. In the absence of call loans it would clearly be impossible for the banks to keep their reserves intact and at the same time lend close to the limit of reserve requirements. Many considerations must be taken into account in determining the relative amount of its funds which shall be employed by a bank in the various ways which have been outlined. Banks whose deposits fluctuate with some degree of

regularity can naturally invest in a different fashion from those subject to large requirements which cannot be foreseen.

Loan Equilibrium

ADJUSTMENTS OF RESERVES.—Suppose that a bank which has invested in all of the various ways heretofore described finds itself below reserve requirements. From knowledge of the tendencies of the accounts of its depositors it may perhaps be reasonably certain that within a few days through deposits of cash or through deposits of checks giving it a favorable balance with other banks its reserve will be restored. Many bankers in these circumstances might be content to allow affairs to take their own course. Others, especially in cities where the banks publish a weekly statement, would be likely to call some of their demand loans but might continue to purchase commercial paper and make time collateral loans to an amount something like current maturities of such loans. If, however, there was reason to believe that depositors were likely still further to draw down their balances and if demands for further accommodation from depositors were to be expected, a much greater reduction in call loans might be made and at the same time new investments in commercial paper, and in time collateral loans, might be largely discontinued. No one of these three kinds of loans would presumably be liquidated before a beginning was made with the other two. Some weight would of course be given to the relative rates prevailing for

each of these three kinds of loans. Bonds would probably not be disposed of unless a pronounced change in the conditions surrounding the employment of its funds was foreseen or unless a bank were confronted with a serious change for the worse in its affairs. While there are neighboring banks with surplus funds to lend a bank whose loans are liquid experiences no difficulty in securing additional funds by means of contraction, though such enforced contraction might result in loss of business to competitors. Aside from loans to its own depositors, payment for which will ordinarily involve a cancellation of its own deposit obligations, it is important to observe that the additional funds which a bank thus secures come from other banks. When bank loans are paid by borrowers, money to an insignificant amount is drawn from general circulation. The total money holdings of the banks are not appreciably increased; there is simply a shifting of cash holdings among the banks.

GENERAL CONTRACTION OF LOANS.—
In periods of active business, however, banks can and generally do lend all that their reserves will support. If during such a period any considerable loss of cash occurs, the foundation of credit is weakened and the banks generally may desire to strengthen themselves. A policy of contraction of loans may then be adopted by most of the banks at the same moment. The results of contraction in such circumstances are far less effective in strengthening the banks than those which follow contraction by one or a few banks. Just as when loans increase more checks are drawn in pay-

ment for increased purchases, so when loans are being generally reduced more checks are drawn in favor of the banks with no corresponding inflow of money. The payment of loans does not increase the amount of money in the possession of the banks taken as a whole; it simply reduces deposit obligations. When surplus reserves are low, it may involve a contraction of loans several times the amount of the cash lost. If the cash lost is due to gold exports the advance in rates which is certain to accompany general loan contraction may make it profitable to borrow in foreign markets. Such borrowings often bring about the cessation of a gold export movement. It is seldom possible, however, so completely to reverse the exchanges by this means as to secure additional cash by means of gold imports.

ULTIMATE EFFECTS OF CONTRACTION.
—Ultimately if contraction entails lessened business activity, money will flow into the banks from general circulation; but this is a slow and uncertain resource of little use in meeting the pressing needs which usually occasion the general liquidation of loans. The reduction of deposit liabilities through contraction will, of course, bring the reserve ratio of the banks to a satisfactory point if it can be carried far enough. But it cannot be carried very far. Business cannot be suddenly deprived of that amount of credit which it has been receiving without disastrous consequences. When the volume of business declines, the volume of credit can also be correspondingly reduced but not before, except within narrow limits. The credit

granted to those engaged in one of the last stages of the production of some commodities can generally, it is true, be reduced without much difficulty. Consider, for example, the meat and provision business. Packers reduce their purchases of cattle and hogs. The necessary daily consumption of the people soon reduces the stock on hand and as cash payments are the rule in this line of business the packers will shortly be able to liquidate their loans and would require no new accommodation. It seems at first sight as if a large amount of commercial loans would have been eliminated. But consider the situation of the large number of farmers engaged in the business of raising cattle and hogs. Unable to sell as much as usual to the packers they would be obliged to fall back upon their own banks, from which they would be compelled to borrow more largely than usual. Even call loans are much less liquid than is generally supposed. When a few banks demand payment of these loans brokers to whom they are principally made secure loans elsewhere and the banks calling the loans are paid. The total volume of call loans is not much changed. Within narrow limits it may be possible to reduce the aggregate of such loans by sales of securities to persons able to pay for them outright. It is also possible to secure additional margins from customers for whom brokers are carrying securities. But when all banks call loans they soon cease to be convertible. Purchasers who might be able to pay for securities outright become frightened, while alarm and even panic may become general. In order to prevent disastrous failures among brokers and consequent loss to themselves the banks find it necessary to refrain from insisting upon general loan contraction.

GENERAL LOAN CONTRACTION TO BE AVOIDED.—In European countries the banks never find it necessary to attempt to strengthen themselves by sudden and general contraction of loans. Slow contraction of loans is of course sometimes insisted upon when it is thought that the business situation will thereby be improved. If it is merely a question of strengthening the banks, however, recourse is had to the central banking institutions found in all European countries. Unlike other banks these central banks in ordinary times never lend to the full extent of their power to grant credit. They are therefore always in position to take over a part of the load of loans from the other banks. This makes the situation in emergencies in European countries analogous to what it has been with us when some, but not all, of the banks were seeking to strengthen themselves by means of contraction. It cannot be expected that each one of the many thousands of banks in this country will reserve part of its lending power for emergencies which after all come but seldom. Somewhere in every banking system a reserve of lending power is required, and it is primarily to meet this requirement that the Federal Reserve banks were established in 1914.

RESERVE BANKS AND LIQUIDNESS.— Under the Federal Reserve System the course followed by banks in making adjustments to variations in demands for cash are not materially different from what it has been in the past. It is just as necessary as formerly for a bank to keep itself in a liquid condition, but the relative liquidness of different classes of assets have been somewhat changed and the liquidness of all assets are enhanced. The liquidness of all assets are enhanced if the reserve banks maintain themselves in a condition of such strength as to be able at all times to supply additional credit and currency to meet emergencies. The process of conversion of assets into cash is the simple matter which we have already seen it to be when only a few banks experience the need of conversion. The process of conversion is a simple matter since it does not involve contraction but merely the transfer of assets to reserve banks, in exchange for cash. Loan contraction will, no doubt, from time to time occur when the volume of business falls off or when there is evidence of an over-extended condition of affairs. Contraction will be carried through gradually, however, so as to conserve all interests so far as may be possible. Contraction will not be resorted to merely to strengthen the banks.

RESERVE BANKS AND COMMERCIAL LOANS.—As an indirect consequence of the operation of the reserve banks all bank assets are more steadily liquid than in the past. Bonds, for example, are more steadily saleable, and the possibility of shifting call loans is always present. But obviously those assets gain most in liquidness which can be used as a basis for loans from the reserve banks. Most of the

European banks may make loans of all kinds both to individuals and to banks. In the case of the reserve banks the field of operation has been somewhat narrowly prescribed, though it may be added it includes those classes of business which make up the bulk of the investments of the European central banks. The normal lending operations of the reserve banks are limited to the purchase of commercial bills of exchange and the rediscounting for member banks of commercial loans of all kinds maturing within ninety days and of agricultural loans maturing within six months. The rediscounting of loans secured by stocks and bonds is specifically prohibited. Commercial loans are generally defined in the act as "notes, drafts and bills of exchange rising out of actual transactions. That is, notes, drafts and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used or are to be used for such purposes." The Federal Reserve Board was authorized to define more precisely the nature and character of eligible paper. In the exercise of this power the Reserve Board has defined commercial loans in such a way as to include all loans to borrowers engaged in production and marketing of goods whose current liabilities are not in excess of their current assets. Loans of this character are everywhere the backbone of the banking business.

SOURCES OF PAYMENT OF BANK LOANS.—Borrowers derive the means of payment of bank loans from a variety of sources. The liquidation of many loans is dependent upon the sale of property,

such as real estate and buildings, or of stocks or bonds. Some loans are gradually reduced and ultimately paid in full with savings made from income and especially from the profits of a business. The floating indebtedness of a successful business may be liquidated by securing additional capital, either through the issue of new stock or the sale of bonds. Payment of particular loans may be accomplished by borrowing elsewhere or by postponing the payment of current accounts with those from whom goods have been purchased. Finally, means of payment may be secured during the life of the loan as a natural result of the regular operations of a business. In the case of particular loans, any one of these various means of payment may be regarded as of primary importance by the banker, but the bulk of all bank loans are based mainly either upon collateral or upon the expected results of natural business operations. Some loans possess both these elements of strength, but more commonly credit is granted upon one of them alone rather than both in combination.

Credit Considerations

COMMERCIAL LOANS.—Loans, the means of payment of which become available during the life of the loan as a result of the regular operations of a business, are commonly known as "commercial loans." The instrument in which the obligation is embodied may be either a bill of exchange or a promissory note. The lender may rely for payment upon the borrower alone or require additional security—either a lien on

tangible property or the endorsement of one or more third parties. There is, then, much variety among commercial loans, but they all possess one feature in common which overshadows these differences. be a commercial loan, the proceeds must be used in financing the production and marketing of goods, operations from which the means of payment will ordinarily be derived before it matures. The limits within which banks may safely finance these operations, and the terms on which accommodation shall be granted, constitute the complex problem of the commercial loan. The financing of fixed assets-land, buildings, and machinery—is entirely outside the limits of commercial borrowing. No part of the indebtedness of a borrower in excess of his current assets can be regarded as commercial in character. Moreover, to finance anything like all of current assets by means of short time loans would in almost all instances involve the speedy insolvency of the borrower and loss to the banks.

CURRENT ASSETS.—Current assets consist of materials, work in process, finished goods, accounts and notes receivable, and cash. In the ordinary course of business all the other current assets are in process of conversion through one or more stages into cash. At the same time, however, it is to be noted that unless a business is being wound up, new current assets of each kind are constantly being acquired. The materials of to-day become the finished goods of to-morrow and the receivables of a more distant future. Current assets are revolving assets.

CURRENT LIABILITIES. - An analogous process is to be observed in the current obligations of a business. Indebtedness to banks and to those from whom goods are purchased is contantly maturing and being paid, but new obligations are at the same time being incurred in connection with the operations which will result in future sales. There must be a constant inflow of cash to a business to meet these obligations as they become due, and this inflow must be sufficient, not merely for this purpose, but also to provide for the current running expenses of the business, to say nothing of provision for up-keep and earnings. But since new obligations are constantly being created, there is always the possibility, in the case of a business which is losing ground, that an inadequate inflow of cash is being met by using proceeds of new current obligations to meet the burdens of the past rather than the operations of the future. Since business is a continuing process, it cannot be constantly subjected to the test of complete liquidation of its indebtedness. The supply of cash, therefore, may be sufficient to meet maturing obligations for a considerable time after a concern is in an unsound or even insolvent condition.

SAFE LIMITS OF CURRENT LIABILITIES.—Two methods of determining whether the current liabilities of a business are being kept within safe limits may be distinguished. Under one method credit is based upon the entire financial position of the borrower as determined by the analysis of statements of the condition of his business and other information.

Under the other method specific transactions, purchases and sales of goods, measure borrowing capacity. Before considering the respective merits of these two methods, it is to be noted that neither of them has validity-indeed, they may be positively misleading-in the absence of character and business ability in the borrower. The most prosperous business may be quickly ruined through mismanagement. Under no method of determining proper limits for loans can the possibility of loss through dishonesty be entirely eliminated. Judgment of men is fundamentally essential for the successful conduct of commercial banking. But definite rules and principles for estimating the character and capacity of individuals are of little service. In the final analysis, therefore, it will simply be assumed that the banker has satisfied himself regarding these essential qualifications.

STATEMENTS OF BORROWERS. — The honesty of the borrower is especially important when statements of the condition of his business are used in determining the amount of credit which may safely be granted. An independent audit of course reduces the danger from fabricated statements, and such audits are becoming increasingly common, although they can hardly be expected in the case of borrowers of small or medium size. The practice of requiring a statement of condition from borrowers has grown during the last twenty years until now it is almost universal in well-managed banks. It is evidently an imperatively necessary requirement where credit is granted on unsecured single name paper. Statements

of condition are made with varying degrees of completeness. Often only a balance sheet is available, but frequently a statement of the amount of sales is also given, as well as other information. The balance sheet alone is commonly the only information furnished purchasers of commercial paper from note brokers. Borrowers naturally are unwilling that detailed information regarding their affairs should be spread broadcast throughout the country. To the note broker, however, more complete information in confidence is commonly given. When balance sheets alone are available intimate knowledge of the industry in which the borrower is engaged is needed in order to interpret them. The relative amount of various kinds of current assets and liabilities shown in the balance sheet when compared with statements of others engaged in the same line of business will often indicate whether it is in a sound or weak condition. A single balance sheet is of very little significance, but a series of statements extending over a period of years often throws much light upon the conditions and tendencies of a business.

FUNDAMENTAL QUESTIONS.—In order that any banker may avoid the two extremes—the error of extending too much credit and the error of extending too little—something more than the ordinary statement of assets and liabilities is required, and particular attention is called to the fact that it is not the customer with intent to deceive who is most dangerous. It is the customer who in all sincerity is himself deceived. In analyzing business statements,

therefore, the banker must get below the surface. Here are some of the questions that must be answered.

- 1. Does the business under consideration occupy a legitimate field, and if so, is it firmly entrenched in such field or is it vulnerable to attack by enemies?
- 2. If a manufacturing concern is the demand for its products permanent, or does the demand depend upon some temporary fashion or fad?
- 3. Is the business a monopoly, or is it open to competition in its own line or along similar lines that may seriously affect it?
- 4. If the business purports to be protected by patents, are such patents really good for anything, and, if so, how long before their expiration?
- 5. Are the location of the business and the condition of its plant such as to insure economical operation?
- 6. Who are the proprietors, and do they understand their business—or any business? Are their knowledge and experience largely technical, or do they understand the ways of the financial world?
- 7. Is the plan of accounting employed such as will show the actual condition of the business up to date, or do the statements taken from the books represent its condition six months or a year previous? Do the books show a proper distribution of cost, and are there proper reserves for bad debts, depreciation and contingencies?
- 8. How do the people who conduct the business stand with their customers, and with the general trade?

9. What is the relationship between the managers and their employees?

10. Is the loan desired and required for the legitimate purposes of the business, or are the proceeds

to be used in some other way?

RATIO OF CURRENT ASSETS TO LIABILITIES.—It is a common rule of thumb that current assets ought to be twice the amount of current liabilities. This is not a rule for lending that should be followed blindly; it is merely a suggestion, a sort of guidepost. If the current liabilities are more than one-half the assets it naturally puts the banker on inquiry to find out whether the rather high proportion of current liabilities to current assets is safe. A proportion of $1\frac{1}{2}$ to 1 may in certain lines of business be a more satisfactory proportion than a $2\frac{1}{2}$ or 3 to 1 proportion in other kinds of business.

LIQUIDATION OF ASSETS.—It is necessary, therefore, to know a good deal about the nature of different kinds of business if one is to grant credit wisely. There are some kinds of business the products of which are universally consumed and paid for in cash. Concerns engaged in such business obviously can borrow more largely, and can go along with a lower ratio of assets to liabilities, than those engaged in other kinds of business. Take a business like that of the packers, for instance, who are large borrowers through note brokers. It would be possible for such concerns to liquidate many millions of dollars in a comparatively short time. All they would need to do would be to purchase in the near future a smaller num-

ber of cattle and hogs. The demand for their products would quickly take off the existing supply and they would largely be paid in cash. Moreover, they would lose no valuable trade connections by curtailing operations, and possibly they might take advantage of the situation to add a few cents to the price of their products.

SLOW LIQUIDATION.—Let us consider another kind of business, say a furniture manufacturer. It might be that just at the time when he would like to reduce his obligations his obligations will increase. Let us suppose circumstances in which the demand for furniture suddenly falls off on account of general reaction in the activity of trade. Dealers in furniture would in those circumstances purchase less than the expected supply of furniture, and presumably, also, they would defer more or less their payments on past purchases. In the meantime the maker of furniture would find himself loaded up with a large amount of it, for the moment unsalable, and he would have no one on whom he could fall back, as was the case with the dealer. Of course, the furniture maker might defer payments for materials to a certain extent, but the value of the materials going into furniture is small as contrasted with the value of the furniture itself, as so much of the value of that product is due to the labor employed upon the material. On this account the delay on the part of the furniture maker in meeting his payments for purchases would not by any means offset delays on the part of furniture dealers in making payments to makers of furniture. Clearly, then, the

furniture maker is a concern from which one would demand a higher ratio of quick assets to quick liabilities than from a packing-house concern. In a general way it may be said that those engaged in the last stages of production, if they are producing an article which enters into necessary and general consumption, can extricate themselves from critical credit situations more easily than any other class of producers in the community.

VOLUME OF SALES.—In the interpretation of balance sheets the amount of net sales is of great assistance. A rapid turn-over of current assets, as compared with that of others engaged in the same line of business, is ordinarily an indication of a capable and successful management. It implies that stocks are wisely purchased; it also indicates that dead stock is not inflating the inventory, and that accounts long past due are not being carried. An absolutely high turn-over is also significant. Here there is a wide variation owing to differences in the nature of various lines of business. The process of production may be long, or the terms of payment may be customarily liberal, as in the case of agricultural implements. Where these conditions are found the ratio of current assets to current liabilities should be high-in other words, a large part of the current assets should be financed by those conducting the business.

RATIO OF COLLECTIONS TO MATURI-TIES.—As we have already seen, the inflow of cash to a solvent business must be sufficient to meet its various maturities and all the other expenses of the business, and in the case of a prosperous concern, there must be something left for profits. A high ratio in cash receipts to the payments which must be met, evidently, then, affords the strongest possible basis for the conclusion that a business will be able to liquidate its obligations in the future. Suppose, for example, that during the two previous years the average monthly collections of a given manufacturing business have been \$100,000; that the average monthly maturities have been \$50,000, and average payments on account of rent, interest, insurance, taxes and office salaries, have been \$30,000. By the discontinuance of its manufacturing operations it is certain that this concern could liquidate its indebtedness unless there should be a most severe falling off in the demand for its product. As in the analysis of the balance sheet, account would necessarily be taken of the nature of the business. A higher margin of collections would be requisite in some industries than in others. This method of testing credit does not take the place of balance sheets and other sources of information. simply supplements them, though it is believed that in the course of time this ratio between collections and maturities and fixed charges will come to be regarded as the most important single factor in credit analysis.

CHAPTER VII

Collateral Loans

OLLATERAL LOANS are loans secured by pledge of personal property. A pledge is a bailment of personal property as security for the payment of a debt or the performance of an act, with an option of sale in the pledgee upon the default of the pledgor in his engagement. The article pledged may be any species of personal property, but of late years a pledging of stocks, bonds, negotiable paper and other representatives of intangible personal property has come to be designated by the term "hypothecation," or the giving of "collateral security," to distinguish such a pledge from a pledge of material articles. A pledge gives greater rights than a lien, for a pledgee has a power of sale which the owner of a lien has not. It is less than a chattel mortgage, for in a chattel mortgage the legal title passes, subject to be divested upon the fulfillment of the mortgage terms; in a pledge the title may or may not pass-ordinarily it does not, but it has been held that it does in collateral securities. It differs further from a chattel mortgage in that to create a pledge no writing that it is a debt and a surrender of possession of property is necessary, and it is required merely that there be property as security. Ordinarily, too, a chattel mortgage must be recorded to be effective against third parties. while a pledge need not be.

FORMATION BY CONTRACT.—A pledge is created by contract, either express or implied. An assignment of securities by a debtor to a creditor is presumed to be a pledge rather than a payment, and where doubt exists whether the transaction is a pledge or a chattel mortgage the courts favor holding it a pledge. The aim is to determine the real intention of the parties, and classify the transaction according to the intention shown. There must be a debt or engagement to be secured in order to create a pledge, but this debt may be some other person's than the pledgor's, and a pledge may be made to secure a present, future or past debt, though to make a valid pledge for a past debt some new consideration is ordinarily required. The pledge may be made to cover new debts as they arise, but there must be an agreement between the parties to effect this, for the pledge will not be deemed to attach to the new debt unless the new loan was made upon the security of the pledge. So the existence of a former debt gives the pledgee no right to hold the pledge when the debt to secure which it was given has been paid. If the debt or contract to secure which the pledge is given is illegal, the pledgee cannot, of course, recover upon the contract, but he may nevertheless retain the pledge until it is redeemed.

WHAT MAY BE PLEDGED.—Practically any personal property, tangible or intangible, may be pledged, as the right to shares of stock in a corporation. Even property exempt from execution on a judgment, as a mechanic's tools, or necessaries, may be pledged. Property not yet in existence cannot be

pledged, and the attempt to do so merely creates a contract to make a pledge in the future, like an agreement to sell. Pay of soldiers and pensions cannot be pledged. By the National and many State Bank Acts, it is provided that "No association shall make any loan or discount on the security of the shares of its own capital stock, nor be the purchaser or holder of any such shares, unless such security or purchase shall be necessary to prevent loss upon a debt previously contracted in good faith, and stock so purchased or acquired shall, within six months from the time of its purchase, be sold or disposed of at public or private sale."

PARTIES AND TITLE.—A person who transfers personal property in pledge as security for a debt must own the property or at least have apparent authority to pledge it. One who has been voluntarily clothed by the owner with the indicia of ownership, though this may have been induced by fraudulent representation, may make a valid pledge as against the owner. One who takes negotiable instruments in pledge before maturity in good faith for value and without notice of any defect in the pledgor's title, acquires a valid holding title. Except in these two cases the pledgee acquires no greater title than the pledgor had. Mere possession of chattels, by whatever means acquired, if there be no other evidence of property or authority to sell from the true owner, will not enable the possessor to give good title. An agent may pledge when and as his principal holds him out as having authority; if an agent pledges goods of his

principal to secure his private debt, the principal is entitled to recover them from the person to whom they are pledged, unless the agent was invested with the indicia of ownership, or the pledge was of negotiable securities. In most States, by statutory enactment, factors (commission merchants) may pledge goods entrusted to them to sell. One member of a partnership may make a valid pledge of firm property to secure a partnership debt, but not to secure an individual debt. An executor, administrator, trustee or other person in a representative capacity may not pledge his trust property for his own benefit. One who has only a lien cannot make a valid pledge, because to maintain a lien he must retain possession, while a pledge requires a delivery. Buying stocks on a margin creates the relation of pledgee and pledgor between the broker and his customer.

DELIVERY.—An absolute essential to the creation of a pledge is a delivery, actual or constructive, of the property pledged. A constructive delivery occurs when the evidence of recognized symbols of the thing is delivered, as the delivery of a warehouse receipt, or a bill of lading. But there must be some delivery. Thus where a bank cashier, to secure a creditor, sealed up a package of bank notes with an endorsement of their purpose and placed them in the bank vault, it was held that the creditor had no pledge or lien. A delivery to a third party for the pledgor's benefit with his consent is sufficient. A delivery with an intention to create a pledge is sufficient to create the relation of pledgor and pledgee without writing

or other act, but not in the case of certificates of stock, where a writing is required unless the certificate has been endorsed in blank. Even where a note is payable to a person's order there may be a valid pledge of it without endorsement, though the practice is not to be recommended. But in the case of stock it is necessary that there be a written transfer or power of attorney of some kind. The pledge continues so long as the pledgee retains possession, and the pledgee has a right against all the world to the retention of the article pledged until the payment of the debt secured, except as against the holder of a right which attached to the property before the making of the pledge. But a pledge of collateral securities may be temporarily redelivered to the pledgee for the purpose of collection by the pledgor without affecting the pledgee's lien, though this exception is not favored and is strictly limited.

RIGHTS AND LIABILITIES OF PLEDGOR.

—A pledgor has a right to assign, by sale or otherwise, his reversionary interest in the pledge, and upon notice to the pledgee the latter will be bound upon payment of the debt secured to turn the pledge over to the assignee. He has also a right to sue anyone who injures the pledge, though preference is given the pledgee in the matter of suing because his interest is generally greater. He has, of course, the right to recover the pledge on payment of the debt for which it was given as security, and he cannot be deprived of this right at the time of making the contract. To allow this would permit lenders to crush their cus-

tomers. But the pledgor's right to redeem may be released by a subsequent contract founded on a new consideration. Statutes in many States allow a pawn-broker to sell the pledge and foreclose the pledgor's right to redeem at the expiration of a fixed time, generally a year. As to the liabilities of a pledgor, he is, of course, liable for the original debt, default in paying which may lead to a sale of the pledge and the application of the proceeds to the debt so far as they will go. If not sufficient to extinguish the debt he still owes the balance. The pledgor also impliedly warrants his title as that of an absolute owner.

RIGHTS AND LIABILITIES OF PLEDGEE BEFORE DEFAULT.—The pledgee gets no better title than the pledgor had, except in the case of negotiable instruments, and except where the pledgor has been clothed by the owner with the indicia of ownership. The best example of clothing one with the indicia of ownership occurs in pledges of certificates of stock. These are not regarded as negotiable instruments, but the owner, by endorsing or signing the power of attorney to transfer, thereby invests the holder with the apparent ownership, and the latter may then pass a good title to one who buys for value without notice, in good faith. There are some limitations to this, as where the pledgor is known to be an agent for a trustee the pledgee cannot take the stock with full protection unless he inquires into the authority of the representative to make the pledge. Where the owner himself never endorsed the certificate, but someone else without authority did, that does not avail against the true owner even in the hands of a pledgee or transferee without notice for value. The owner of an instrument negotiable or non-negotiable cannot be precluded by a forgery. The pledgee having the right of possession may sue any person who causes injury to the pledge, because, as a matter of fact, he has generally a greater interest than the owner himself in keeping the pledge intact.

RIGHT TO THE USE AND PROFITS OF THE PLEDGE.—The pledgee may use the pledge so far as is reasonably necessary. Ordinarily this would be little or nothing, but the pledgee of a horse would have to use the pledge in order to keep it in condition, and in all cases the pledgee may use the pledge as the pledgor permits. The pledgee may collect the profits or income of the pledge, as dividends on stock or interest on bonds, but he must apply them to the principal debt, and if they exceed the amount needed, he holds the excess in trust for the pledgor. The pledgee may have pledged stock transferred to his name on the books of the company, and this is frequently done, and may vote such stock, though in some States the pledgee, upon the demand of the pledgor, must give the latter a proxy to vote the stock. The pledgee is liable for assessments on the stock standing in his name, though by statute in some States the pledgor and not the pledgee is liable; but the pledgee may charge against his pledgor the amount so paid. The pledgee is entitled to be reimbursed for necessary expenses in keeping the pledge. The pledgee may assign his interest, and this he does by assigning both the debt secured and the pledge.

PLEDGEE'S RIGHT TO HYPOTHECATE PLEDGED STOCK.—Where a broker purchases stock for a customer who deals with him on margin (creating the relation of pledgor and pledgee), it seems that the broker has the right to hypothecate the stock, at least to the extent that the broker has advanced his own money in the purchase. He is not bound to keep on hand the identical stock purchased, but still he must have on hand or under his control at all times ready for delivery to his customer shares of the same description, and in amount sufficient to fill the customer's order. He has no right to pledge his customer's stock beyond this, and commits the wrong of conversion if he does; but if he does, and there is nothing on the certificate to warn the broker's pledgee that it is already pledged, this second pledgee takes it free from any claims of the customer, and need not surrender it to the owner (purchaser) except on payment of the debt of the broker for which it was the second time pledged. This is owing to the rule already discussed that one who clothes another with apparent ownership cannot dispute the title of a buyer or pledgee from such person in good faith for value and without notice. The right to use, sell, or rehypothecate the pledge may be given by a pledge agreement, and is a common clause in collateral notes.

REDELIVERY AND CONVERSION.—The pledgee must redeliver the identical thing pledged, with the increase and profits, upon tender of redemp-

tion by the pledgor, except that he need not deliver the identical certificates of stock. If the pledgee does not redeliver he is guilty of conversion, as he is at the time he makes an unwarranted use or disposal of the pledge. The rule as to measure of damage is generally the value at the date of conversion, without reference to the nature of the pledge. In New York State and in the United States courts, in the case of conversion of stocks, it is the highest value within a reasonable time after the pledgor becomes aware of the conversion; in other States it is the value at date of demand, or the highest intermediate value between date of conversion and the date of trial, or the value at date of conversion.

RIGHTS OF PLEDGEE AFTER DEFAULT. -The pledgee upon default in redemption at the agreed time by the pledgor, may sue the pledgor upon the debt for which the pledge was given as security, and may recover judgment without affecting his lien on the property pledged; the property pledged may then be applied on the amount of the debt as represented by the judgment. After default in redemption by the pledgor, the pledgee, on notice to the pledgor, and demand of performance, and on reasonable notice of the time and place of sale, may sell the property pledged at public sale. Demand of performance is waived by positive refusal to perform after performance is due, but the pledgor's right to notice of sale is not thereby waived. This right to sell applies to all property pledged except negotiable instruments; these the pledgee must hold and collect as they

become due and apply the proceeds to the debt, in the absence of a special power of sale. The reason is that negotiable paper would never bring its true value on a forced sale. The general power of the pledgee to sell may be modified or enlarged by the pledge agreement. Thus banks ordinarily require of their borrowers a note waiving notice of time and place of sale, and providing for private sale, and many other provisions. A sale at a recognized stock exchange has been held to be a sale at public auction, but the point has not been clearly settled. The pledgee, in the absence of agreement, has no right to buy at the sale. If the subject matter of the pledge can be divided the pledgee may sell only such part as will discharge the debt: otherwise he is liable for conversion of the part not necessary to be sold. The notice should be served or given to the pledgor in person, or to an authorized agent if the pledgor have one.

TERMINATION OF PLEDGE.—A pledge is not terminated by the death or bankruptcy of the pledgor, but at the termination of the pledge agreement the pledgor's representatives may make tender of the debt and demand the property, and in default of such tender the pledgee may sue the pledgor's representatives or sell upon notice to them. Payment terminates the pledge as does redelivery, tender or sale, and if the pledgee does not redeliver on a good and valid tender he converts the pledge and may be sued for the value of the property.

WAREHOUSEMEN AND WAREHOUSE RECEIPTS.—The law relating to warehousemen

and warehouse receipts is a branch of the law of bailments. A warehouseman is one engaged in the business of storing goods for others for compensation. He is a bailee for hire and is required by law to use reasonable skill and diligence, or "ordinary" care as it is technically termed, in respect to the property entrusted to him. Ordinary care is that degree of care which men of common prudence would exercise under similar circumstances with regard to their own property. A warehouseman is liable for ordinary negligence, or a want of reasonable care. He is not an insurer of the goods and is not responsible for their loss where he has exercised ordinary care. A warehouse receipt is a written acknowledgment by a warehouseman that he holds certain described goods in store for delivery to the person to whom the receipt is issued or to his order where the receipt is negotiable. The Uniform Warehouse Receipts Act, which is now the law in a majority of the States, codifies and makes uniform the law of warehouse receipts.

COMMON AND STATUTORY LAW.—At common law, independent of statute, warehouse receipts were assignable by delivery, or by endorsement and delivery, and their transfer passed to the assignee the title of the assignor to the property. The transfer of the warehouse receipt had the same effect as delivery of the goods themselves and vested in the assignee the constructive possession, but he took no better right or title than that possessed by the assignor. A valid transfer can be made by a mere delivery of the receipt with intent to pass title to the

goods, without endorsement, and statutes authorizing transfer of warehouse receipts by endorsement have been generally construed not to invalidate a transfer of title by mere delivery. But common law transfers, if they may be so called, did not give to the assignee any greater rights than the assignor possessed, and in a large number of States, prior to the enactment of the Warehouse Receipts Act, statutes were passed declaring warehouse receipts negotiable. These statutes, however, have been construed by the courts as not conferring upon warehouse receipts the full measure of negotiability which is possessed by bills of exchange or promissory notes. They gave to the holder to whom a receipt had been regularly transferred by endorsement, the effect of manual delivery of the goods represented; they served to dispense with notice to the warehouseman that the receipt had been transferred, which notice was generally otherwise necessary to protect the holder from delivery of the goods to the original bailor; and their effect was to transfer the title to a bona-fide purchaser free from any equities of prior parties not apparent on the face of the instrument. They did not, however, confer upon the transferee title to the goods as against one who had a superior title to the transferor, nor confer title where the receipt was innocently acquired from a thief or finder, as against the true owner. The Uniform Warehouse Receipts Act, which codifies and makes uniform the common and statute law, provides for two kinds of receipt, non-negotiable and negotiable. The non-negotiable receipt is one in which it

is stated that the goods received will be delivered to the depositor or to any other specified person. The negotiable receipt is one in which it is stated that the goods will be delivered to the bearer or to the order of any person named in such receipt.

Warehousemen and Warehouse Receipts

NON-NEGOTIABLE WAREHOUSE RE-CEIPTS.—A non-negotiable receipt is not, generally speaking, a document upon which the banker should advance value and receive in pledge. The transferee acquires as against the transferor, the title to the goods, subject to the terms of any agreement with the transferor, and he acquires the direct obligation of the warehouseman to hold possession of the goods for him according to the terms of the receipt. But prior to proper notification, the title of the transferee to the goods and the right to acquire the obligation of the warehouseman may be defeated by the levy of an attachment or execution upon the goods by a creditor of the transferee or by a notification to the warehouseman by the transferor or a subsequent purchaser from the transferee of a subsequent sale of the goods by the transferor. Furthermore, in case the goods are delivered by the warehouseman to the transferor prior to notification, the rights of the assignee or pledgee would be endangered, if not defeated, as the warehouseman would not be responsible, although the receipt was not produced and surrendered when the delivery was made. The banker, therefore, is not particularly concerned with the non-negotiable warehouse receipt except to let it alone and to have an ability to know whether a receipt is non-negotiable or negotiable.

NEGOTIABLE WAREHOUSE RECEIPTS. -Negotiable warehouse receipts are very extensively pledged to bankers as collateral for loans, but even under the Uniform Warehouse Receipts Act they do not possess the full measure of negotiability accorded by the law to bills of exchange and promissory notes. They are negotiable by endorsement and delivery, or by delivery alone if in form so permitting, in the same way as bills and notes, but although the receipt is in form capable of being negotiated by delivery, as by endorsement in blank, the bona-fide transferee for value from a thief or finder takes no title as against the true owner. This is one risk which the banker, as pledgee for value, incurs. If, however, a person entrusted with a negotiable receipt by the owner for a special purpose abuses his trust and makes a wrongful negotiation, the bona-fide transferee is protected as against the owner. The transferee of a negotiable receipt is also protected in his right to the goods as against a delivery by the warehouseman without taking up the receipt. The Warehouse Receipts Act requires, except in certain special cases, such as sale to satisfy warehouseman's lien or in case of perishable or hazardous goods, that where a warehouseman delivers goods represented by a negotiable receipt he must take up and cancel the receipt, or in case of partial delivery, make endorsement thereon, and failure to do this makes him liable to the holder for value of

the outstanding receipt, whether the same was acquired before or after such delivery, and such failure is also made a criminal offense. This provision applies only to negotiable receipts and without it such receipts would frequently be valueless as security. Goods represented by an outstanding negotiable receipt are, by the Warehouse Receipts Act, exempted from attachment or garnishment by a creditor of the depositor while in the possession of the warehouseman, unless the receipt is first surrendered or its negotiation enjoined. This is an important provision for the protection of the banker who takes the receipt as security for a loan.

WAREHOUSEMEN'S LIABILITY.-The Uniform Warehouse Receipts Act thus provides the rule of liability for contents of packages: "A warehouseman shall be liable to the holder of a receipt for damages caused by the non-existence of the goods or by the failure of the goods to correspond with the description thereof in the receipt at the time of its issue. If, however, the goods are described in a receipt merely by a statement of marks or labels upon them, or upon packages containing them, or by a statement that the goods are said to be goods of a certain kind, or that the packages containing the goods are said to contain goods of a certain kind, or by words of like purport, such statements, if true, shall not make liable the warehouseman issuing the receipt, although the goods are not of the kind which the marks or labels upon them indicate, or of the kind they were said to be by the depositor."

AGENTS OF WAREHOUSEMEN.-A further important question is whether a warehouseman, whose agent signs and issues a warehouse receipt for goods which have not in fact been received, is responsible to a transferee of the receipt for the goods stated to have been received. The rule of the common law which has had a more extensive application to cases of false bills of lading issued by agents of carriers, was that the principal was not bound, as the authority of the agent only extended to the issue of receipts where goods had been actually received, and a receipt issued for goods not in fact received was an act beyond the authority of the agent and not binding on the principal even in favor of a bona-fide holder of the receipt. A few States, among others New York and Pennsylvania, hold the principal liable for the act of his agent in such cases upon the theory of estoppel. The Uniform Warehouse Receipts Act in the provision last above quoted changes the common law rule. It provides that "a warehouseman shall be liable to the holder of a receipt for damages caused by the nonexistence of the goods * * * *" and this, coupled with a further provision of the Act that "the signature of the warehouseman may be made by his authorized agent" makes him responsible to a bona-fide holder of a warehouse receipt which acknowledges the receipt of goods not in fact received. The banker, therefore, who loans money upon a warehouse receipt falsely acknowledging the receipt of 300 tubs of butter, or any other commodity, can compel the warehouseman to make it good.

WARRANTIES OF GENUINENESS.-Where a receipt is negotiated or transferred for value, the Warehouse Receipts Act provides a warranty by the transferor of the receipt or of a claim secured thereby, of the genuineness of the receipt, that he has a legal right to negotiate or transfer it, and that he has no knowledge of any fact which would impair the validity or worth of the receipt. Also that he has a right to transfer title to the goods and that the goods are merchantable or fit for a particular purpose whenever such warranties would have been implied, if the contract of the parties had been to transfer without a receipt the goods represented thereby. This would enable a banker, who took as pledge for a loan a forged receipt or a stolen receipt or a receipt for goods not owned by the person who obtained the loan, to hold the borrower responsible upon his warranty. But the law exempts a pledgee of the receipt who receives payment of the debt for which the receipt is given as security, either from the drawee of a draft therefor or from any other person, from liability as warrantor of the genuineness of the receipt or of the quantity or quality of the goods therein described.

LIABILITY OF ENDORSERS.—Although a person who negotiates and sells a warehouse receipt to another, for value, warrants the genuineness of the receipt and the other matters above specified, he does not, by endorsing the receipt, incur the ordinary liabilities which attach to the endorser of a promissory note in case of default of the maker. The Warehouse Receipts Act provides that "the endorsement of a

receipt shall not make the endorser liable for any failure on the part of the warehouseman or previous endorsers of the receipt to fulfill their respective obligations." This is the law apart from the Warehouse Receipts Act and has been so ruled, even where State statutes have made warehouse receipts negotiable. The liability is analogous to that of an endorser "without recourse" of a promissory note. If the note is not paid, the endorser cannot be held, but if the note was a forgery or there was any defect of title, he would be liable as warrantor.

WAREHOUSEMEN'S LIENS. - The warehouseman has a lien on the goods for his charges, and statutes in many States have required that his lien be stated in the receipt, otherwise he cannot enforce such lien against the transferee for value of the receipt. It is obvious that negotiable receipts should show on their face what charges are claimed against the goods. The Uniform Warehouse Receipts Act requires that every receipt must embody "a statement of the amount of advances made and of liabilities incurred for which the warehouseman claims a lien. If the precise amount of such advances made or of such liabilities incurred is, at the time of the issue of the receipt, unknown to the warehouseman or to his agent who issues it, a statement of the fact that advances have been made or liabilities incurred and the purpose thereof is sufficient."

EXTENSIVE USE OF WAREHOUSE RE-CEIPTS.—A bona fide purchaser of a warehouse rereceipt is one who has taken the receipt for value with-

out notice of defect in the title of the transferor. A pledgee who takes a warehouse receipt as security for a loan is a purchaser for value, and he acquires the pledgor's title to the property, so far as necessary to effect the object of the pledge. By means of the Negotiable Warehouse receipt, owners of millions of dollars of stored goods are enabled, through pledge of the receipt, to obtain needed loans and advances upon the security thereof, and tide themselves over periods when the goods are not readily salable. The warehouse receipt is in many respects analogous to the bill of lading; one represents goods in store, the other goods in transit. Both are now used to an enormous extent as instruments of credit, and loans and advances which run into the billions of dollars are annually made upon faith thereof.

Carriers and Bills of Lading

COMMON CARRIERS.—The transportation of merchandise by water and by land, from one point to another at shorter or longer distances, is a business of vast extent in our modern commerce. The person or corporation who conducts this business is termed a carrier. Carriers are of two classes, private carriers and public or common carriers. A private carrier is one who undertakes isolated cases of transportation and whose usual vocation is different. He is a bailee of the goods entrusted to him and, like other bailees, is bound to use ordinary care where he carries for hire and a less degree of care if the carriage is gratuitous. A common carrier is one whose regular calling

is to transport, for hire, goods and chattels for all who may choose to employ and remunerate him. The common carrier differs from an ordinary bailee in two important particulars, (1) he is bound, according to his facilities, to transport all goods which are offered to him when coupled with proper remuneration, (2) his common law liability is exceptional. He is responsible for the goods, where lost or damaged, as an insurer, except where the loss is caused by act of God or public enemy.

BILLS OF LADING .- A bill of lading is a written acknowledgment by the carrier of the receipt of the described goods, and an agreement, for a consideration, to transport and deliver the same at a specified place to the consignee or person designated therein. The bill of lading must be signed by the carrier, but it has been quite generally held, with some few exceptions, that it need not be signed by the shipper, and that the acceptance of the bill by the shipper binds him to the terms of the contract. The Uniform Bill of Lading Act provides for the signature of the shipper, but the shipper does not always sign, and without his signature its acceptance by him completes the contract and binds both parties to its terms. lading now in common use are of two kinds, the Straight bill of lading and the Order bill of lading. The Straight bill of lading is an acknowledgment of the receipt of goods and an agreement to carry and deliver to a named consignee at destination. When this agreement is fulfilled by the carrier its contract is performed. The Straight bill contains no contract

of the carrier that he will require surrender of the bill before delivery of the goods. The Order bill of lading is a like receipt, but the contract is to carry and deliver to the order of a specified person, generally the shipper, and it contains an express agreement that the surrender of the bill, properly endorsed, shall be required by the carrier before delivery of the property. In the forms approved and recommended by the Interstate Commerce Commission and generally used by carriers, the Straight and Order forms of bill are identical, including certain conditions on the back, except that the Straight bill omits the following matters contained in the Order bill: (1) the surrender clause, (2) the inspection clause, (3) the words "order of" and (4) the word "notify," indicating the person to be notified of the arrival of the goods.

NEGOTIATION OF ORDER BILLS.—The Uniform Bills of Lading Act, which has been enacted in a number of the most progressive States of the Union, and is a companion act to the Warehouse Receipts Act, makes a distinction between Straight or non-negotiable and Order or negotiable bills of lading and provides that "a negotiable bill may be negotiated by any person in possession of the same, however such possession may have been acquired, if by the terms of the bill the carrier undertakes to deliver the goods to the order of such person, or if at the time of negotiation the bill is in such form that it may be negotiated by delivery." The Uniform Bills of Lading Act, in modified form, has also been passed by Congress. It applies to bills of lading issued in

interstate and foreign commerce. Among its provisions is the one just quoted relating to negotiation of Order bills. This provision gives a greater degree of negotiability than heretofore to Order bills of lading, because under it the bona fide purchaser can acquire good title from a thief or finder, if endorsed in blank so as to be capable of negotiation by delivery. Order bills of lading, however, are not in all respects on the same footing as Straight bills of lading, for, as in the case of warehouse receipts, there is no liability of the carrier as insurer of the contents of packages where he has described such contents merely by a statement of the marks and labels upon them, and there is no liability of an endorser, as in the case of promissory notes, for default of the maker or prior endorsers. The banker who loans money or makes advances to one who assigns the bill of lading as security is chiefly concerned with the Order bill of lading. The Straight bill of lading affords him no security, for there is no obligation of the carrier to hold possession of the goods for the holder of the bill, and their delivery to the consignee before notice of the assignment of the bill of lading would protect the carrier. The only bill of lading, therefore, which should be considered as security by the banker is the Order bill, and even the taking of this bill as collateral is sometimes attended with certain risks.

FALSE BILLS.—Heretofore a serious risk to the purchaser or pledgee of an Order bill of lading has arisen from the issue by the agent of the carrier of a bill of lading acknowledging the receipt of goods not

in fact received. This might be done (1) mistakenly, (2) fraudulently, as by collusion where there are no goods, (3) as a matter of accommodation to the shipper, to furnish him in advance with the means of obtaining credit and in the expectation that the goods for which the bill has been prematurely issued will be ultimately delivered to the carrier for transportation. By the rule of the common law which, before the enactment by Congress of the modified Uniform Bills of Lading Act, entitled "an act relating to bills of lading in interstate and foreign commerce," was recognized and applied by the Federal courts and by many State courts, the carrier was not liable to a bona fide transferee or pledgee of the bill in such case. The authority of the agent to sign and issue bills of lading was held to exist only where he had already received the goods and not to exist in the absence of such receipt. Where he signed and issued a bill, therefore, which acknowledged the receipt of goods not in fact received, it was his own act and not the act of the carrier, and the latter was not bound to a transferee for value of the bill. In some few States the courts have refused to apply this rule, and have held the carrier liable on the ground that by holding his agent out to the public as authorized to issue bills of lading he has clothed him with an apparent authority in such cases which the carrier is estopped to deny. In some dozen or more States, special statutes have also been enacted making the carrier liable, and such liability is also provided by the Uniform Bills of Lading Act, wherein the issue or negotiation of bills

without goods is also made a criminal offense. The enactment by Congress of the Bills of Lading Act above referred to, provides such liability in cases of interstate and foreign shipments, and overturns the rule of non-liability applied by the Federal courts. The operation of such rule is now limited to intrastate shipments in a few States only, where the Uniform Bills of Lading Act has not been passed. The establishment of a liability of the carrier for the truth of the statements in the bill of lading is of vital importance, for otherwise, wherever money is loaned upon a bill of lading acknowledging the receipt of 100 bales of cotton, or two carloads of shingles or 500 sacks of potatoes, and no cotton, shingles or potatoes are behind the bill, the money is lost, for in such cases the shipper is generally irresponsible. The act of Congress also makes it a criminal offense to negotiate or transfer for value "a bill which contains a false statement as to the receipt of the goods."

SPENT BILLS.—Another but less serious risk, owing to its lesser frequency, grows out of the rule applied by some State courts, though not recognized in others, that where the goods represented by an Order bill have been delivered to a person holding the bill and rightfully entitled thereto, but without requiring surrender of the bill, the contract of the carrier has been performed, the functions of the bill have ceased and it becomes a spent or dead bill. Where this rule is applied, should the holder of the unsurrendered bill, after receiving the goods, fraudulently negotiate the bill, the holder would acquire no enforce-

able rights, and herein lies the risk. The Uniform Bills of Lading Act provides a liability of the carrier to the holder for value to whom a spent bill has been negotiated, and a similar liability is provided by act of Congress. The negotiation of spent bills is also made criminal by the State Uniform Bills of Lading Act.

ALTERED BILLS.—At common law, a material alteration of a contract without consent of the person obligated, destroyed it, and the holder of such altered contract had no enforceable rights therein. Both by one of the conditions of the Uniform Bills of Lading and by provision of the Uniform Act, an altered contract is now enforceable for its original tenor and not destroyed completely. The act of Congress also provides "that any alteration, addition or erasure in a bill after its issue without authority from the carrier issuing the same, either in writing or noted on the bill, shall be void, whatever be the nature and purpose of the change, and the bill shall be enforceable according to its original tenor." The risk from acquiring altered bills has therefore been lessened, although there is still danger of loss in the case of raised bills, as where a bill acknowledging receipt of 10 boxes is fraudulently raised to 100.

GOODS NOT OWNED BY SHIPPER.—Another, though infrequent, risk attendant upon the giving of value upon the faith of an Order bill of lading arises in the case where the shipper is not owner of the goods shipped and is wrongfully in possession of them. He delivers the goods to the carrier

and receives an Order bill of lading therefor, upon which he obtains an advance. The holder of the bill as security would, in this case, have no right to the goods as against the true owner.

GOODS LOST OR DAMAGED IN TRANSIT.

—Where goods are lost or damaged in transit through a cause for which the carrier is exempted from responsibility by virtue of the conditions in the bill of lading, of course there is an impairment or loss of the security, as represented by the bill of lading, unless there is coupled with the bill of lading an insurance contract against such loss. But in this particular case the risk is not as great as might first appear, because the shipper or owner of the goods to whom the advance has been made upon security of the bill of lading, is generally a responsible person who is liable for and will be able to pay the money loaned, although the security for such loan has been destroyed. It is only in cases where insolvency or irresponsibility of the shipper or debtor is concurrent with loss of the goods from a cause for which the carrier is not responsible that the holder of the security will suffer.

ATTACHMENT OF GOODS REPRESENT-ED BY BILLS OF LADING.—Numerous cases have arisen in many of the State courts where goods represented by an Order bill of lading outstanding in the hands of a banker as pledgee for value have been attached while in the possession of the carrier by a creditor of the shipper. Lower courts in many of these cases have failed to recognize the rights of the banker holding the bill, and have sustained the attach-

ment; but almost invariably the higher courts of the different States have upheld his rights, as pledgee for value of the bill, as against the attaching creditor. In some cases where the banker has been proved to be only a collecting agent of the shipper, and not to have advanced value for or given credit for the draft to which the bill of lading is attached, the attachments have been held valid; but wherever the banker has taken title to the draft with the bill of lading as security therefor, whether the full value has been actually paid out to the shipper or only credited to him in his bank account, the superior rights of the banker as pledgee of the bill have been upheld. The Uniform Bills of Lading Act provides an exemption from attachment of goods represented by an outstanding negotiable or Order bill of lading as follows: "If goods are delivered to a carrier by the owner, or by a person whose act in conveying the title to them to a purchaser for value in good faith would bind the owner, and a negotiable bill is issued for them, they can not thereafter, while in the possession of the carrier, be attached by garnishment or otherwise, or be levied upon under an execution, unless the bill be first surrendered to the carrier or its negotiation enjoined. The carrier shall in no such case be compelled to deliver the actual possession of the goods until the bill is surrendered to him or impounded by the court." The same language is contained in the act of Congress as appears in this section of the Uniform Bills of Lading Act, except that the bill is termed an "order" instead of a "negotiable" bill.

NON-LIABILITY OF PLEDGEE AS WAR-RANTOR.—In 1898 a court in Texas held that a bank which had purchased a draft secured by bill of lading for wheat and collected the amount of the draft from the drawee, surrendering to him the bill of lading, was liable to the drawee for the amount collected where it turned out that the wheat was musty and of an inferior quality than that contracted for. The theory of the court was that the bank was not only a purchaser of the draft, but also a purchaser and seller of the wheat to the drawee and an implied warrantor of the security. This doctrine was soon afterwards followed by the Supreme Courts of North Carolina, Alabama and Mississippi, but was subsequently overturned in later cases in three of the four States named, leaving the State of Mississippi as the only one whose courts still adhere to this doctrine. The contrary doctrine, that the bank purchasing a draft and taking an assignment of the bill of lading in pledge by way of security does not warrant the genuineness of the bill or the quantity, quality or condition of the goods, has been declared by the Supreme Court of the United States and by a large number of State courts, and is now expressly provided by the Uniform Bills of Lading Act, which, however, provides the same warranties by seller to purchaser as in the case of transfer of warehouse receipts. Similar provisions are contained in the act of Congress.

SHIPPER'S LOAD AND COUNT.—In cases where the goods represented by bills of lading are loaded and counted by the shipper—and this is fre-

quently the case where large factories are located on spurs and sidings away from the main track and away from the railroad freight depot-the practice is for the carrier to stamp on such bills the words "shipper's load and count," which indicate that the shipper has loaded and counted the contents of a particular car or shipment, and that the carrier is not responsible for the correctness thereof. Obviously such bills, although they may be Order bills, are not a safe basis of collateral, for the integrity of the bill as to value of the shipment rests entirely on the honesty of the shipper, and the carrier is not responsible. The act of Congress prohibits the insertion of words of this character when goods are loaded by the carrier, and also in certain cases where loaded by the shipper; that is to say, where the shipper of bulk freight maintains adequate facilities for weighing such freight, which are available to the carrier, and makes written request of, and gives reasonable opportunity to, the carrier to ascertain the kind and quantity of bulk freight, the carrier must do so within reasonable time, and is prohibited from inserting in the bill "shipper's weight" or words of like purport.

WORD "NOTIFY" ON ORDER BILLS.—It is sometimes assumed that the word "notify" on an Order bill of lading carries notice that the person to be notified has some right or equity in the goods which might be asserted as against a pledgee for value, and that it is therefore unsafe to advance value upon such a bill. This is an erroneous assumption.

The original form of bill of lading was the Straight bill. But as under this bill the carrier could deliver the goods to the consignee without taking up the bill, the shipper had no means of retaining the goods as security until he received payment of the purchase price. The practice, therefore, became common of issuing bills to order of the shipper, under which the carrier was required to hold the goods and make delivery only to the holder of and upon surrender of the Order bill. The shipper would attach his bill to a draft and forward it for collection and upon payment of the draft by the purchaser of the goods, the bill would be delivered to him and enable him to obtain the goods from the carrier. The word "notify" on such bills simply indicates a request to the carrier that upon arrival of the goods he will notify the person for whom they are intended that he may, by paying the draft and obtaining possession of and surrendering the bill of lading, receive delivery of the goods. In addition to sending the draft and Order bill for collection, the practice is now common for the shipper to obtain an advance on the documents from his local banker, who, as owner of the draft with the bill of lading attached as security, has the collection made for his own account. The Uniform Bills of Lading Act clears up all doubt as to the effect of the word "notify" in an Order bill by providing that "the insertion in a negotiable bill of the name of a person to be notified of the arrival of the goods shall not limit the negotiability of the bill or constitute notice to a purchaser thereof of any rights or equities of such person in the goods." The same provision is in the act of Congress.

SURRENDER OF BILLS OF LADING TO DRAWEES.-Considerable doubt has arisen in the past in the minds of bankers holding drafts with bills of lading for collection, and some litigation has resulted, concerning the duty of the collecting bank to surrender the bill of lading to the drawee upon acceptance of the draft or his obligation to hold the security until the draft is actually paid. The following provisions of the Uniform Bills of Lading Act thus regulate the subject in accordance with the weight of authority: Where the seller of goods draws on the buyer for the price of the goods and transmits the draft and a bill of lading for the goods either directly to the buyer or through a bank or other agency, unless a different intention on the part of the seller appears. the buyer and all other parties interested shall be justified in assuming: (a) If the draft is by its terms or legal effect payable on demand or presentation or at sight, or not more than three days thereafter (whether such three days be termed days of grace or not), that the seller intended to require payment of the draft before the buyer should be entitled to receive or retain the bill. (b) If the draft is by its terms payable on time, extending beyond three days after demand, presentation or sight (whether such three days be termed days of grace or not), that the seller intended to require acceptance, but not payment of the draft before the buyer should be entitled to receive or retain the bill. The provisions of this section are applicable

whether by the terms of the bill the goods are consigned to the seller, or to his order, or to the buyer, or to his order, or to a third person, or to his order. These provisions, however, are not contained in the Act of Congress.

CHAPTER VIII

Agricultural Loans

GRICULTURAL loans are not essentially different from industrial loans. Both are made to assist in producing material for market although farm products are, for the most part, not ready for consumption when they leave the grower's hands, but form the basis for industrial operations that make them usable. Farming with live stock raising is the characteristic occupation of this country, and this is recognized by the Nation and the various States in the creation of agricultural departments in their plans of administration, by the establishment of agricultural colleges, and by various special enterprises intended to promote better farming. The Federal Reserve Act and rulings of the Federal Reserve Board wisely contain provisions granting special privileges to agricultural and live stock paper. Few things marketed from the farm can be produced in ninety days, which is the maximum maturity for other paper eligible for purchase by Federal Reserve Agricultural and live stock paper having more than three but less than six months to run, however, may be received for discount by Federal Reserve banks to an amount to be fixed from time to time for each Federal Reserve bank by the Federal Reserve Board. The marketing of staples such as cotton and wheat is a difficult problem. The time they are ready

for sale cannot be controlled and distributed throughout the year, as in the case of manufactured articles, but is regulated by seasons and weather conditions; and, with moderate variation, each crop is ready in all sections at about the same time. Transportation facilities are inadequate to move such vast quantities immediately, storage room can not be provided at the various mills which will consume it, and prices would of course be demoralized if the entire crop were thrown on the market at one time. Thus much of these staples remains in the hands of producers for a time, and is sold gradually. When properly stored and otherwise complying with regulations, such goods may be used as security for "commodity paper," which is eligible for discount by Federal Reserve banks at favorable rates.

GRAIN ELEVATORS AND WAREHOUSES.

—"Grain elevator" is a term applied to a storage warehouse for grain. Elevators are either owned by grain producers, by jobbers, by warehouse companies, or by railroad carriers. Some elevators are privately owned and used by the owner for storing the grain purchased by him. Others are operated as public warehouses. Usually the grain of various owners is placed in the same bin, care being taken that all of the grain deposited in a particular bin is of the same grade and quality. Where grain is thus placed in elevators, the identity of individual lots is lost. Special arrangements may be made in the case of public elevators for the preservation of identity, but higher storage rates must be paid under those circumstances.

Country elevators, relatively small in capacity, are to be found all over the grain-producing sections of the country. They serve the purpose of locally concentrating the crop raised in each small district, before the same is shipped to one of the central markets. Each farmer hauls his grain to the nearest elevator, where it is conveniently weighed and then dumped into the elevator. The owners of these country elevators usually purchase for cash the grain delivered by the farmers, and they in turn sell the accumulated supply to dealers located in the larger centres. There are four principal classes of country grain elevators: first those operated by "line companies"; second, those owned by local grain dealers; third, those operated by farmers' co-operative associations or companies, and fourth, those run by mill owners and malting concerns. "Line companies" are corporations which own and operate a chain of elevators along one or more railroad routes, and which have headquarters in primary markets, to which shipments are made of the grain bought and collected from farmers.

MARKETING GRAIN.—Owners of country elevators pay the farmer for his grain as soon as it is weighed and deposited. Owners of local country elevators, whether they be small dealers or line companies, obtain financial assistance by borrowing money from banks on shipping documents covering the grain sent to primary markets. Money is also borrowed on grain stored in the elevators, insurance certificates being required. The grain which is not consumed locally finds its way, sooner or later, to one

of the primary markets, which are large distributing centres for domestic and export trade in wheat, corn, oats and barley. The sixteen leading primary grain markets are Chicago, Minneapolis, Kansas City, St. Louis, Duluth, Milwaukee, Omaha, Peoria, Louisville, Cincinnati, Indianapolis, Toledo, Cleveland, Detroit, Wichita and Little Rock. Not only are large supplies of grain concentrated at these primary markets, but facilities are afforded in these cities for cleaning, mixing, weighing, grading and storing the grain gathered from the numerous local markets. There are grain exchanges in these centres, and many milling and malting establishments are located there. The elevator warehouse facilities are naturally larger than those found in the smaller cities, and usually these warehouses are subject to inspection and supervision by State authorities, or by the exchange authorities, or by both. Elevators located in the primary markets are equipped with machinery for loading and unloading grain on and from water and rail carriers. Some of these elevators are "floating" warehouses and may be moved close to ships bringing in grain. They are also equipped with hoppers, cleaning machines, dryers, blowers and scouring plants. The leading seaboard markets are New York, Baltimore, Philadelphia, Boston, New Orleans, San Francisco, Puget Sound points, and Portland, Ore. Grain is also exported by lake through the Welland Canal and through the St. Lawrence river from Chicago, Duluth, Detroit and other ports situated on the Great Lakes.

STATE AND FEDERAL REGULATION.-Some of the States have laws governing the operation of public grain elevator warehouses. Many of the laws specifically prohibit discrimination in charges and services and require licensing and bonding of warehouse proprietors. Provisions are also made for the issuance of reports showing the amount of grain stored, and in some cases it is required that the grain should be graded and weighed and certificates issued by State grain inspectors. The warehousemen are authorized to issue negotiable receipts upon which must be stated the quantity and grade of the grain stored. Public elevators in Chicago, for instance, are also required to register all receipts issued. Under the Federal Grain Standards Act, passed in August, 1916, the Secretary of Agriculture was vested with authority to prepare standards of various grades of grain that may be traded in. The law also authorizes Government supervision of the work of State inspectors and inspectors engaged by grain exchanges.

GRAIN EXCHANGES.—The grain exchanges operate inspection departments or bureaus, the function of which is to inspect the grain stored in the terminal elevators. All the grain which is received in Chicago or New York is inspected and certificates are issued. Exchanges usually publish a list of approved elevators. The inspection by the exchanges prevents the delivery of unmerchantable grain or of grain of a quality inferior to the one called for. The exchanges establish the grades, regulate the mixing, and weigh all the grain received. Small fees are charged

for the inspection. Canadian grain received "in bond" for trans-shipment to foreign ports is not inspected, but is only weighed. Members of the grain exchanges transact business both in "spots" and in "futures." The relative prices at the different markets are largely influenced by the cost of transporting the grain, but also by other factors, such as the local supply and demand, the world's supply and demand, and other considerations governing price fluctuations in commodities. Dealers in grain, and the millers who produce flour, utilize the machinery of the exchange for "hedging" purposes—just as cotton merchants and spinners use the cotton exchanges to protect themselves against price movements.

GRAIN LOANS.—Grain stored on the farm may be covered by a mortgage and thus form the basis for a loan by a country bank. The farmer sells his grain for cash to a local buyer. The buyer usually owns or leases a grain elevator, which he fills as the farmers haul in their products. He may have sufficient capital to carry on his business, but as a rule borrows some money from his local bank. The loan may be made on his general assets or secured in some way, but as the grain he buys is not in a public warehouse and is constantly coming in and going out, it is not the most desirable class of collateral. He will ship out about as rapidly as possible, using the capacity of his elevator to take up the slack between receipts from the farmers' wagons and shipments as freight cars are furnished, for transportation, by the railroads.

SALES MADE BY GRAIN BUYERS.—The buyer will sell mostly to grain dealers in the nearest grain center. Sales will be made on contract or on consignment. If on contract, the buyer agrees to furnish a given quantity of grain of a certain kind and quality at a certain price and within a certain time. If on consignment, the buyer sends the cars to grain dealers who sell to the best advantage on the open market, and account for the proceeds to the local buyer, less the commission. In either case the grain dealer finances the local buyer during the time the grain is in transit from the country elevator to the city. Assuming that he is satisfied as to the buyer's character and financial responsibility, the grain dealer will authorize him to draw a sight draft on him, with shipper's order bill of lading attached, for nearly the full value of the car of grain. The buyer deposits the sight draft in his local bank, which may or may not charge him something for making the proceeds immediately available, and thus enabling him to pay for more grain. The draft will be presented to the grain dealer in the city one day or several days before the car of grain arrives by freight. On the evidence of the attached bill of lading, the grain dealer pays the draft on presentation, and when the car arrives adjusts with the buyer any difference between its net value and the amount of the draft.

CREDIT GRANTED BY BANKS.—It is evident that a grain dealer doing a large business will soon have a considerable sum of money advanced on cars in transit. He will probably arrange with his

bank for a loan up to a certain amount on his unsecured note, called his "open line," and for a certain additional amount to be secured by bills of lading or warehouse receipts. Order bills of lading are receipts from railroads or other common carriers covering given quantities of certain goods to be transported and delivered only on the order of the shipper. The country buyer endorses the bills of lading before attaching them to these drafts. While lacking some qualities which would make them perfect negotiable instruments, the order bills of lading are so regarded in practice, and are readily accepted as collateral to loans to grain dealers. Such loans are nearly always made payable on demand, as the total amount being used by the borrower varies from day to day. Substitutions of collateral are made daily also, as some cars arrive and the bills of lading are taken out, and others given the bank on new cars in transit. It is not uncommon for a bank to deliver to the borrower on his trust receipt collateral of this kind for which he will return substitutes later in the day.

WAREHOUSE RECEIPTS AS COLLAT-ERAL.—The grain dealer may sell the grain he receives to mills or other dealers locally, in which case he receives immediate payment. Or he may sell to mills or dealers in some other city, in which case he will draw sight draft with bill of lading attached, much as the country buyer did in shipping to him. If public warehouse facilities permit, some dealers and mills will store grain for future sale or use. While theoretically warehouse receipts cover particular grain in certain bins or tanks, it is necessary to move wheat frequently to prevent spoilage, and thus different lots of wheat in some places become mixed with other lots of the same grade. Where delivery of grain in Exchanges or Boards of Trade is made by means of warehouse (elevator) receipts, it is customary to require that bond be furnished to the Board of Trade by elevator operators and that weighers for the Board check all grain in and out, on whose reports receipts issued by the elevator are registered by the secretary of the Board. Elevators so bonded and controlled are called "regular." Warehouse receipts accompanied by insurance policies are thus good collateral. Banks loan on them freely with margins of, say, ten to twenty per cent. Loans on elevator receipts are more likely to be time loans, and are frequently sold through brokers or to banks in other cities who are seeking investments. This is particularly true when the local banks are carrying full lines for the borrower or are loaned up closely. As substitution of collateral is often desired, it is a common arrangement for the local bank to hold the collateral on notes sold elsewhere, issuing collateral trust certificates to accompany properly identified notes. These certificates show that the local bank holds collateral of estimated value sufficient to cover the loan and is authorized to exchange same to the borrower for others of equal value. Notes of good firms so secured are good investments. Loans on grain stored in public warehouses are classed by Federal Reserve banks as "Commodity Paper" and given a preferential discount rate.

Cotton Loans

COTTON RAISERS.—Cotton is raised in the South either by the home-owner, to whom the plantation belongs, or by the tenant farmer, who rents the cotton field from the land-owner. The payment of money rent is sometimes, but not generally, practiced, and the tenant farmer usually arranges to pay his landlord on a percentage basis of the crop. The two main methods are (1) the landlord and tenant agree that the proceeds of the crop shall be divided evenly, the land-owner furnishing the land, houses, horses, feed and the tools, and the tenant supplying the labor; (2) the landlord agrees to furnish only the land, in which case the terms provide that the tenant shall pay over to the landlord only one-quarter of the net proceeds of the crop. The Southern States have stringent lien laws which protect the landlords. Arrangements for renting cotton farm land are usually perfected before Christmas, and the tenant assumes occupancy on the first of the year. Besides the land, he is given possession of a small house, fitted with a stove, a barn and pasturage. A tenant farmer is supposed to have the necessary implements and live stock.

MONEY NEEDS FOR PLOWING.—Having possession of the land, the tenant farmer begins plowing. Whatever little money he may have saved up from the previous year's cotton crop is soon spent for food, and the farmer is soon obliged to buy on credit. He opens an account with a local supply house. The

store may give him an open credit, or it may require the farmer to give his note, payable in the fall. In certain cases the store insists that the notes be secured by a chattel mortgage on the farmer's implements. Frequently the farmer, in order to obtain credit from the supply house, is obliged to mortgage his interest in the growing crop. Sometimes he goes to his bank and obtains credit by executing such a mortgage. The money borrowed from the bank he uses to buy for cash instead of opening credit at the supply house. The owner of the supply store in the South, having received little cash from his customers, is obliged to buy his goods also on credit. The usual practice is for him to either discount his note at the bank, depositing as collateral a bundle of notes he had received from his tenant-farmer customers, or else to present his own note to the wholesaler with the bundle of customers' notes.

PLANTING AND PICKING.—The planting of cotton begins either in the latter part of March or early in April. The plant begins to grow in May or June, and then it is time to begin "chopping," that is, to cut out the surplus growth, reducing the sprouted stalks to a "stand," remove the weeds and clean up the soil. To do this work the farmer will hire labor, but in most cases he and his family will do their own "chopping." After the "chopping" and until picking time the farmer devotes his efforts to cultivating the field, and this process keeps him busy during the months of July and August. In Texas, cotton picking begins in the middle of July, but in other parts of

the cotton belt the picking season does not start until about the first of September. Men, women and children, many of them colored, are employed in picking cotton. They are mostly piece-workers, few being paid on a weekly wage basis. The cotton farmer, having waited many months for the fruits of his labor, uses all haste to rush his first bale to market in order to get cash for it. The rush to market of first bales invariably creates a currency strain, because the small country banks are suddenly called upon to pay out a large sum of money in cash. The farmer needs the money to pay his laborers.

GINNING OF COTTON.—Cotton, as it is picked, is hauled in loose shape by the farmer to the gin, where the lint is separated from the seed. In some cases the owner of the gin retains part of the ginned cotton as compensation for his services, but in other cases the ginner is paid in cash, so much per hundred pounds. After ginning, the cotton is put through the press, from which it comes out in neatly packed and strapped bales.

MARKETING COTTON.—After the cotton is packed in bales the farmer takes it to market, where he disposes of it to "cotton factors," or to "cotton buyers." Cotton factors act as selling agents for the farmer. Sometimes they sell the cotton immediately, sometimes they hold it, and sometimes they ship it to a central market, where better opportunities are presented for disposing of the staple at advantageous prices. These cotton factors charge the farmer for storage, for transportation, for insurance, and a com-

mission for their services. In recent years the cotton factorage business has become proportionately less important than heretofore. Cotton buyers are representatives of cotton merchants and cotton exporters whose principal offices are located in the larger cities in the South or in New York. Cotton buyers are stationed in small towns throughout the South where it is convenient for the farmers to bring their cotton. The farmer hauls his few bales to a local market where he meets the buyer. The latter inspects the cotton by cutting into the bale to draw samples, and then quotes the price he is willing to pay. The farmer, if dissatisfied with the offer, may submit his cotton to sampling by another buyer who may make a more attractive offer.

COTTON TICKETS.—If buyer and seller agree upon a price the farmer is handed a ticket upon which the purchaser marks the price per pound that is to be paid. The farmer takes his cotton to a designated weigher, who marks on the ticket the weight of each bale. The cotton buyer does not always give the farmer a check for the cotton, but often expects him to take the "ticket" to the bank after it is properly filled out by the weigher. When the farmer presents the ticket to the local bank, the bank figures out the money due him, country banks being equipped with cotton tables which facilitate calculating the value of each bale. The farmer is usually paid in cash, but sometimes he is advised to permit the bank to credit the proceeds of the sale of the cotton to his account in that institution.

BANK ADVANCES TO COTTON BUYERS.

—The cotton buyer arranges with his bank that it should pay upon presentation of the tickets, but at the same time the cotton buyer usually does not have the necessary funds to his credit in the bank, and consequently the bank is called upon to make advances. The bank either permits the cotton buyer to overdraw his account during the day and give a note for same at the close of day-retaining the cotton tickets as security,—or else the cotton buyer is called upon to give a draft on the cotton merchant or exporter, whose agent he is. These cotton tickets are tantamount to certificates of ownership, and cotton cannot be moved without presentation of the tickets. The financial strain in the South resulting from the production of the cotton crop begins about June 1st in Texas and reaches its height about August 1st. The seasonal demand for money invariably necessitates borrowing by Southern banks from their correspondents in the East. In view of the fact that during the cotton picking season producers are in need of cash to pay their help, Southern banks not only require bank credits but they are obliged to call upon their central reserve city correspondent to ship them currency.

COLLATERAL FOR BANK LOANS.—The country banks borrowing in New York for crop purposes usually forward to their correspondents collateral in the form of notes, drafts and chattel mortgages which have been received from merchants and farmers. The Southern bank usually executes its note and sends the collateral in a large bundle. The New

York bank examines the same, but hardly ever has occasion to touch it, inasmuch as the Southern bank is always ready to take up its note at maturity. In the event that it is not in position to do so, the New York institution will agree to a renewal of the note for another month or two. Money borrowed by Southern banks in August and September is usually paid by the end of November.

LOANS ON COTTON IN WAREHOUSES .--While the cotton buyers purchase cotton from the farmers as soon as the cotton is ginned and baled, they are not in a position to dispose of the staple until they accumulate a substantial shipment. Consequently, pending the delivery of cotton to American mills and to foreign spinners, the cotton merchant (for whom the buyer has been acting) is obliged to place his cotton in storage in warehouses, cotton yards and on compress platforms. Requiring funds to carry the same, or to buy more cotton, the merchant obtains a loan from his bank, secured by a warehouse receipt. Bankers who are asked to advance money on warehouse receipts for cotton do not only take into consideration the character and responsibility of the borrower, but they examine into the safety of the warehouse and the financial standing of the warehouseman. Warehouses, in issuing receipts, usually inspect the cotton, weigh the bales and furnish a receipt describing the quantity and quality of the cotton placed in their care. Congress passed a bill in August, 1916, which provides for the Federal licensing and supervision of warehouses where agricultural products, such as cotton and grain, are stored. It is believed that banks will now be willing to advance money on warehouse receipts more freely than they have been in the past.

ASSISTANCE OF FEDERAL RESERVE BANKS.—Notes and drafts secured by approved warehouse receipts for cotton are rediscountable at the Federal Reserve banks. A special rate for this character of paper, lower than the trade acceptance rate for the same maturity, has been established by the Reserve banks in the South with the approval of the Federal Reserve Board. This special "commodity rate" applies to paper not having more than 90 days to run. The assistance rendered by the Reserve banks has made it possible for banks in the South to charge lower rates to customers who elect to carry cotton in warehouses pending the receipt of orders for the same, or in the hope of obtaining higher prices for the staple at a later date. By being able to rediscount paper secured by warehouse receipts, the banks have been placed in a position where they have a larger supply of funds available to borrowers. In recent years it has been customary for the Secretary of the Treasury to make deposits of Government funds with Southern banks during the crop-moving seasons. This has had the effect of instilling confidence in growers and merchants, and has helped in preventing or abating money stringencies. Since December 31, 1915, instead of depositing Government funds with National banks, the Secretary of the Treasury has made deposits in Federal Reserve banks in the South.

COTTON MERCHANTS AND EXPORT-ERS.—Concerns which buy cotton from farmers and factors are known as "spot houses." They deal in all grades of cotton and sell to domestic as well as foreign spinners. Many of these houses maintain offices or headquarters in New York and some operate from New Orleans, Dallas, Galveston, Memphis and other cities in the South. The price offered the farmer by the buyer who examines the cotton largely depends upon the quality of the cotton. The merchant or exporter is very much concerned with the grade and length of cotton, for the reason that spinners, in making purchases, usually specify in detail the character of cotton they require. One grade may be available for one mill and be practically of no value to another.

CLASSIFYING COTTON. — The work of grading or classifying cotton is a specialty. Experts are not common. In many instances a single bale of cotton will contain several grades, but as a rule some one particular grade is found in preponderance. Moreover, cotton varies according to the place of production, and it is the function of the spot dealer to be familiar with all grades and markets, and to be able to supply the exact grade required by particular customers. When a spot house receives an order for 100 or 1,000 bales of a particular grade, it must gather the necessary quantity together from all parts of the South if it finds that it has not the required cotton in its store or warehouse.

FINANCING EXPORTS OF COTTON.—When the cotton exporter in the South receives an

order to ship 1,000 bales to Liverpool at a fixed price, he delivers the cotton to a railroad or to an ocean carrier, if he happens to be located at a seaport, and secures a through bill of lading. The price determined upon is usually what is known as "C. I. F. & 6%," i. e., cost, insurance and freight, and 6 per cent for tare deducted. The shipper has the cotton insured. He draws a 60 or 90 day draft, payable to himself, for the invoice value of the cotton. This he indorses on the back in blank. The draft or bill of exchange is drawn either upon the foreign cotton merchant or spinner to whom the cotton is being shipped or upon a foreign bank which has an arrangement with the purchaser to accept his bills. Southern cotton shipper sells the draft with the attached bills of lading and insurance certificate to his bank, or sends the draft with the documents to a broker in New York, who sells the draft to some New York institution. The shipper must pay a small commission to the bank and a commission to the broker. The bank buying the draft pays for it in dollars, according to current rates of exchange, the equivalent of whatever foreign money the draft may call for. The bank buying the bill forwards it to a correspondent abroad, who presents it for the purposes of "acceptance" to the purchaser of the cotton or to the latter's bank. After the bank stamps its acceptance upon the bill the same is sold and bought in the open market until maturity, when it is paid.

COTTON EXCHANGES. — In the United States there are only two markets for "cotton fu-

tures," one in New York and the other in New Orleans. Members of the cotton exchanges located in these two cities deal in contracts for the future delivery of cotton. The contract traded in is a basic one, that is, it provides for the delivery of cotton of a basic grade, middling, and provision is made for adjustments in cases where the cotton actually tendered for delivery is not of the basic grade but consists of a number of bales of a higher grade and a number of bales of a lower grade. Under the form of contract traded in, the seller has the option to deliver any of the established grades, price adjustments being made for differences in grades in accordance with relative prices for the various grades established by the "fixed differences" of the exchange. The functions of the exchanges are to provide a continuous market, to disseminate trade and crop information, and to afford an organization where future conditions and events may be systematically discounted, all of which tend to establish world prices for the commodity. Moreover, the exchanges are used for speculation. Activity along those lines helps to establish a proper price level and incidentally aid in distributing the money losses and profits involved in assuming the inevitable economic risks of changes in value.

PROCESS OF HEDGING.—Besides furnishing means for establishing market prices, one of the chief services rendered by cotton exchanges is that of providing the necessary machinery for hedging. Hedging is in the nature of insurance or protection against

loss occasioned by price fluctuations. The hedging practice is resorted to by cotton merchants, by spinners and by manufacturers of cotton goods. Southern cotton merchant, contracting in July to deliver 1,000 bales of cotton to a spinner in January, will frequently instruct his broker on one of the exchanges to buy for him a "future contract" for the same quantity of cotton deliverable in January. If by the time the merchant delivers the cotton to the spinner the price has advanced two cents a pound above that at which the contract was made, the merchant stands to lose two cents a pound. He, therefore, instructs his broker to sell out his "futures" on the exchange. Inasmuch as the price of "futures" and the price of "spots" usually fluctuate in unison, it is safe to assume that the loss the merchant suffered in the one transaction he will have wholly or partially recouped by the profit on the other. The prices paid to growers and the prices at which cotton is sold to domestic and foreign spinners are based largely upon the price of futures quoted on the exchanges.

UNITED STATES COTTON FUTURES ACT.—As amended by the Act of August 11, 1916, the United States Cotton Futures Act of February 18, 1915, provides for Government regulation of trading in contracts for the future delivery of cotton. Briefly, it imposes certain requirements for the conduct of business on the cotton exchanges, and imposes a penal tax of two cents per pound in the event that transactions are not carried on in accordance

with the specifications. The law vests with the Secretary of Agriculture authority to prepare and promulgate standard grades of cotton. The law also makes provision for the settlement by the Agricultural Department of disputes arising between buyer and seller. The amendment to the act provides for trading in specific contracts.

Live Stock Loans

STOCK RAISING.—Live stock raising is one of the most important factors in the economic life of our nation. Horses and mules as work animals are almost indispensable to agriculture; sheep and hogs produce great wealth in meat, wool, lard, etc.; but cattle are the greatest source of income, giving us beef for ourselves and for export, hides for leather, milk, butter, cheese and the innumerable by-products of packing houses which increase returns so largely. They are the basis for many loans and of great interest to bankers. Farmers are realizing more keenly and more generally than ever that the best way to market corn, hay and other feedstuffs, is on the hoof, or as dairy products, and that by so doing they not only obtain the greatest return for their salable crops, and use some which would otherwise be worthless. but they can return to the soil much of its fertility. Cattle are raised in every State in the Union, both for beef and for dairy purposes. It is claimed that no breed of cattle combines satisfactorily milk and beef qualities, and for convenience we will consider them divided into these two classes.

DAIRY CATTLE.—Scientific dairying is highly developed in Wisconsin, Minnesota, Ohio, Pennsylvania, New York, Iowa and certain other States, where it has been carried on successfully for many years, and herds of registered and other high-grade cattle are the rule. The income from animals of this type can be anticipated with reasonable certainty. Loans to owners are commonly made on their showing of assets, including cattle, and not on chattel mortgage security. Such loans to experienced and responsible men are most desirable. Dairving is a growing industry in many States in addition to those named. The rapid increase of population in cities, and the stronger demand universally for milk and milk products of high sanitary standard, have made it increasingly profitable. The establishment of creameries and condensaries has helped greatly. In some sections, such as Kansas and Oklahoma, bankers have brought in good young cows from wellknown dairy herds and sold them, one or two or three to a man, lending him the whole amount of the purchase price with a mortgage on the cows as security. When care is used in selecting the men with whom this arrangement is made, it soon results in a profit to both banker and farmer, and, better still, helps in the upbuilding of the community from which the bank draws its support. In new countries the wife's few cows (with the help of the chickens) have often brought in the only cash income the family had while they established themselves and raised a crop. Agriculture received the man's thought and effort for a

few years because it required less capital and brought quicker returns than livestock raising. When his finances permitted he branched out into fattening some cattle on his grain and thus making two profits. Dairving came much later on, when the price of milk advanced, its marketing became convenient and the continuous income offered attractions. So all through the farming section of the central plains States will be found these stages of evolution; not that dairying crowds out feeding, but it finds its own place, stays, and adds to the growing wealth of our nation. Bankers may sustain losses on loans for pretentious attempts in dairying by inexperienced men with highpriced cattle, but loans of moderate amounts to capable and industrious men for the purchase of dairy cows are thoroughly sound.

BEEF CATTLE.—The raising of cattle for beef purposes is likewise a science. It must be remembered that while a great many animals in the aggregate remain in the hands of their first owners until sold for slaughter in a local abattoir, others are sold half a dozen times and are shipped to and from market three or four times before killed. These markets are the stockyards where packing houses are located. The large packing houses will buy at all times cattle of any age or weight, whether young calves for veal or old ("canner") cows and ("bologna") bulls. The prices offered fluctuate constantly, but a man who wants to sell is sure when he ships cattle to the stockyards that he will find a buyer. Nor are the packing houses the only buyers at the stockyards. A farmer

or cattle man who wants a certain number of a certain kind of cattle goes in person or instructs a commission firm in whom he has confidence to buy them for him on the market. It not infrequently happens that he will buy and ship back home cattle which were sent in from his own neighborhood. One man may bring in steers which he thinks are thoroughly fat. Another man sees them and believes that by judicious feeding he can put more weight on them in a short time, and profit by a fancier price as well as the added number of pounds. There are speculators there, too, ready to buy nearly anything on which they have a chance to make money. Scattered animals of quality unlike others in the same lot, when brought into a bunch similar to themselves, sell to better advantage. Shipments received late in the day may sometimes be bought cheap enough to pay to carry them overnight and leave the speculator a profit. The market price is affected by the number of cattle offered for sale. This in turn is affected by the time of year and by the season's weather conditions. Drought resulting in lack of stock water, dried up pastures, and short feed crops, will send cattle to market; a favorable season will keep them away longer. Conditions which are only local do not make much difference in the price, as the market reflects the average for the whole tributary territory, but the general crop situation has quite an influence.

LOANS ON RANCH CATTLE.—It is evident that since ranch cattle are handled in rather large herds the funds of small local banks are entirely inadequate to carry the necessary loans. This want was at one time largely met by commission firms at the markets, who made loans to buyers of cattle through them, endorsed the notes and sold them wherever they could find buyers. As the paper came to be in demand, the firm found it possible to make a brokerage on the loans and commissions on the purchase and sale of the cattle. Desire to do a large volume of business and some unfavorable seasons resulted in failure on the part of some firms to protect endorsed paper and brought these loans into disrepute. There are good firms doing a conservative and profitable business now in both commission and brokerage lines, but in late years the tendency has been to make them separate businesses. Live stock loan companies have been incorporated with organizations equipped to inspect the cattle mortgaged and all conditions which influence the success of the undertaking.

STOCKER LOANS.—A loan on aged steers to finance their final fattening is about as certain of natural liquidation at maturity as can be found. Younger steers are practically always in demand in some parts of the country and are hardier than cows. Hence natural division of cattle loans is into (1) those on steers one year or more old and (2) those on stock cattle, consisting of breeding cows, heifers, calves and bulls. Loans on stock cattle, when made to reliable and capable men, are about as certain of ultimate payment as any others, but it is not so certain that payment can be forced at maturity without in-

convenience and possible loss to the borrower. Unfavorable seasons, unusual death losses among the calves, a bad market, etc., may leave the deal without profit, or worse, if immediate sale must be made; but by selling some, and perhaps extending the time another six months or a year, to increase the calf profit, the deal may eventually turn out very well. Local banks may well make loans of this kind, as they know the customers thoroughly, are on the ground all the time, and can step in and take the cattle if necessary before a serious loss occurs. Such loans, with local bank endorsements, are readily taken by bank correspondents to an extent based largely on their balances. The steer loans can be obtained from larger banks or from cattle loan companies. The loan companies, however, do make loans on stock cattle very frequently, and when there is a surplus of money and the demand for paper is great, buyers take the notes readily. On the whole, "cow loans" are not quite so good for the distant purchaser and should be kept as close at home as possible.

STEER LOANS.—The largest part of the paper sold by the loan companies is secured by steers. Without forgetting that loans on other classes of cattle are handled similarly, a steer loan may be considered as typical. In April or May a cattleman of experience goes to the loan company where he is acquainted and tells them he wants to borrow thirty thousand dollars to buy two-year-old steers, for which he has sufficient pasture with good water to carry them until fall. If he has cash on hand for part of

the cost price, so much the better, but a considerable margin will not be required, and sometimes the whole purchase price will be loaned. This is because the lender looks at some other things in addition to the property to be mortgaged. The man himself is the first consideration; his record as a successful handler of cattle, and his reputation for honesty and industry. There is a saying that "the brand on the man is more important than the brand on the steer." The second question is, are the cattle worth the money, and of such a class as will increase in value through natural growth and reasonably insure payment of the debt when due? Third, has he made ample provision for taking care of the steers during the life of the loan? Fourth, what other assets has the borrower? As a matter of record and to set these points out in detail for consideration, a statement will usually be asked for Items to be found in such statements include name, age, legal residence, with Section, Township, Range, County, State and Post Office; under assets, the personal property, giving number of steers one year old, steers two years old, steers three years old, steers four years old and over, heifers one and two years old, cows, calves (with year of birth), bulls, horses, mules, sheep, and hogs, the per head and total value of each class being shown, feed on hand (itemized), cash on hand, and other personal property, and also real estate, including homestead less exemption and other real estate less encumbrance; under liabilities, full details of any encumbrance on live stock, other borrowed money, amount due relatives and other debts; under general information, the number of acres and kind of land under lease, the rental price, statement as to any judgments or suits pending, reference to other persons informed as to borrower's financial condition, number of years lived at present location, former residence, whether surety on any notes or bonds, etc.

PURCHASE AND DELIVERY.—The application having been considered favorably, the cattleman arranges his purchase. The delivery of the cattle to him, payment therefor to the seller, inspection of the cattle by the agent for the loan company, execution and delivery of the note and mortgage, and filing of same for record in the proper place or places, will be as nearly simultaneous as possible. In this instance the loan company takes six notes of five thousand dollars each, all secured by the one mortgage. This is so that one or more of the notes may be sold to customers who could not carry as much as thirty thousand dollars of any one maker's paper. These are called "split loans." A few bankers will not buy notes unless all of the loan is owned by them, as they believe there is a possibility of loss due to the diverse interests, if anything goes wrong, and quick action to a single purpose is necessary. Other buyers rely on the loan company's endorsement and accept "split loans" without question. Banks and others seeking investments write to the loan company for paper. The notes are sold them, endorsed by the loan company, at a lower interest rate than the company charged the borrower. Copies of the mortgage and

of the maker's statement may or may not accompany each note. The loans run about six months, being chiefly made in April or May and September or October. This is partly because banks are unwilling to put their money out for longer periods, and partly because these are the seasons of change in cattle ownership, when one man takes his profit to date and another begins the next process in the growing of the animal. When the notes come due, the loan company must provide for their prompt payment to the holders, and this whether the cattle are sold and money paid by the borrower or not. It must be prepared to carry some paper for a short time with its own funds. The company will have kept track of the cattle during the six months, watching for any unfavorable condition or any dishonesty, and will know when they can be sold. If the borrower wants to keep them six months longer, the company may consent, and so make a new loan on the same cattle to the same man. Otherwise they are put on the market and enough of the proceeds turned over to the loan company to satisfy its claim. If the proceeds should be insufficient, the borrower must make up the difference in some other way or the company loses.

FEEDER LOANS.—The paragraphs just preceding refer to cattle in pastures where grass is practically the only food they have except perhaps some cotton seed cake in bad weather. Mention has been made of cattle going to the feed lots of Kansas, Iowa, Illinois, etc., when they have about reached maturity,

to be fattened for killing. In addition to the Southern bred cattle brought in, there are, of course, many which have been raised in small bunches in these central States. Often superior individual attention and careful feeding matures them at an earlier age than the Texas steer. Wherever they have been raised, they may be fattened in pastures on grass in the spring and summer, but those to be fattened in the feed lots through the winter must be fed corn, alfalfa, silage or other roughness, and the like. Cows and heifers (particularly spayed heifers), are susceptible to very profitable feeding of this kind, and loans on them for that purpose are freely made both by local banks and by loan companies. again the steer loan has a little the preference. superior resisting power in bad weather, if nothing else, gives him an advantage, according to general opinion. Banks in the feeding country are larger and more numerous than in the South, and can handle a greater proportion of the loans without outside help. The loans are likely to be smaller, too, as the cattle will be handled in bunches of moderate size. Nevertheless, the loan companies do a considerable business with the larger borrowers and with those in communities where the number of feeders is too great for the local bank. Loans by the companies are handled in the manner already described. If the borrower has plenty of feed and has provided water and shelter, the full purchase price is often loaned. There are no requests for renewal of this paper, for the cattle must go for killing when ready, almost regardless of prices.

The advantage of certain maturity is had, but at the sacrifice of any opportunity to work out of a bad situation. Hogs are often put in the feed lot to follow the cattle, and the profit in feeding is not infrequently in the hogs. They are sometimes included in the mortgage on the cattle. Fertilizer from the feed lot, when spread on the fields, is a most valuable return to the farmer, which should not be overlooked in figuring his earning on a feeding operation.

Land Banks

FEDERAL FARM LOAN ACT.—The Federal Farm Loan Act, which became effective July 17, 1916, provides that there shall be established at the seat of Government in the Department of the Treasury a bureau charged with the execution of this Act and of all Acts amendatory thereof, to be known as the Federal Farm Loan Bureau, under the general supervision of a Federal Farm Loan Board. The Act further provides for the creation of twelve Federal Land banks and permits the establishment of any number of joint-stock land banks for the purpose of making loans at reasonable rates of interest, for long periods of time, on farm lands. The Act further provides that the United States shall be divided into twelve farm loan districts, and a Federal Land bank with a subscribed capital stock of not less than \$750,000 shall be established in each district. Each Federal Land bank may establish branches in its district. Within thirty days after the capital stock is offered for sale it may be purchased at par by anyone. Thereafter, the stock remaining unsold shall be bought by the Secretary of the Treasury for the United States. It is provided, however, that the Government shall not receive any dividends on its stock. Ultimately, it is intended that all the stock in the banks shall be owned by the associations of borrowers.

NATIONAL FARM LOAN ASSOCIATIONS. —The Act provides for the creation of local National farm loan associations through which it is contemplated that the Federal Land banks shall make their loans. In the event that a local loan association is not formed in any locality within a year, the Federal Farm Loan Board may authorize a Federal Land bank to make loans on farm land through approved agents. Ten or more persons who own and cultivate farm land qualified as security for a mortgage loan under the Act, or who are about to own and cultivate such land, may form such an association, provided the aggregate of the loans desired by the membership is not less than \$20,000. Each member must take stock in his association to an amount equivalent to 5 per cent. of the amount he wishes to borrow. This stock the association holds in trust as security for the member's individual loan. The association, in turn, when applying for money from the bank, must subscribe for stock in the bank to an amount equivalent to 5 per cent. of the sum it wants to obtain for its members. This stock is held in trust by the bank as security for the loans it makes through the association. If a prospective borrower has no money with which to pay for the stock which he takes in the association,

he may borrow the price of that stock as a part of the loan on his farm land.

HOW LOANS ARE OBTAINED.—A member of a National farm loan association, before obtaining a loan, must first fill out an application blank supplied to the loan association by the Federal Farm Loan Board. This application blank and other necessary papers will then be referred to a loan committee of the association which must appraise the property offered as security. Such application as is approved by the loan committee is then forwarded to the Federal Land bank and must be investigated and reported on by a salaried appraiser of the bank before the loan is granted. This appraiser is required to investigate the solvency and character of the prospective borrower as well as the value of his land. When a loan is granted the amount is forwarded to the borrower through the loan association. The Act specifically defines the purposes for which loans may be obtained as follows:

- (a) To provide for the purchase of land for agricultural uses.
- (b) To provide for the purchase of equipment, fertilizers and live stock necessary for the proper and reasonable operation of the mortgaged farm; the term "equipment" to be defined by the Federal Farm Loan Board.
- (c) To provide buildings and for the improvement of farm lands; the term "improvement" to be defined by the Federal Farm Loan Board.
- (d) To liquidate indebtedness of the owner of the land mortgaged, existing at the time of the or-

ganization of the first National farm loan association established in or for the county in which the land mortgaged is situated, or indebtedness subsequently incurred for one of the said purposes.

Loans may be made only on first mortgages on farm land. Only those who own and cultivate farm land or are about to own and cultivate such land are entitled to borrow. No individual can borrow more than \$10,000 or less than \$100. No loan may be made for more than 50 per cent. of the value of the land mortgaged and 20 per cent. of the value of the permanent insured improvements upon it. The loan must run for not less than five and not more than forty years. Every mortgage must provide for the repayment of the loan under an amortization plan by means of a fixed number of annual or semi-annual installments sufficient to meet all interest and pay off the debt by the end of the term of the loan. No Federal Land bank is permitted to charge more than 6 per cent, per annum on its farm mortgage loans. The Federal Land banks are specifically prohibited from charging in connection with making a loan any fees or commissions which are not authorized by the Farm Loan Board. The authorized fees need not be paid in advance but may be made part of the loan.

FARM LOAN BONDS.—After a Federal Land bank has loaned on first mortgage \$50,000 it can obtain permission from the Farm Loan Board to issue \$50,000 in farm loan bonds based on these mortgages, sell such bonds in the open market, and use the money thus obtained to lend on other mortgages. This proc-

ess of lending on mortgages and selling bonds in issues of \$50,000 may be repeated until bonds to the amount of twenty times the bank's paid-up capital are outstanding. If each bank should have only its required minimum paid-up capital of \$750,000, this plan will provide eventually, if all the authorized bonds of the 12 banks are sold, over \$180,000,000 to lend on first mortgages on farm land. The banks, however, can increase their capital stock above the required minimum and so increase the amount of bonds they can sell, and thus increase the total amount of money available for loans on farm mortgages. To make these bonds attractive to investors, the bonds, together with the mortgages upon which they are based, are exempted from Federal, State, municipal and local taxation and are made legal investments for fiduciary and trust funds. The capital stock of the Federal Land banks is also exempt from taxation. Federal Reserve banks and member banks of that system are empowered to buy and sell these bonds. They are to be issued in denominations of \$20, \$50, \$100, \$500 and \$1,000.

JOINT-STOCK LAND BANKS.—In addition to the system of twelve Federal Land banks and the National farm loan associations of borrowers, the Act permits the establishment of joint-stock land banks and authorizes them to carry on the business of lending directly to borrowers on farm mortgage security and issuing farm loan bonds. These banks must have a capital of not less than \$250,000. They are under the supervision of the Federal Farm Loan Board, but the

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Government does not lend them any financial assistance. The joint-stock land bank is free from many of the conditions imposed on the Federal Land banks. Subject to the 50 and 20 per cent. value limitation and the limitation as to territory, the joint-stock land bank may lend more than \$10,000 to a single individual, and it is not restricted to making loans for the purposes specified in the case of the Federal Land bank. The joint-stock bank, like the Federal Land banks, cannot charge an interest rate on farm mortgages in excess of 6 per cent., nor shall such interest rate exceed by more than 1 per cent. the rate of interest paid by the bank upon its last issue of bonds. A joint-stock bank is limited in its bond issue to 15 times its capital and surplus. Among the restrictions placed on these banks under the Act are (1) that their mortgages must provide for an amortization system of repayment such as is prescribed in the case of loans through the Federal Land banks, and (2) that they shall in no case demand or receive under any form or pretense any commission or charge not specifically authorized by the Act and approved by the Farm Loan Board. The bonds of the joint-stock land banks are exempted from taxation. Their capital stock, however, is not exempted.

CHAPTER IX

Acceptances

THE rapid development of the foreign and domestic commerce of the United States since the latter part of 1914 has brought about radical changes in the mechanism by which commerce is financed. Increased volume of crops, raw materials and manufactures require increased credit facilities and the creation of adequate machinery for making these crops and manufactured products available either for domestic use and consumption or for the markets of the world. For a great many years the American system of giving expression to credit by means of the promissory note and open account had been extensively utilized in domestic transactions, while foreign trade found its medium of settlement in the pound sterling of England, the franc of France, the mark of Germany and the lira of Italy. Therefore, when in the course of events incident to the war, the United States became the shopkeeper for the world, it was the natural time to rebuild and strengthen the machinery of credit and establish a thoroughly American system of finance for foreign and domestic trade, adequate for present needs and capable of expansion to meet the requirements of the future. The need was for the widest possible use of available credit resources through a system evolved from the experience of England and European countries made applicable

to the demand of American commerce. The changes brought about through the recognition of this need were many and important, not the least of which was the creation, through provisions of the Federal Reserve Board, of the American bankers acceptance, the acknowledgment of the trade acceptance as an instrument of credit and the establishment of the American discount market. The acceptance or time bill of exchange is undoubtedly the most perfect expression of credit and is the product of generations of trade and banking experience. In the early history of trade reference is found to the bill of exchange, denoting the use of credit between one tradesman and another. The first people known to extend credit through a bill of exchange or, as we now know it, the acceptance, were the English, and the present exceptionally high standing of the English bill may be attributed to the experience of generations of merchants and bankers who have found the acceptance the preeminent expression of honor in trade.

DANIEL WEBSTER'S INSIGHT.—The demand for a commercial credit system in the United States adequate to handle the transactions of commerce was emphasized by Daniel Webster in a speech delivered before the United States Senate in 1834 in the course of which he said: "All bills of exchange, (acceptances as they are known to-day), all notes running upon time, as well as the paper circulation of the banks, belong to the system of commercial credit. They are parts of one great whole. We should protect this system with increasing watchfulness, taking

care, on the one hand, to give it full and fair play, and, on the other, to guard it against dangerous excess. Commercial credit is the creation of modern times, and belongs in its highest perfection only to the most enlightened and best governed nations. Credit is the vital air of the system of modern commerce. It has done more—a thousand times more—to enrich nations than all the mines of all the world. It has excited labor, stimulated manufacturers, pushed commerce over every sea, and brought every nation, every kingdom, and every small tribe among the races of men to be known to all the rest. It has raised armies, equipped navies, and triumphing over the gross power of mere numbers, it has established national superiority, on the foundation of intelligence, wealth, and well-directed industry. Consistently with security, and indeed founded upon it, credit becomes the great agent of exchange. It increases consumption by anticipating products, and supplies present wants out of future means. As it circulates commodities without the actual use of gold and silver, it not only saves much by doing away with the constant transportation of the precious metal from place to place, but also accomplishes exchanges with a degree of dispatch and punctuality not otherwise to be attained."

DEVELOPMENT OF ACCEPTANCES.— From the time this statement was made to the present, there has been a steady development of the method by which our domestic and foreign commerce is financed, and this development has brought with it the perfection of the acceptance system. An eminent authority on international finance, Paul M. Warburg, after the close of the World War, said: "The future growth of the American acceptance business is a thing in which not only we, but the entire world is deeply interested. It is not only legitimate and good business; it is, at the same time, a contribution towards the reconstruction of a suffering world; a contribution on our part to which the world is plainly entitled."

Bankers Acceptances

DEFINITION.—A Bankers Acceptance is defined as a draft or bill of exchange, whether payable in the United States or abroad and whether in dollars or in other money, of which the acceptor is a bank or trust company, a firm, person, company or corporation engaged generally in the business of granting bankers acceptance credits. An approved form of bankers acceptance will be found in Fig. 14.

AUTHORITY.—The passage of the Federal Reserve Act gave to American banks that are members of the Federal Reserve System, for the first time, authority under section 13 to make acceptances, or in other words, to accept bills of exchange drawn upon them having not more than six months sight to run exclusive of days of grace, provided such acceptances resulted from a transaction or transactions involving:

- (1) The shipment of goods between the United States and any foreign country or between the United States and any of its dependencies, or insular possessions, or between foreign countries;
 - (2) The shipment of goods within the United

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States provided shipping documents conveying security title are attached at the time of acceptance;

(3) The storage of readily marketable staples provided that the bill is secured at the time of acceptance by a warehouse, terminal or other similar receipt;

(4) The creation of dollar exchange.

LIMITATIONS ON AMOUNT TO ACCEPT.

-Provision is also made by the act that any member bank may lend its credit by accepting bills drawn upon it up to an aggregate of 50% of its combined paid up and unimpaired capital and surplus. It can further, upon application to and with the approval of the Federal Reserve Board, grant such credit or accept an additional 50% of its combined paid up and unimpaired capital and surplus, provided, however, that it does not accept in connection with domestic transactions an aggregate greater than 50% of its combined capital and surplus. There is an additional provision under which with the approval of the Federal Reserve Board a member bank may accept drafts having not more than three months' sight to run exclusive of days of grace drawn upon it by banks or bankers in foreign countries or dependencies or insular possession of the United States for the purpose of creating dollar exchange as required by the usages of trade in the respective countries, dependencies or insular possessions.

DOLLAR EXCHANGE.—No member bank is permitted to accept drafts or bills of exchange for any one bank for the purpose of creating dollar exchange to an amount exceeding in the aggregate ten per centum of the paid up and unimpaired capital and surplus of the accepting bank, unless the draft or bill of exchange is accompanied by documents conveying or securing title or by some other adequate security and then only to an amount not exceeding at any time in the aggregate one-half of its paid up and unimpaired capital and surplus. Up to July 1, 1921, the Federal Reserve Board granted permission to American banks to accept for the purpose of furnishing dollar exchange bills drawn by banks or banking firms in the following countries: Argentina, Bolivia, Brazil, British Guiana, British Honduras, Chile, Colombia, Costa Rica, Cuba, Dutch Guiana, Ecuador, French Guiana, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru, Porto Rico, San Salvador, Santo Domingo, Trinidad, Uruguay and Venezuela, and Australia, New Zealand, and other Australasian dependencies.

ELIGIBILITY FOR REDISCOUNT.—Banks, trust companies or corporations engaged in granting bankers acceptance credits are not limited in the amount which they may accept for any one person, firm, or corporation; but to have bills eligible for rediscount or purchase by the Federal Reserve Banks, acceptances of any one person, firm, or corporation in excess of 10% of the combined capital and surplus of the accepting bank or banks must remain actually secured throughout the life of the acceptance. In the case of acceptances of member banks, this security must consist of shipping documents, warehouse receipts or such other documents or some other actual

security growing out of the same transaction as the acceptance so as to insure at all times a continuance of an effective and lawful lien in favor of the accepting bank. Federal Reserve Banks are permitted to rediscount acceptances having a maturity at the time of discount of not more than three months, exclusive of days of grace, which have been drawn under a credit opened for the purpose of conducting or settling accounts resulting from a transaction or transactions drawn in accordance with the requirements of Regulation A of the Federal Reserve Act.

FEDERAL RESERVE BANK OPEN MAR-KET PURCHASES.—Authority is also granted the Federal Reserve banks to purchase and sell in the open market at home or abroad from or to domestic or foreign banks, firms, corporations or individuals, bankers acceptances and bills of exchange of the kinds and maturities made eligible by the Act for rediscount with or without the indorsement of a member bank. Such acceptances to be eligible for purchase by Federal Reserve banks must conform to the requirements of Regulation A of the Federal Reserve Act, except that (a) a bankers acceptance growing out of a transaction involving the importation or exportation of goods may be purchased if it has a maturity not in excess of six months, exclusive of days of grace, provided that it conforms in other respects to the relative requirements of Regulation A, and (b) a bankers acceptance growing out of a transaction involving the storage within the United States of goods actually under contract for sale and not yet delivered or paid for may be purchased, provided that the acceptor is secured by the pledge of such goods; and provided further that the acceptance conforms in other respects to the relative requirements of Regulation A. A bill of exchange, unless indorsed by a member bank, is not eligible for purchase until a satisfactory statement has been furnished of the financial condition of one or more of the parties thereto. A bankers acceptance, unless accepted or indorsed by a member bank, is not eligible for purchase until the acceptor has furnished a satisfactory statement of its financial condition in form to be approved by the Federal Reserve bank and has agreed in writing with a Federal Reserve bank to inform it upon request concerning the transaction underlying the acceptance.

COMMERCIAL LETTERS OF CREDIT .-Acceptances arising out of transactions involving the importation, exportation or domestic shipment of goods are generally drawn against what is known as a commercial letter of credit. A commercial credit is an undertaking on the part of a bank to loan its credit rather than money to a customer for the purpose of financing the shipment of goods either to or from the country or within the country in which the credit is drawn or for the purpose of storing such goods pending shipment. Under the terms of the credit, acceptances are drawn which indicate clearly the character of the transaction to be financed, the maturity, amount, nature of goods for which the acceptance is issued, and if importation or exportation, the name or description of carrier.

CLASSIFICATION OF LETTERS OF CRED-IT.—In the financing of an importation there are several possible combinations of parties at interest. Although a shipment is made direct by the exporter in a foreign country to the importer in the United States, the seller does not usually rely upon the unsupported credit of the buyer abroad and generally requires a bank guaranty. The importer, therefore, calls upon his bank to lend its credit to the transaction, and thus the exporter is given the right to draw upon a banking institution instead of a commercial house. But even this added responsibility does not always satisfy the exporter, who may prefer funds in his own country, and, in this event, the American bank requests a foreign correspondent bank to notify the exporter that it will negotiate his drafts. He may, therefore, sell his bills of exchange either to the notifier or to his own local bank. Hence, a letter of credit may involve such different parties as the importer, credit issuer, notifier, negotiator, any indorser of the completed drafts, and lastly the exporter.

LEGAL RELATIONS.—The legal relations between these parties are expressed in a number of documents. The import letter of credit is the authorization addressed to the beneficiary in one country by the credit-issuing bank in another country under which the former is given the right to draw drafts up to a specified sum and within a definite time, and the latter undertakes to honor the drafts when presented. The export letter of credit is the advice from a bank to the beneficiary that a credit has been opened in his

favor by a foreign bank and that the notifying bank agrees to honor drafts drawn by the beneficiary.

TERMS AND CONDITIONS.—Letters credit may be classified also according to their terms and conditions. If a bank agrees to honor drafts drawn by the exporter only when accompanied by satisfactory bills of lading, consular and commercial invoices, the statement is called a documentary letter of credit. It is termed a clean or "open" credit if such stipulations are not mentioned. A broad basis of classification of letters of credit rests on the right of the issuing bank to rescind its engagement to honor drafts drawn by the beneficiary. If the credit-issuing bank reserves the right to withdraw from the undertaking, the document is styled a "revocable" letter of credit. The "irrevocable" letter of credit contains a definite engagement on the part of the issuing bank to honor drafts drawn by the beneficiary in accordance with the terms and conditions specified in the letter. This engagement may not be cancelled by the issuing bank prior to the expiration date without the consent of the beneficiary. The "irrevocable" letter of credit may be strengthened further by having the notifying bank in the same country as the exporter add its unqualified assurance that it will pay or accept the bills drawn by him even if the foreign bank should refuse to honor them. It is then called a "confirmed" export letter of credit. Expressing, therefore, both the definite undertaking of the issuer and also of the notifier, it is actually an "irrevocable-confirmed" letter of credit. Where the notifying bank does not add its guaranty, the credit is described as "unconfirmed," since the advising bank maintains that it is merely transmitting the information of the credit to the beneficiary without incurring liability for its continuance. Thus three classes of letters of credit may exist: Irrevocable by the issuer and confirmed by the adviser; (2) irrevocable by the issuer but unconfirmed by the adviser; (3) revocable by the issuer and also unconfirmed by the adviser. This classification is a departure from the usual precept that the terms "confirmed" and "irrevocable" are synonymous as applied to commercial credits. However, while writings on this subject accept the two-fold grouping of confirmed or irrevocable as against unconfirmed or revocable credits, actual banking practice operates on the classification given above.

IMPORTATION ACCEPTANCE. — The American importer desiring to purchase merchandise abroad, for example, in France, goes to his bank, outlines the transaction and requests a commercial credit. If the bank is satisfied with his credit standing, it issues a commercial letter of credit for the amount involved and for the purpose stated by its customer. The credit authorizes the French merchant to draw on the bank for the value of the merchandise which the American importer is purchasing. The drafts to be drawn must be limited to the amount named in the letter of credit, must be drawn and negotiated not later than the specified date, and must mature within a given number of days, say, 30, 60 or 90 days after sight. The credit will further stipulate the documents

that are to be attached to the drafts when presented for acceptance. If the American importer is anxious to get his merchandise at the earliest possible date, the information that the credit has been opened is cabled through a bank located in the vicinity of the French exporter, thus saving the delay which would be occasioned if the advice of credit was forwarded to the exporter through the mails. When the French exporter receives the advice, the merchandise is prepared for shipment, ocean bill of lading and other necessary documents are obtained, and a draft is drawn on the American bank issuing the credit for the value of the merchandise. To this draft is attached the documents stipulated in the letter of credit and the draft is presented to the French bank for purchase at the current rate of exchange. All the shipping and other documents are made out or indorsed so as to give the bank purchasing the draft title to the goods. Having purchased the draft, the bank in France now forwards the draft and documents to its correspondent in this country with instructions to present them to the American bank issuing the credit. The American bank, finding that everything is in accordance with its letter of credit instructions, accepts the draft and returns it to the correspondent of the French bank, retaining however the shipping and other documents which are to be surrendered to the American importer to enable him to get his merchandise. When these documents are surrendered, it is customary for the American bank to obtain from its customer (the importer) a trust receipt. The importer then secures

his merchandise from the steamer or warehouse into which it has been placed and proceeds to dispose of it within the time allowed under the letter of credit in order that he may be placed in funds to reimburse the bank prior to the maturity of the draft which it has accepted for him. The correspondent of the French bank having received the accepted bill from the bank issuing the letter of credit acts on instructions received from the French bank and sells the acceptance in the open market for its account at the best available rate. At least one day prior to the maturity of the draft. the American importer places funds in the hands of the bank which has issued the credit for him, thus enabling it to retire the obligation when presented. It is usual for the American importer's bank to charge him a small commission for its services in making this transaction.

EXPORTATION ACCEPTANCE.—An American exporter, receiving an order for shoes to be shipped to Brazil and not wishing to draw a draft on his customer or sell him on open account, makes a provision that the purchaser finance the transaction through a commercial credit. The purchaser in Brazil goes to his bank and requests it to arrange a credit with its correspondent in the United States for the amount of the invoice. The Brazil banker, having full knowledge of the credit standing of its customer, requests its correspondent in this country to issue the credit and guarantees that the bank issuing the credit will be placed in funds before the maturity of any drafts drawn on it under the credit. Upon receiving

the advice from Brazil, the American bank which is to issue the credit advises the American exporter that it will accept his draft drawn upon the bank up to a certain amount, provided the drafts are accompanied by all of the documents mentioned in the letter of credit and which of course represent the shoes which have been shipped. The American bank advises the exporter that the credit will expire on a given future date and it is therefore necessary for the exporter, upon receiving the advice that the credit is open, to ship the shoes promptly and complete his part of the transaction as expeditiously as possible. When the exporter has placed his shoes on the vessel and has secured the shipping and other documents which are to be forwarded, he draws a draft on the American bank issuing the credit for the value of the shoes with the maturity in accordance with the terms of the credit, attaches the draft and documents and presents it to the bank for acceptance. The bank, upon investigation, finding all of the terms complied with, accepts the draft, returns it to the exporter, who then sells it in the open market reimbursing himself for his shoes. The documents, having been removed by the American bank accepting the draft, are forwarded to the Brazil bank to be released by the Brazil bank to its customer, the purchaser, in order that the shoes may be delivered to him upon arrival. At or before maturity the Brazil bank either by means of remittances or cable advice to charge its balance in this country, places its correspondent in funds to meet the draft when presented for payment.

DOMESTIC ACCEPTANCE.—A New England corporation purchasing cotton in Texas desires to finance this purchase by means of bankers acceptances. Application is made to a Boston bank to issue a credit for an amount not exceeding the value of the cotton being purchased and in favor of the cotton merchant in Galveston. The bank, satisfying itself on all the terms of the transaction and being assured of the credit standing of its customer (the corporation), issues a credit for not over 90 days and advises its customer that the seller may draw upon it, bills to the amount of the cotton invoice and for the maturity named. The seller in Galveston is then advised and the arrangement being satisfactory to him the cotton is shipped and he receives from the railroad shipping documents. He then draws a draft for the value of the cotton on the bank issuing the credit, attaches the shipping documents, insurance policies and invoice, and presents the draft to his local bank. This bank may purchase the acceptance or it may receive it for collection. In either event it is forwarded to the correspondent of the Texas bank in Boston to be presented for acceptance to the bank issuing the credit. This bank finding the documents in order and the bill drawn in accordance with its requirements as stated in the letter of credit, removes the documents, accepts the bill and returns it to the correspondent of the Texas bank. On account of market conditions for bankers acceptances, the Texas bank may advise its Boston correspondent to sell the bill in the open market and place the proceeds to the credit of its account.

Or it may after being accepted be returned to the Texas bank to be delivered to the shipper, who will reimburse himself through sale in the local acceptance market. The New England corporation, having received the documents, removes the cotton from the cars upon arrival, proceeds to manufacture the cotton into goods for sale within the 90 day period, that it may reimburse its Boston bank at the maturity of the bills accepted by it. All of the shipping documents should be issued or indorsed in order to give the bank issuing the credit absolute title to the goods during the life of the credit.

ACCEPTANCES SECURED BY WARE-HOUSED GOODS.—Should the New England corporation referred to in the previous case desire to carry this stock for a time during or beyond the 90 day period, the cotton may be placed in a warehouse and a draft drawn on its bank for the value of the cotton to which is attached the warehouse receipts to the order of the bank as collateral. The bank having agreed to finance the corporation through such a transaction accepts the draft and returns it to the corporation to be sold. It is stipulated in the credit issued in this case that the cotton must be placed in a warehouse independent of the corporation and that the corporation must not have any control of the cotton as long as the warehouse receipts are outstanding. If the corporation desires to remove any portion of the cotton during the life of the credit, it must place the bank in funds to cover the value of the cotton so removed, as the bank must be secured at all times

during the life of the credit either by warehouse receipts or cash.

OPEN MARKET PURCHASES OF ACCEP-TANCES.—Bankers acceptances arising out of one of the foregoing transactions, if otherwise eligible may, under the provisions of the Federal Reserve Act, be purchased in the open market by the various Federal Reserve banks. Acceptances of member banks of the Federal Reserve System which have been drawn in accordance with the rules and regulations of the Federal Reserve Board are eligible for purchase or rediscount by Federal Reserve banks. Bankers acceptances, other than those of member banks, whether foreign or domestic, shall be eligible only after the acceptors shall have agreed in writing to furnish to the Federal Reserve banks of their respective districts, upon request, information concerning the nature of the transactions against which acceptances have been made. No Federal Reserve bank shall purchase a domestic or foreign acceptance of a "banker" other than a member bank which does not bear the indorsement of a member bank, unless there is furnished a satisfactory statement of the financial condition of the acceptor in form to be approved by the Federal Reserve Board.

ACCEPTANCE MARKET.—The buying and selling of bankers acceptances create what is known as the acceptance market. Bills of well known banks are actively sought by bankers, discount houses and brokers engaged in such business. These dealers operate on a margin of about ½ of 1% per annum

gross profit. The rate of discount varies with the money market, the demand for acceptances for investment, and the maturity of the acceptance as, for example, 90 day maturities might command a rate of discount of $6\frac{1}{8}\%$; 60 day maturities, 6%; 30 day maturities, $5\frac{7}{8}\%$.

INVESTMENT VALUE.—The bankers acceptance is the most liquid type of investment available and from the standpoint of safety is analogous to a certified check, constituting a primary unconditional obligation of the accepting bank to pay at maturity. It has for security the accepting bank's entire resources and must be honored at maturity, even though the taker of credit should fail to complete his part of the agreement. In considering the advisability of any short-term investment there are three general tests that should be applied.

- 1. Is it safe? Is there reasonable assurance of the return of principal at maturity with interest for the period the funds have been invested?
- 2. Is it liquid? In the event of funds being required prior to maturity can the security be turned into cash readily and without substantial loss?
- 3. Can the securities be obtained in desired denominations and maturities?

It is on the basis of these three general considerations that the investor should select his short term investments. Judged by these requirements, bankers acceptances of the types eligible for purchase and rediscount by the Federal Reserve banks may properly be regarded as one of the most desirable forms—

if not the most desirable form—of short term investment. They combine to an unusual extent these important requisites—safety, liquidity and convenient maturity and denomination. Eligible bankers acceptances have a broad open market in which millions of dollars of bills change hands each day at rates varying generally not more than 1/8 % to 1/4 % per annum between the bid and offered prices. The fact that the Federal Reserve banks under the law are permitted to purchase them tends to stabilize rates on this class of obligation and to insure a market for them even in times of extreme stress. The holder of an eligible bankers acceptance, therefore, may feel, first, that because of the nature of the obligation it will be met promptly at maturity and, second, that if at any time during the life of the acceptance he desires to obtain his funds he will be able to do so either by selling it in the open market or by discounting the obligation through his bank.

CONVENIENT MATURITIES AND DE-NOMINATIONS.—Bankers aceptances are to be had in the open market in maturities running anywhere from a few days to as long as six months. The general run of bills offered varies in maturity from about thirty days to ninety days. An investor anticipating a demand for his funds is usually able to buy bills maturing on or about the date at which he expects to need them. Of course, even if this were not the case he would still be able, because of the market which has been developed, to obtain funds by selling his holdings in the open market. Bankers acceptances

are drawn in varying denominations. Based as they are on actual commercial transactions, the denominations usually will vary with the size of the underlying transaction. In some cases where the amount involved is a large one it has been the custom to make up the entire amount so far as possible in denominations of \$5,000 or multiple thereof. However, there are a great many bills appearing in the open market in denominations of anywhere from a few hundred dollars to five thousand dollars, so that the prospective buyer will generally be able to invest approximately such an amount as he may desire.

INVESTORS IN ACCEPTANCES.—Because of the characteristics of prime eligible bank acceptances, which have been pointed out, these instruments of finance have become recognized by the most important financial institutions in the country as an exceedingly desirable form of short term investment. Among the buyers in large quantities at this time are the National banks. State banks and trust companies. Laws have been passed in a great many States, notably in New York and Massachusetts, permitting savings banks and trustees to invest a certain portion of their funds in certain classes of eligible bills. Corporations accumulating funds for dividends, interest requirements, and other purposes, are turning to bankers acceptances as a means for the employment of such funds pending their distribution. Insurance companies also in many cases are keeping a portion of their current funds in prime bankers acceptances and even private investors and business men having idle funds

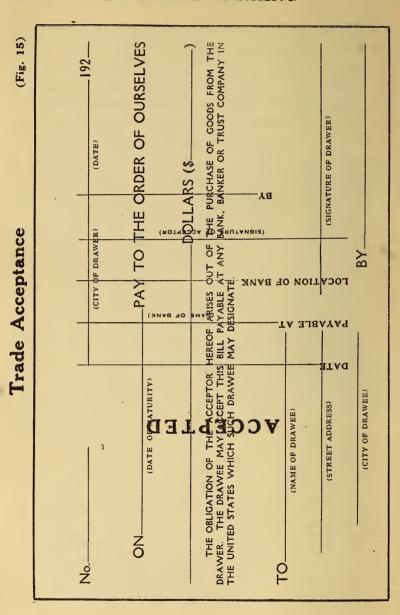
on hand have during recent months in increasing numbers been utilizing bankers acceptances. It is, therefore, apparent that the bankers acceptance makes its appeal to all classes of investors, whether individuals or corporations, having idle funds temporarily on hand.

Trade Acceptances

HISTORY.—The trade acceptance was a well known and generally used instrument of credit in this country up to the time of the civil war. Following that conflict the necessary granting of long term credits, owing to the disorganization of business, created a demand for cash. This situation suggested to sellers of merchandise the granting of a cash discount for the prompt settlement of accounts, which led to the open account system in place of the trade acceptance. The open account system remained in favor for more than fifty years and until the business of the country at the outbreak of the world war had reached such proportions that it became desirable to release the frozen capital represented by open or book accounts through the restablishment of the trade acceptance system previously in use. The open account system is economically wrong, as it is productive of dead capital, and creates immobile credit instead of mobile credit. The economic value of the trade acceptance has been proved by generations of users in England and Continental Europe where it is regarded, next to bankers acceptances, as the highest grade of commercial obligation in existence.

FINANCIAL EFFICIENCY.—In a recent publication on the subject, Robert H. Treman, formerly Deputy Governor of the Federal Reserve Bank of New York, said: "The trade acceptance is a form of commercial paper the use of which will do more to increase American financial efficiency than almost any other factor, whereas the open book account system is wasteful and inefficient. Competition has in the last few years been extensive and seems to be growing, leading often to unsound business methods while the cost of doing business continues to mount; all of which emphasizes the necessity for better business methods and more careful consideration and less waste. Banking experience for many years has demonstrated that purely commercial loans are the safest of all temporary investments. The two name commercial credit, that is, trade acceptance, is one of the most liquid and satisfactory forms. The credit represented by a trade acceptance with two or more names gives evidence that the buyer is prepared to meet his obligation at a certain definite time and is adopting the most approved and economical way of transacting business."

FORM OF TRADE ACCEPTANCE.—Upon the creation of the Federal Reserve Board, trade acceptances were officially recognized by the Board and recommended for use in all commercial transactions in which the element of time for payment of goods is involved. A trade acceptance is a negotiable evidence of a sale of merchandise and an acknowledgment to the seller by the buyer of the latter's obligation to pay



for goods bought according to sales terms. An approved form of trade acceptance will be found in Fig. 15.

UTILITY OF TRADE ACCEPTANCES .-The trade acceptance may be used to the advantage of both buyer and seller in connection with all transactions wherein goods are actually sold on time and title passes. When the foregoing conditions prevail, it may be used by the producer of raw materials, manufacturer, wholesaler, retailer or the consumer. It should not be used where goods are leased or where title remains with the seller until the last of several installments have been met or where collateral is required. Where goods are sold, a trade acceptance is made out by the seller for the amount due and forwarded to the buyer at or about the time the goods are billed. The buyer may pay spot cash, or if a discount is offered for cash payment, he may take advantage of such privilege. If he does not do this, it is assumed that he agrees to pay the cash in 30, 60 or 90 days-whichever time is determined upon by the seller as his credit terms. If the buyer decides to take the privilege of time payment, he should then write across the face of the trade acceptance in the space provided: First—The date of acceptance. Second—The name of the bank at which he is to pay the acceptance when Third—The city or town where the bank is located. Fourth-The official signature used in his business. This should be done at or before the expiration of the cash discount period and the trade acceptance immediately returned to the seller. The seller may then hold the acceptance until it is due or, if he desires to avail himself of the amount represented for use in his business, he may discount the acceptance at his bank or sell it to a dealer in acceptances. In either event it will be presented at maturity to the bank at which it is made payable, either by the seller of the goods or by a subsequent holder.

COLLECTION OF TRADE ACCEPTANCES.

—Banking institutions holding trade acceptances for collection, whether taken for collection or discounted, should collect them through the usual collection channels. When made payable at a banking institution, they MUST be presented there for payment. Failure to present them for payment at maturity at the banking institution where they are payable is to disregard the lawful obligation of the collecting agent and is contrary to good banking practice. On presentation to the paying bank at maturity the trade acceptance should be paid and charged to the acceptor's account the same as a check, unless the acceptor has requested that specific authority be secured before such action is taken. In a majority of the states which have adopted the Negotiable Instruments Act, Section 87 reads as follows: "Where the instrument is made payable at a bank it is equivalent to an order on the bank to pay the same for the account of the principal debtor thereon," (which in the case of an acceptance is the acceptor). In Missouri this provision is qualified by the addition of the following words: "* but where the instrument is made payable at a fixed or determinable future time, the order to the bank is

limited to the day of maturity only." Illinois, Nebraska and South Dakota omit the provision entirely; so does Kansas, which repealed the section by Chapter 94 of the laws of 1915. In Minnesota the word "not" was interpolated so that the section reads: "shall not be equivalent," etc. If the acceptor has not sufficient funds on deposit to meet the acceptance at maturity, the paying bank may refuse payment and the item should be protested unless instructions to the contrary have been given. It will then be returned to the seller and adjustment may be made with the buyer.

USE AND ABUSE OF TRADE ACCEP-TANCE.—The principal mission of the trade acceptance is to liquify credit, improve the turnover and minimize credit losses. To maintain its place as a high grade credit instrument, it will, therefore, be used with the best class of current accounts. Where goods have previously been sold on an open account basis and the credit department record of the customer shows that his account is usually settled with due regard for the credit terms, the acceptance is used to the best advantage. Under no circumstances should a trade acceptance be given in settlement of an overdue account. Only those trade acceptances which are drawn at the time of or within a reasonable time after a shipment or delivery of goods sold can be considered as real trade acceptances and as such be approved by the Federal Reserve Board and thus made eligible for discount. To use the trade acceptance merely as a means of collecting an otherwise slow account would tend to subordinate the trade acceptance to the open account

by suggesting it as a last resort for bad debts. In an ordinary commercial transaction but one trade acceptance should be used and this one should be given at or about the time the sale is made. If such an acceptance is not paid at maturity, settlement in some other form should be made. This is usually by an ordinary promissory note or draft. Under no circumstances should a trade acceptance be given in renewal of a matured and unpaid acceptance. Such a renewal bill would not conform to good practice nor be within the spirit of the movement to establish the trade acceptance as the premier form of prime commercial paper.

GENERAL PRACTICE.—In general practice the maturity of a trade acceptance should approximate that of the open account in place of which it is used. Where goods are sold on open account, net cash, payment within 10 days is considered prompt, and if cash discount terms are met within 5 days this also is considered prompt. It is reliably estimated that not onehalf of all open accounts are met in exact agreement with sales terms. The practice, therefore, of drawing a trade acceptance to run for 45 to 60 days where previous open account sales terms have been quoted as 30 days is not subject to criticism, as such open accounts were seldom settled within 15 or 30 days beyond their due date. The granting of unreasonable sales terms in consideration of the giving of a trade acceptance is an abuse. This is true whether these inducements be in the form of discounts, of unnecessary time, or more favorable conditions than would be

available under the open account system. The more closely the acceptance is kept to the usual terms and conditions upon which goods are sold the higher will be its value and the more readily will it be regarded as a prime credit instrument. The freer a trade acceptance is from special provisions or conditional clauses the more easily will it be understood and the more readily negotiated. Inclusion of clauses on trade acceptances providing for attorney's fees if the bill is not paid at maturity, interest charges, or special inducements may not render an acceptance ineligible, but will have a tendency nevertheless to confuse the acceptor or subsequent purchaser of the bill, and should, therefore, not be used. The only place where a trade acceptance should be used is in settlement of a bona fide sale of goods. The making of a trade acceptance for any other purpose is illegal and subjects the parties involved to risk and prosecution. In times of credit stringency, devices are the more frequently resorted to in order to obtain financial relief, and it is not unusual then for attempts to be made to abuse every form of credit instrument. Unscrupulous persons are likely to resort to forgery and to draw drafts representing fictitious transactions for the purpose of misleading bankers and producing an instrument that upon its face purports to be a commercial transaction and is in the form of a trade acceptance. The law specifically provides for such offenders and with the exercise of care by managers of credit departments both in business houses and in banks such abuses will be readily detected.

CREDIT ANALYSIS.—Each trade acceptance should represent a carefully investigated credit account. No diminution of care in the selection of credit risks should be permitted because trade acceptances are used. On the contrary there should be closer investigation so that every trade acceptance shall represent the best of credit risks. The mere fact that the paper is in trade acceptance form should not lead any one to believe that proper investigation of the credit standing of the parties may safely be omitted.

TRADE ACCEPTANCES AND PROMIS-SORY NOTES.—If the trade acceptance is to mean anything beyond single name paper, there should be responsibility attached to the acceptor of the bill as well as to the drawer. While, of course, the bank discounting a trade acceptance for its customer may not always require a statement of the acceptor, unless it be for those who accept for important amounts, yet the bank is entitled to sufficient information so that it can determine whether the acceptor is of good moral and financial standing and may be relied upon to meet his acceptances promptly at maturity. There is a fundamental difference between a trade acceptance and a promissory note. A trade acceptance is an order of the seller on the buyer to pay and its selfevident character is prime facie. A note is a promise by the maker to pay and its self-liquidating character is not prime facie. A trade acceptance must be drawn by the seller on the purchaser for goods sold, while there is nothing to indicate the origin of a promissory note. Trade acceptances are discounted in

large volume by banking institutions and are offered freely by discount houses and dealers with or without their indorsement. They are also purchased in the open market and discounted for member banks by the Federal Reserve banks receiving from the Federal Reserve banks a preferential rate of from ½ to ½% when rediscounted for member banks. They serve as a basis for currency issue and because of their evident self-liquidating character are, when properly drawn, more highly regarded by indorsers than commercial paper.

PROPER INTRODUCTION.—No should be made to force a buyer to give a trade acceptance until he has had ample opportunity to understand the system of trade acceptances through proper explanation by the seller or his agents, or the buyer's bankers. Once a buyer or seller is shown the advantages and utility of the trade acceptance and thoroughly understands its use and operation, he rarely seeks to return to the open account method. As president of the American Acceptance Council, Paul M. Warburg has made this declaration: "We are preaching the gospel of the trade acceptance for no other purpose than that we believe its use makes for sounder business and banking conditions. We do not say that single name paper is not good, or illiquid; but we may fairly say that the trade acceptance is better and more liquid. We do not say that the trade acceptance serves all purposes and that all cash sales and all cash discounts ought to be avoided; but we do say that where business is not done on a strictly cash basis, the trade acceptance will be found the safer, sounder, and, in the long run, more economical method than the open accounts. Indeed we believe that it is so much of an improvement over the open account that in some cases sellers, at present sacrificing a very heavy cash discount for the purpose of avoiding the dangers and inconveniences of open accounts, might find it to their advantage to consider the economy involved in the use of the trade acceptance when dealing with customers of strong credit. Our interest in this matter is that whatever makes for better morals in business and for better credit and banking conditions is a decided benefit to the United States."

TRADE ACCEPTANCE GROWTH.—The trade acceptance system needs explanation rather than defence. It has already shown its ability to win its way when inaugurated under proper auspices and when opportunity and facilities for discussion and careful consideration are accorded. Its benefits are acknowledged by satisfied users in every line of business who are enthusiastic in proclaiming its merits. Dangers are not inherent in it, and abuses develop only out of careless ignorance or wilful perversion.

CHAPTER X

Stocks and Bonds

THE words "stocks" and "bonds" were formerly applied indiscriminately to the financial obligations of governments. Some of the early certificates of indebtedness of the United States were known as "stocks," and the same name still clings to certain obligations of the city of New York. the language of modern finance, however, bonds are certificates of indebtedness and stocks are certificates of ownership. In incorporated companies bonds represent specific liens on property possessed, and stocks represent the property itself. In other words, the owner of the stock in a company is a part owner of the company, and participates in the profits and losses, while an owner of bonds issued by the same company is interested in the success of the company only in so far as the security and punctual payment of such bonds, principal and interest, are concerned. The bondholder has no part in the operation of the company; ordinarily he has no voice in its management; in short, he is merely a creditor; while the stockholder possesses a definite ownership interest in the company in proportion to the amount of stock owned by him. The bondholder is not responsible for the success or failure of the enterprise, while the stockholder, in addition to the privileges which go with his stock, has that responsibility and obligation which attaches to ownership.

STOCKS AND THEIR CLASSIFICATION.—

When a company or corporation is organized, money or other things of tangible value which are invested in or contributed to the enterprise by the organizers are known as capital. Such capital is evidenced by proportionate shares of value denominated capital stock. As a matter of convenience this stock is divided into equal parts, usually of \$100 each, termed "shares of stock." The total amount of stock which may be issued is fixed by the certificate of incorporation of the company. To evidence the ownership of these shares, certificates of stock are issued to holders in amounts equal to the number of shares owned. These certificates specify the number of shares owned, the par value, and certain other facts, as for instance, whether the stock is common or preferred, assessable, full-paid or not. Generally speaking, there are two classes of stock, "common" and "preferred," and the usual relation that each bears to the other is indicated by their respective names.

COMMON STOCK.—The control or management of a corporation, as a general rule, vests in the ownership of common stock. Ordinarily the possession of a share of common stock entitles the registered holder thereof to a vote at annual and special meetings of the corporation for the legally constituted representatives of the stockholders in the management of the affairs of the corporation. Such representatives are usually termed directors, and hold their authority by reason of a preference expressed for them by the owners of a majority in shares of the

common stock of the corporation. Directors, when elected and during their term of office, have well defined rights and powers as to the determination of corporate policy and the appointment of executive officers, but being compelled at definite times to relinquish office, are subject to the owners of a majority number of shares of common stock. The right of common stockholders to have a voice in determining corporate policy usually makes common stock more eagerly sought for in open market and renders unnecessary the payment of large dividends. Ordinarily the amount of dividends paid upon common stock is less in amount than that paid upon preferred stock. In some instances, however, common stock dividends exceed in amount those of preferred stock. In some great corporations, such as the Pennsylvania Railroad Company, common is the only class of stock issued, while in the Great Northern Railway Company preferred alone is outstanding. The rights of common stockholders are very minutely defined by law and very zealously protected by courts. Except where otherwise determined by charter or contract provision, the ultimate rights of common and preferred stock in a liquidation of corporate assets are similar.

PREFERRED STOCK.—Ordinarily preferred stock has no voting power, and is therefore not of value in determining corporate policy. Preferred stock is primarily an investment stock, and is issued in such form and with such preferences as to assets and dividends, over common stock, as to cause its

ready absorption by the purchasing public, and is thus a means of providing funds for corporate extension and development. The rates of dividends are usually fixed in amount and unearned dividends are usually made cumulative. By cumulative dividends are meant those dividends which, if not paid one year, must be paid in some succeeding year, at the fixed rate provided for, together with all dividends which have subsequently accrued. Oftentimes a minimum rate of dividend is fixed with a provision for an increase in proportion to and in common with the rate of dividend declared on an outstanding issue of common stock. Preferred stock is usually preferred as to assets in corporate liquidation over common stock. In case of failure to pay the fixed rate of dividend for a stated period of time, the right of holders of shares of preferred stock to vote, and of a determined number of shares to control corporate policy until resumption of dividends, is often accorded in an indenture providing the terms under which the stock is issued. Preferred stock has of late years more largely assumed the nature of a preferred investment, and sinking funds derived from earnings have been created for the redemption of preferred stock in definite annual amounts at a fixed price or such lower price as may be determined by open market purchases.

FULL PAID STOCK,—When a corporation has received, either in cash or other value permitted by law, the full face of stock, such stock is known as "full paid," and that fact is so indicated on the certificates. If not full paid, the holder may be held liable for the

unpaid portion, unless it is expressly stipulated by agreement that the share may be sold for less than its face value with the understanding that it may be considered full paid. When a corporation has not received its full value for stock which has been issued, always excepting a reasonable deduction for marketing expense, such stock is known as "watered stock." This term as usually employed applies to stock which has been issued in payment for property or services which have been given a value in excess of their true worth, or which represent expected future value.

TREASURY STOCK.—"Treasury stock" is capital stock which has been authorized and issued, but instead of being sold or disposed of to the public, is held in the treasury indefinitely; or which, having been outstanding in the hands of the public, has been re-purchased by the company and not cancelled. Such stock is carried in the balance sheet as an asset of the company, but it cannot be represented by a vote in the meetings of the company, nor does it ordinarily draw dividends.

CERTIFICATES OF STOCK.—A "certificate of stock" to be legal must be signed by the authorized officials of the company and sealed with the corporate seal. It must also specify the number of shares represented and must bear the name of the registered stockholder. The certificate of stock is not capital, but merely the evidence of ownership of capital. Stock certificates of a corporation are usually kept in the custody of a proper official, generally the secretary, and bound in a volume with a stub for recording each

certificate issued. This stub bears the essential facts concerning the certificate. If the certificate is canceled it must be returned to the company and is attached to its original stub. Certificates of stock may be transferred the same as any other evidence of ownership, but the voting power of such new stock is not transferred until a record of such transfer has been made on the books of the company.

VOTING TRUST CERTIFICATES.—In the modern development of corporate finance an instrument of practical value has come into wide use. It is termed the "voting trust." The voting trust is an agreement whereby the holders of the common or other controlling stock of a corporation agree to relinguish for a definite period their rights of control in corporate affairs to one or more individuals, called voting trustees, who during the life of the agreement act for them in the administration of corporate affairs, electing directors and performing the ordinary functions of stockholders. A voting trust is usually the corollary of internal dissension or financial reorganization, and is used to insure the restoration of confidence or the protection of money advanced to restore the credit standing of the corporation involved. Voting trust certificates have the attributes of stock certificates and are assigned and transferred in similar ways.

SHARES WITHOUT PAR VALUE.—It has long been customary to issue stock of a fixed par value, usually \$100, the same having no relation to the intrinsic value of the shares or to their selling price.

In new companies, stock of fixed par value has sometimes been sold at one-tenth of that value, such transactions indicating depreciation in the value of the stock or the fictitious nature of the par value. In the last analysis, a share of stock is a certificate of ownership of a specific part of a business. The precise value of such specific part is determined by an inventory and a financial statement. The par value has no bearing upon its actual value, except in so far as it represents a fixed unit of proportional ownership. market price of a share of stock is dependent, in large measure, upon supply and demand, irrespective of the intrinsic value disclosed by the corporate books. To actually fix the true value of a share of stock and to prevent as far as is possible the issuance of stock having a value fictitious, and not intrinsic, confusing in public service corporations the relation which rates and earnings should bear to actual capital investment. the certificate of stock having a par value has been abandoned in some States and certificates bearing proportionate value issued in place thereof. Such certificates are accorded a face value of the actual original amount paid therefor, values being determined by the proportion of value which each certificate bears to the actual capital value of the corporate enterprise.

TRANSFER OF STOCKS.—On one side of a certificate of stock there is a blank form of assignment and power of attorney to transfer, which may be filled out by the owner when the stock is delivered to another person, with the name of such person, or may be signed in blank and delivered. In most States

stock so transferred carries full legal title, although in a few States registry must be made on the books of the company, to protect the transferee against the claims of a subsequent attaching creditor of the transferor who, serving a writ of attachment upon the company while the stock remains registered in the name of the transferor, will acquire superior rights to the prior unrecorded transferee. Furthermore, the transfer of a certificate of stock is not complete so far as the company is concerned until the transfer is recorded on its books. Prior to that time the transferee would have no voice in the management of the affairs of the company and the latter would be protected in paying dividends to the former owner who would still appear as owner of record. A further point to be observed by purchasers or lenders of money upon shares of stock is whether the stock is subject to any lien of the company for indebtedness of the transferor. The laws on this subject in different States vary greatly; in some States the company cannot acquire such a lien while in other States the company is given a lien or right to refuse transfer until the indebtedness of the owner of record is satisfied. This right of lien is sometimes expressly given by statute and sometimes created in other ways.

STOCK TRANSFER AGENTS.—With the development of large business through corporate means, most of the larger corporations find it expedient—in fact quite necessary—to appoint a "transfer agent," who exercises entire supervision of the issue and transfer of their stock; and because of the predomi-

nance of New York City as a stock market, a very large percentage of such agents are located in that city. These transfer agents are usually banks or trust companies, by whose selection the corporation is assured of responsibility, reliability and accuracy, all of which are essential. Indeed so thoroughly precise must the transfer agent be that occasionally he is accused of being unnecessarily technical. The reason for the exercise of such extreme care may be found in the following extract from the court decision in a recent case involving the transfer of securities: "It is the duty of such a corporation, before making such a transfer, to be satisfied of the genuineness of the power presented. In so doing, it must act on its own responsibility and incur its own risk of being misled by forgery or fraud, and it is no answer to a claim put forward by the true owner that the company acted in good faith upon what it supposed to be genuine authority, and without negligence."

Bonds and Their Classification

WHAT BONDS ARE.—A bond is a contract between one party desiring funds and another party having funds to invest. It is a promise by the borrower to pay to the lender at a definite future time with interest a certain sum of money. The proper classification of bonds is diffcult owing to their multiplicity and the ingenuity displayed in inventing new kinds and new names. Bonds may be classified according to (1) the character of the obligor, (2) the purpose or function of issue, (3) the

character of security, (4) the conditions of payment of principal, (5) the conditions of payment of interest, (6) the methods of transfer.

CLASSIFICATION ACCORDING TO CHAR-ACTER OF OBLIGOR.—In accordance with the character of the obligor bonds are classified as "government bonds" and "corporation bonds." The term "government bonds" is used in a broad sense to include not only the bonds of sovereign States, but also those of administrative and civic sub-divisions of such States. In addition to Liberty Bonds and all other bond issues of the United States and its dependencies and of the various States, the term would also cover the class of obligations known as municipal bonds, which, in a strict sense, consist only of obligations of incorporated cities and towns, but which, in the broader and more generally used application of the term, include, in addition, the bonds of counties, villages, parishes, townships, boroughs, precincts and tax districts. The term corporation bonds covers practically all bonds outstanding other than governmental issues. As many different classes of corporation bonds may be made as there are classes of corporations; three main sub-divisions are commonly made, however, viz.: railroad bonds, public utility bonds, and bonds of industrial and miscellaneous companies. Under the name of public utility bonds come obligations which are issued by street and interurban railways, gas companies, electric light companies, power companies, telephone companies, and water companies.

CLASSIFICATION ACCORDING TO PUR-POSE OF ISSUE.—Among the bonds which derive their titles from the purpose of issue, are adjustment bonds, income bonds, construction, equipment trust, extension, improvement, purchase money, refunding and terminal bonds. "Adjustment bonds" are issued to enable a company to adjust its finances or for the purpose of adjusting the interests of two or more corporations. "Income bonds" are general obligations ranking in lien after all specifically secured bonds, the interest on which is payable only when earned as income, and in the amount determined by the directors. "Construction bonds," as their name implies, are for the purpose of erecting new buildings, or in the case of a railroad, new trackage, and as a rule are secured by a first mortgage on the property. A progressive railroad is under constant necessity of increasing its equipment, and therefore "equipment trust bonds," or notes, are issued, and the money thus raised is used for this purpose. Such bonds are secured by the equipment purchased. "Extension bonds" are issued primarily for the purpose of extending the main line of a railroad from one point to another. "Improvement bonds" are issued for the purpose of repairs and improvement on a property. These, in the case of a railroad, may include buildings, stations, trackage, rights of way, and switch yards. "Purchase money bonds" are those which are used as part consideration in the purchase of properties. "Refunding bonds" are issued for the purpose of procuring funds which shall be used in retiring outstanding issues of bonds. Sometimes this is done to secure a lower interest rate and sometimes in order to take care of maturing obligations. "Terminal bonds" are usually issued by subsidiary companies organized to hold title to terminal stations and properties for one or more railroad companies.

CLASSIFICATION ACCORDING TO CHAR-ACTER OF SECURITY.—Based on their security. bonds are divided into two classes, "unsecured" and "secured"; the former being merely simple promises to pay, while the latter are promises to pay, reinforced by pledge of property. It must not be thought that "unsecured" bonds are less safe than "secured" bonds. The obligor issuing unsecured bonds often has such high credit that it is quite unnecessary to ask for pledge of specific assets. Federal Government, State and municipal bonds, while secured by legislative lien on tax revenues, are generally termed unsecured bonds. They are unsecured because accompanied by no collateral contract, such as is the case with the majority of railroad, public utility and industrial bonds. "Unsecured bonds" have also been issued to some extent by corporations. Such bonds are known in this country for the most part as debentures. Although debentures are not secured by pledge of property, it is usually provided that if any subsequent mortgage debt is issued, the debentures shall be equally secured by the same mortgage. "Secured bonds" include such as have back of them actual value, which may be obtained by the bondholder through legal action in case of default in payment of

the bonds. This actual value is in the nature of a lien either on personal property or on realty (or on both). Those bonds which have a lien on personalty consisting of bonds, notes, stocks, etc., are called collateral trust bonds. Another class of bonds secured upon personalty are the equipment trust bonds, secured as they are by a lien on railway rolling stock—which has been adjudged personalty under the laws of most of the States of the Union. Among the various kinds of secured bonds may be mentioned "land grant bonds," the security for which is a mortgage on the lands involved; "real estate railroad bonds," secured by a mortgage on real property not actually used in the operation of the road; "sinking fund bonds," secured by a fund created by a contract which is usually in the hands of a disinterested trustee; "prior lien," "first," "second," "third" and "general" mortgage bonds, the security for which is indicated by their titles. It will not do to rely too much on the name of the issue, for often such names are misnomers, and more frequently are they devoid of any connotation which would give accurately the lien of the bonds so named.

CLASSIFICATION ACCORDING TO MATURITY OF PRINCIPAL.—According to maturity of principal, bonds may be classified as "straight" when the whole issue matures at a fixed date in the future; "perpetual" when there is no fixed maturity date; and "serial" when the maturities of an issue are distributed over a period of years. A hybrid fourth class may be mentioned, namely, "sinking fund" bonds, which, while maturing at a fixed date are to

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be partially retired before that date through the operation of a sinking fund. The great majority of American bonds are "straight" bonds; serial bonds are a less important class; while perpetual bonds are almost unknown. In foreign countries, however, government bonds are frequently perpetual. The principle of serial maturity is most often made use of in connection with equipment trust issues. It is provided in many cases that bonds may be paid before maturity at the option of the obligor; in other words, the bonds are made "redeemable" or "callable." Usually the right of redemption may be exercised by the payment of a premium above par, but this is not always true for municipal issues are commonly redeemable at par. Corporations place redemption features in their bond issues partly because of the possibility that they may be able to refund their funded debt on a lower interest basis some time in the future, and partly to preserve a flexible corporate structure so as to facilitate consolidation, etc. Perhaps consideration may be given to convertible bonds most appropriately at this point. Convertible bonds are those to which has been given the privilege of conversion into some junior security -usually the stock-of the issuing corporation. The conversion privilege is usually good only during a part of the life of the bond. The possibility of a speculative gain is the added attraction offered to investors through convertible issues. Advantage accrues to a corporation which has an issue of bonds converted into stock as that reduces its bonded debt and fixed charges. Debenture issues often are made convertible.

CLASSIFICATION ACCORDING TO PAY-MENT OF INTEREST.—On most bonds, the payment of interest is unconditional, i. e., if any interest installment is not paid, the issue goes into default. In the case of income bonds, however, interest does not have to be paid if it is not earned by the obligor. Usually it is provided that if any substantial part of the interest on an income-bond issue is earned in any year, it must be paid. If all unpaid interest on an issue is made payable out of the earnings of future years, the issue is cumulative; if not, it is non-cumulative. Income bonds are largely a product of reorganizations, resulting from the necessity of reducing fixed interest charges for the reorganized corporations.

CLASSIFICATION ACCORDING TO METHODS OF TRANSFER.—On this basis there are three classes: coupon bonds, registered bonds and coupon bonds registered as to principal. Coupon bonds are payable to bearer and are transferable by mere physical delivery. This class of bonds derives its name from the attached coupons, which are in effect a series of promissory notes, one maturing on each interest date. Interest is collected by detaching the coupons and sending them to the obligor or its interest-paying agent. The ownership of registered bonds is evidenced by registration in the transfer office of the obligor; transfer of title is accomplished only by endorsement on the back of the bond. Holders of registered bonds receive their interest in the form of checks from the obligor. Coupon bonds registered as to principal are, as the name implies, bonds

which, although registered as far as principal is concerned, have coupons attached thereto which pass by delivery and are payable to bearer. The mortgage under which bonds are issued specifies what classes are to be issued, and whether or not the various classes are to be interchangeable. Greater safety is the advantage to be gained by registration, for in case of loss or theft, payment of principal and interest can be stopped. The disadvantages of registration lie in expense and inconvenience in making transfers, lower market price and greater difficulty in hypothecation.

MUNICIPAL BONDS.—Broadly speaking, any bond issued by the general government or any subdivision of the general government, such as State, county or city, is a "municipal" bond, but in the general acceptation of the term a "municipal" bond is one issued by a county, city or town, for the purpose of providing funds for public works or improvements therein. Such bonds may be issued for the erection of a schoolhouse, and be known as "school bonds," but must be paid by taxes levied upon the people in the municipality or school district issuing the same. Bonds for street improvement, sewers, waterworks, or drainage, issued by a municipality or a subdivision thereof, come under the heading of "municipal bonds," and their payment is provided for in the same way. In considering municipal bonds as an investment, the first and fundamental consideration is that of legality. It has sometimes happened, even after all legal phases of an issue have been carefully scrutinized by capable lawyers, that some hidden point has been discovered which has invalidated the entire issue. Generally speaking, a municipal bond issue, in order to be legal, must be in accordance with the constitution of the United States and must be authorized by the constitution and statutes of the State in which the municipality is located. Strict compliance with all terms of statutes is absolutely necessary. After the legality of a municipal bond issue has been established, the investor should assure himself that there is a sufficient amount of taxable property within the district to insure the payment of the interest and principal of the bonds. He should satisfy himself also as to the financial record of the municipality. The serial municipal bond is gradually displacing the long term bond of fixed existence, and the sinking fund bond, and is in accord with soundest principles of municipal finance.

RAILROAD BONDS.—The railroads are the highways of the nation and are absolutely necessary to its development. The properly issued and well secured bonds of well managed and honestly financed railroads are premier corporate securities. The classifications of railroad securities are most numerous, and are the result of methods used in obtaining great sums of money demanded by rapid development. "General mortgage bonds," last in lien when originally issued, have become first mortgages on a majority in mileage of main line track, and first mortgage bonds may be a lien on a limited mileage of secondary trackage. Discrimination and careful

investigation are essential to safety, and the last mortgage on a well established line is often better security than a first mortgage on a newer road, or one serving an undeveloped territory. Outstanding bonds should bear a conservative ratio to mileage. The value of bonds, in the last analysis, rests upon the earning power of the railroad. Principal and interest can only be met when net earnings are ample, and railroad credit vanishes in increasing ratio as net earnings decrease. The total annual bond interest charge of a railroad should not exceed one-half of the annual net earnings. When net earnings are not in proportion of two to one to interest charges on outstanding bonds, care should be exercised. The interest charges on outstanding bonds must be met when due or default occurs and foreclosure follows. Such is not the case with dividends on capital stock. Dividends are payable only when earned and with the consent of the board of directors. Dividends are not usually fixed charges against earnings. Therefore the well financed railroad has a larger amount of outstanding capital stock than outstanding bonds. Conservative financing is reaching a critical point when the proportion of outstanding bonds to capital stock exceeds one-half. The railroad is then in a position where it is compelled to pay too high a price for its money, which, if long continued, weakens its resources and causes collapse. In estimating the security of railroad bonds, give careful study to the territory served by the road, its history, population, resources and capacity for development.

PUBLIC UTILITY BONDS.—Public utility corporations are now well established, and their securities are considered prime investments. Recent legislation in the various States has been favorable to the stability of public utility enterprises. Public utility commissions insure steady earnings and prevent reckless and disastrous competition. The extension of the use of electricity, gas and the telephone, is in its infancy. Public utility earnings have shown a steady increase, and will undoubtedly continue to do so for some further period of time. Bonds issued by public utility companies are approved by public utility commissions, and in most States can only be issued for the actual cost, determined by investigation, of the property upon which the bonds are a lien. High grade public utility bonds bear a higher rate of interest, and usually sell at a lower price than railroad bonds of equal grade, thus insuring a larger interest return. Statistics show that for a period of years, public utility earnings have exhibited a steady increase in volume, irrespective of prosperity or depression. Gas, electricity and the telephone are no longer luxuries, but necessities, and with increasing population and cheapness of service, the public utility corporation is benefiting. Electric street and interurban railroads, though carriers of passengers and freight, are usually termed public utility corporations. Their condition is not as a rule as favorable as that of other public utilities, on account of the greater expense entailed in carrying on their functions, and because they are in most cases subject to the legisla-

tive action of common councils in cities, regarding terms of franchise and regulation of service. In some States, however, the indeterminate franchise, practically eliminating competition and placing rate making under the control of a State public utility commission, has displaced the franchise, to the benefit of the corporation. The investment restrictions applying to the bonds of public utility corporations as to security, proportion of net earnings to interest charges, ratio of capital stock to bonded debt, outstanding bonds per mile in the case of railways, territory and population served, are similar to those applying to steam railroads. It should be noted, however, that most public utility corporations operate under a franchise limited as to time, and care should be taken to ascertain that the franchise does not expire during the life of the outstanding bonds.

INDUSTRIAL BONDS.—With the great development of industrial corporations insuring, as such growth does, enlarging fields for the sale of goods and their manufacture at lowest cost, the command of inventive genius to overcome the advantages gained by the inventions of others, the control of the production of raw materials, and diversity of output, the financing of their credit needs by bond issues has become recognized as a conservative method of finance. Industrial corporations always contend, however, with different problems than do most other forms of enterprise, and in a large measure their business, although a fundamental one, sometimes involves risks approaching the classification of hazardous. Bond

issues of such type are to receive different consideration than others. Good will and patent rights must be carefully considered. A going plant may have large cash value, but the salvage worth of such a plant is small. If the management is not progressive, competition may soon eliminate its goods from the market. The supply of raw materials must not be entirely dependent upon the good will of others, nor must it be so far removed from the place of manufacture as to work a disadvantage in competition. The quick assets of the corporation must be carefully investigated and analyzed, and the proportion of net quick assets to outstanding bonds should be a fixed one, and always maintained. Industrial bonds should mature at an early period, and should have a sinking fund provision, or preferably should be serial in maturity. The proportion of net earnings to interest charges should be larger than in the case of railroads and public utility corporations, on account of the rapid changes which take place in business conditions. A first mortgage bond of the United States Steel Corporation is undoubtedly good, but it cannot be placed in a similar class or be used for similar investment purposes, as the first mortgage bond of the Pennsylvania Railroad Company.

EQUIPMENT BONDS.—By reason of an unusual record of stability and safety, continuously extending over a long period of years, "equipment bonds" or "car trusts" deserve consideration as investments of the highest type. Equipment bonds issued upon the security of rolling stock, including locomo-

tives, are in large measure preferred liens upon the income of the issuing corporation, for a continuance of earnings depends upon the use of rolling stock, and a default in equipment bonds would deprive the corporation of its chief means of revenue. In times of receivership, courts have ordered the payment of interest and principal due upon equipment bonds in preference to other obligations, and for a long period of years there has been no default in equipment obligations. Equipment bonds or notes are issued under what is legally a lease or an agreement of conditional sale. These agreements are usually recorded in the States in which the corporation operates, and are not cancelled until payment in accordance with their terms is fully made. The Philadelphia plan of equipment trust provides for the creation of an equipment trust by agreement between a trust company, one or more designated individuals, and the corporation. The equipment is purchased by the equipment trust and leased by the trustee to the corporation, at a rental sufficient in amount to meet the principal and interest of the equipment bonds or notes when due. Such bonds or notes are guaranteed by the corporation.

TIMBER BONDS.—The issuance of "timber bonds" is a comparatively recent development in finance. A great amount of these bonds in par value has been absorbed by banks and the investing public. Timber, standing, and of good quality, is an asset which as time passes will increase in value. Timber as security for a bond issue has been likened to land. The

analogy is not a correct one. A part is never equal to the whole. Land is a fundamental value. Timber is not. Standing timber is ordinarily not insurable. The fire hazard is therefore of first importance. Timber bonds have usually been issued for a fixed period of time of long duration. Provision has been made for a sinking fund of a certain percentage in money of the amount in feet of timber cut. Failure to provide this sinking fund is a default in the provisions of the mortgage. To prevent such default timber has been cut when the market was so low in price as to cause inevitable loss. Such loss exhausted the resources of the company obligated on the bonds, and in some cases resulted in receivership. The sinking fund in timber bond issues is not sound, and should be displaced by the serial bond issue. The timber business is not a stable one, and timber bonds are oftentimes classed as hazardous investments. The rate of interest paid on such bonds would seem to indicate that they are so considered. In many timber bond issues the security of the issue consists largely of other assets than standing timber, such as saw mills, pulp mills and paper mills. The bonds may also bear an endorsement worth considerably in excess of the debt guaranteed.

DRAINAGE AND RECLAMATION BONDS.

—For the purpose of reclaiming fertile land, a large part of the time under water, political subdivisions designated as "drainage districts" have been created under constitutional authority, with power to issue bonds and to assess and levy taxes against real proper-

ty for their payment, together with the interest thereon accrued. Various methods are used in carrying out this purpose and in providing for tax levies. In some districts taxes are levied by county authorities, in others by judicial officers. This type of bond often is little more than a special assessment bond against benefited property, and its ultimate payment is secured by the value of the property, and not by a general tax levy. "Reclamation bonds" are similar in purpose and form, and are issued for the redemption of arid lands, through the use of water. Where municipal districts are created for this purpose they are similar to drainage districts in form and powers granted. Corporations have endeavored to reclaim arid lands through funds provided by bond issues, but the problems involved have been so intricate and vast that disaster in most instances has been the result.

Bond Issuance

BONDS AND NOTES.—Bonds have been described as a species of promissory note, being a promise to pay a certain sum at a definite time with interest at a fixed rate. The main distinctions between bonds and promissory notes have to do largely with proportions. The maker of a promissory note, the promisor, may be an individual, a partnership or at times a corporation. The maker of a bond, or the obligor, is a government, a State or municipality, or a corporation; seldom an individual. The amount of the promissory note, limited largely by the loaning capacity of a bank, is usually less than one hundred thousand dol-

lars. The amount of a bond issue is usually a matter of millions, split up into segments that it may be absorbed by the investing public. The promissory note is for a period of months, the bond is due after a period of decades. It will be of interest to trace briefly the process in finance through which bonds are issued, taking for an example the bonds of a large corporation making steel rails.

PROCEDURE IN ISSUING BONDS.—There would probably be three or four plants of such a company in operation, each located conveniently near its supply of fuel and raw products. In the course of time, owing to the development of a certain section of the country, conditions might arise that would put the business of one of these plants on a much more profitable basis if it could increase its share of the output, a result only to be attained through the erection of several new buildings and the installation of costly machinery. To do this would require at least \$2.500,-000. The company, therefore, decides to issue that amount in bonds secured by a first mortgage on another part of the property. A special meeting of the stockholders is held and the whole matter is laid before them. A large majority of the stockholders, having full confidence in the officers of the corporation, will, of course, send their proxies, so that the meeting, perhaps, will be but little larger than an ordinary directors' meeting. At that time it is decided how long the bonds shall run, what the rate ought to be, and what particular part of the property shall be mortgaged as security for the issue. It will be shown

that although the interest on the new bonds will add to the fixed expenses, yet the increased manufacturing facilities will largely add to the profits and perhaps reduce very materially the amount of money which must be borrowed from time to time on shortterm notes.

BOND UNDERWRITING SYNDICATES.— The next step is to find a banking house that will offer the best price for the entire issue; that is, advance the money to the corporation, or "underwrite" the bonds. (The word"underwrite" arose from the custom adopted by merchants, in the days prior to the organization of insurance companies, of agreeing among themselves to become liable for losses sustained by any of their number. It was usual to reduce this agreement to writing and naturally the parties to the agreement wrote their names under it and consequently became "underwriters" or insurers.) A price is finally agreed upon and the bankers take over the issue, say at 90; that is, they advance to the corporation \$2,250,000. In the meantime, a trust company has agreed to act as trustee of the mortgage securing the bonds, receiving a fee in payment for the service, and also probably being appointed as a depository for the payment of the interest on the bonds as it falls due. A registrar will also have been appointed.

BOND SELLING SYNDICATES. — Having received the issue of bonds and advanced the money to the corporation, the banking house will now undertake to dispose of them at a fair profit, not, however, directly to the public. A syndicate will be formed

among several banking and bond houses, each of which will take an allotment at a certain price. These, in turn, act as distributing agents, and through their salesmen and letters to regular clients, the issue is finally taken up by the public. In buying the bonds, the ultimate purchasers are largely influenced by the reputation of the banking firm, since the bank's position is in the nature of an intermediary between the corporation and the public. The net result is that the corporation has borrowed from the general public in small lots the sum of money needed for its purposes.

STOCK EXCHANGES.—Many of the larger cities in all countries have found it necessary to organize stock exchanges for the purpose of facilitating the buying and selling of the enormous quantity of corporate stocks and bonds which now exist. These exchanges are but the evolution of a common meeting place, such as the old coffee houses, bank corridors, or certain street corners, where it originally was the custom of those who dealt in government or other securities to congregate. A survivor of the old stock exchange localities is the modern "curb market," where are sold, in the open air, those stocks and bonds which have not been listed on any regular exchange. The curb market in New York City is probably the most important one of its kind in the United States. Its operations are conducted in Broad Street.

SERVICE OF STOCK EXCHANGES.—The Stock Exchange gives to good stocks and bonds a ready market and a known price. Without these two features, bonds would lose their value entirely as a

temporary investment for the idle funds of a bank. It is the ease with which they may be converted into cash that makes bonds useful as "secondary reserve." Stock Exchange prices go over the "ticker" and are published in the newspapers in every town of importance in the world. Thus it is possible to keep in touch with the market value of securities far from the centres in which they are dealt, and the radius of their usefulness as collateral for bank loans is greatly widened. Since stocks in financial institutions are not as a rule traded in very generally on any of the great stock exchanges, this class of stocks does not figure as prominently in the daily quotations as do railroads and industrials. Nevertheless, the total of bank stocks in the United States compares very favorably with the totals of the other kinds. And in spite of the fact that the personal element enters into a consideration of bank stocks probably more than in any other, it must be admitted that, judged by the ordinary elements of strength, these are quite as attractive as any other kind. The ease which the Stock Exchange affords for the purchase and sale of securities which, on account of economic causes, are subject to fluctuations, has made it a centre for speculation as well as investment. Authorities find it hard to agree as to what extent these two terms may or may not be synonymous.

GOVERNMENT OF STOCK EXCHANGES.

—The government of the Exchange is vested in a committee consisting of a president and other officers, together with a number of members. This governing

committee has power to draft rules for the conduct of business and is the administrative body. In addition, there may be several other committees, for example the committee on stock list, which, after investigation along prescribed lines, has authority to list stocks on the Exchange. The members of the Exchange have "seats," which term means the privilege to conduct business on the "floor." This is the large open space where the brokers congregate. At intervals are posts which designate the particular stock which may be bought or sold there. This system is one of wheels within a wheel and makes it unnecessary for a broker to search about the room for a purchaser when he wishes to sell or buy a certain stock. Sales are made practically at auction; that is, the seller asking for a price and the buyers bidding usually a little below. As sales are effected, memorandum notes are made by both parties, which are checked up at the end of the day. In the larger stock exchanges, settlement is made through the stock exchange clearing house for the more active stocks. This mechanism operates similarly to the ordinary bank clearing house for the exchange of checks. Well-known active stocks are usually listed on several stock exchanges and this fact has led to what is known as the "arbitrage" business; that is, the purchase of stocks in one city, London, for example, where for some local reason prices may be low, the stocks being then resold at a higher price in New York.

FINANCIAL TERMS.—There are many terms common to stock exchanges, a few of which, although

in everyday use, are not generally understood by the public. Such are the following:

"Bear"—One who is interested in having the prices of one or more securities decline.

"Bull"—One who wants prices to advance.

When a broker has bought more of a certain stock than he has contracts to deliver, he is said to be "long" of that stock. Selling "short" means selling, or contracting to deliver, stock that the broker does not own. A "short interest" is a group that expects to buy stocks after a fall in prices. If instead prices have advances, such brokers incur a loss.

Another expression in common use, but not clearly understood, is the term "watered stock." Such stock is, of course, in disrepute, and means that a larger issue of stock has been sold to investors than is represented by the actual value of corporate property. This is not to be confused with over-capitalization, which means a larger capital has been subscribed than is necessary to conduct the business on an interest or dividend-paying basis.

BANKS AND STOCK EXCHANGES.—For the purpose of buying and selling stocks and bonds, the broker requires a vast amount of money, since the purchaser may not settle until the securities are actually delivered or transferred. This money is advanced by the banks on collateral by what is known as "call" or "demand" loans. The bank is privileged to ask payment for such loans on short notice, although custom has decreed that a sufficient time must be given the borrower to make a readjustment.

Demand loans sometimes run for long periods of time, the interest being paid at certain intervals at varying rates.

ELEMENTS OF SECURITY.—The elements of security in stocks and bonds have been tersely formulated by Rufus Waples of Philadelphia in the following rules:

- (1) Minimum liability of loss is secured in the class of bonds authorized for the investment of trust funds by such a State as New York.
- (2) No reasonable likelihood of loss is incurred in buying bonds that are legally issued and are a valid and binding obligation on all the taxable property of a city of over 10,000 population, when it is a long settled community and has many diversified sources of revenue, with a debt of about 5% of the assessed valuation or less. Smaller cities are more apt to be negligent at times in paying obligations at the date due.
- (3) There is a very strong presumption of safety in bonds of dividend paying transportation companies enjoying right of eminent domain and on those of public utility corporations (railroads, street railways, gas, water works, etc.), when satisfactory earnings have been maintained for several years; when the amount of bonds authorized is properly limited; when charter and franchise or physical or other conditions offer a large measure of protection from competition; and when the franchise will survive the maturity of the bonds for a satisfactory period.
- (4) There is a fair presumption that interest on an industrial bond will be earned and bond paid at

maturity, if the permanent, available assets (land and buildings of a general character and property that cannot be diverted or seriously depreciated) offer foreclosure value sufficiently in excess both of the bond issue and of all practicable depreciation, and if the surplus earnings provide an adequate sinking fund for the retirement of bonds.

- (5) The probabilities strongly favor regular dividends on a conservative issue of preferred stock when a much larger issue of common stock has long earned dividends and surplus, and when commercial fluctuations cannot seriously unsettle the average net business profit.
- (6) There is a good business chance that common stock will maintain the average earnings of the past ten years if the business is essentially of a permanent nature; and if the managers who built up the business are in the prime of life, and have accumulated large resources as surplus earnings of said business; and if they retain both the active management and their own interest in the business.

TEST QUESTIONS.—An investor, when offered full information about a security that is new to him, and that does not at once command his confidence, wishing to know the favorable features, and to discover the points of danger, can, with a little patience, act understandingly by applying certain wellestablished principles, taught by the history of securities, and conveniently made use of as test questions.

(1) Was the bond prepared by the best legal talent, at the instance of experienced bankers, with

the single purpose of affording the greatest protection possible to the bondholders?

- (2) Were all steps taken under honest, capable experts (business, legal, engineering and accounting), and are the records available for examination?
- (3) Is the capitalization conservative? Has the cash cost or probable physical and franchise value been closely approached or exceeded in the authorized bond issue?
- (4) Is the security issued by a company that furnishes all reasonable information to stockholders about its earnings and condition?
- (5) If the security is issued by a company that should prosper greatly by increasing population, is the company's property so situated that local growth in any portion of its territory will benefit it?
- (6) Are the bonds and stock owned in good part by men of financial strength whose self-interest would lead them at all times to consider the welfare of the company?
- (7) If foreclosure became necessary, would a creditor or bondholder be satisfied to become part proprietor or property owner, on account of the great value of the pledged property?
- (8) Has the management ably, conservatively and conscientiously worked out developments for the good of the company?
- (9) Are the employees contented, amenable to discipline and working harmoniously with the management?
 - (10) Has the earning power back of this secur-

ity a broad dependence upon the patronage of many customers well able to pay for service or goods?

- (11) Is the earning power of the company fairly well protected from injurious competition and likely to continue so, with a growing population to serve or trade to rely upon?
- (12) Is the earning power of the company dependent upon the patronage of hoped-for customers, or upon sub-companies organized to supply a demand? Does it seem likely that profits are only a future matter—to be reached in "due process of time"?
- (13) Does the earning power depend upon any expectation of unfair advantage over competitors, such as reliance on a degree of official favoritism that seems attractive to some men, though it cannot permanently aid a true investment bond or stock?
- (14) Are the conditions of earning power growing unfavorable from (a) Insufficient capital? (b) Increasing cost of operation? (c) Increasing demands of employees, or strikes? (d) Substitution by competitors of new methods or materials for old? (e) Depletion of products of mines or quarries? (f) Depletion of products of forests? (g) Depletion of products of agriculture? (h) Loss of population? (i) Increasing cost of service or distance of deliveries? (j) Increasing cost of securing raw materials or fuel? (k) Obsolete equipment or superior equipment of business competitors? (l) Loss of tariff advantage? (m) Loss of skill or prestige in management? (n) New or improved or shorter competing railway lines? (o) Larg-

er tonnage in competing steamship lines? (p) New rival methods of doing business?

- (15) Is the price asked for the bond or stock much greater or less than the usual quotation?
- (16) Has the security been quoted higher or lower in price because of some influence afterward withdrawn? (Learn if there have been purchases by a sinking fund, expectation that the issue would be bought in and retired, accumulation in view of acquiring voting control, or supposed important advantage or disadvantage arising from new connections, discoveries, trade expansion or loss, etc., and learn exact facts.)
- (17) Is the bond offered presented as a bargain, at such a price, or with such prospects of peculiar advantage to buyer as to disorganize the investor's critical faculty and hasten him into a purchase in the belief that he is securing great value for much less than it is worth?
- (18) Are the bond buyer and his associates furnishing money for experiments to get 5% if a new enterprise prospers and to bear all the burden if it fails?
- (19) Is the bond issue large enough to secure the best legal talent, if it should be needed to protect the issue, by levying a small percentage upon each bond?
- (20) Are the business affairs of the company conducted on such a scale that a judgment for injury or loss of life would probably be but a small percentage of the net earnings of the company?

- (21) Is the bond issue so large, or complicated, or difficult to understand, that sales of timid holders would be likely to cause great price fluctuations?
- (22) Is the vendor of the security able, in behalf of the bond or stock offered, to give satisfactory replies to all questions above cited that properly apply to it?
- (23) Is the vendor, through responsibility and ample experience, an authority for all statements made by him?
- (24) Have responsible bankers directed the initial and all later steps taken in preparation of this security, bringing an experienced, judicial, business training to bear upon the fullest information, obtained by the most capable experts available?

CHAPTER XI

Systems of Banking

HE principal banking systems of the world are exemplified by the systems of banking existing in the United States, England, France, and Canada. The United States system is described in previous chapters of this text-book and in collateral text literature on the Federal Reserve System. Less than a third of the incorporated banks of the United States are organized under Federal charters, and over two-thirds under State charters. There are very few branch banks in the United States, the privilege of establishing branches being denied to the National banks by the Federal Government, and in the case of State banks, the privilege of establishing branches being either denied by the States or so restricted as to be practically prohibitive in most States. Most American banks are small institutions that serve chiefly their own communities. Aside from the Federal Reserve banks, only National banks have the privilege of issuing notes, and these notes requiring for their issue the pledge of Government bonds bearing low interest rates—a type of bond of which there is a very small amount outstandingare not issued in large amounts. Their privilege of note issue is not of very great importance. There is no single central bank in the United States, but all the National banks and a large number of the State banks and trust companies are affiliated with the Federal Reserve System. This is a system of twelve central banks, each possessing the note issuing privilege, the twelve banks being co-ordinated and controlled by a central agency in Washington, the Federal Reserve Board, which consists entirely of Government appointees. These are the distinguishing features of the United States banking system.

British Banking System

BANK OF ENGLAND.—The hub of the British banking system is the Bank of England—the most famous bank in the world. This bank was founded in 1694 with the primary object of providing funds needed by the British Government in its war with France. The establishment of the bank was due to a suggestion made in 1691 by a Scotchman named William Patterson. As originally passed, under the guise of a tonnage act, the law authorized the subscribers for a perpetual loan of £1,200,000 to form a corporation to be called "The Governor and Company of the Bank of England." Its entire capital of £1,200,000 was loaned to the British Government, from which the bank received an annual return of £100,000, representing interest at 8 per cent and £4,000 to cover the expenses of management. The bank was authorized to issue notes up to the amount it loaned to the Government, and "to deal in bills of exchange, gold or silver bullion, and to sell any wares or merchandise upon which they had advanced money, and which had not been redeemed within three months after the time agreed upon." Its notes at first bore interest. Soon, however, it acquired the right to issue demand notes and to receive deposits. The bank's charter was originally for twelve years. As it has been renewed from time to time the Government has obtained additional privileges from the bank, and the bank has in turn obtained concessions from the Government. The Government's original debt to the bank of £1,200,000 has now grown to be a perpetual non-interest-bearing debt of £11,015,000.

THE PEEL ACT.—England suffered a severe financial crisis between the years 1836 and 1839. At that time there were no restrictions on the amount of notes that could be issued by the Bank of England, although it was expected that the bank would keep at least a 33 1-3 per cent specie reserve against its outstanding bank notes—an expectation that was frequently far from realized. Joint stock banks outside of a radius of sixty-five miles of London, since 1826, had also enjoyed a practically unlimited right of note issue. Small concerns, moreover, having less than six partners, had possessed the right of note issue throughout England since the Act of 1708. Notes had been issued to excess, and many banks had failed, involving the public in heavy losses and much hardship. "Between 1839 and 1843, eighty-two banks, of which twenty-nine were banks of issue, failed; 240 suspended payments between 1814 and 1816, and similar disasters occurred from 1825 to 1840. An epigram by an American writer was frequently quoted at the time to the effect that "free trade in banking is synonymous with free trade in swindling." This situation led to an extensive Parliamentary investigation, and finally to the Bank Act of 1844, known as the Peel Act from the name of its author, Sir Robert Peel, who was then Prime Minister. This act is still the fundamental law of the Bank of England, having undergone little change since 1844.

BANKING PRINCIPLE.—In the controversy preceding the act of 1844 there were two important schools of thought, one the advocates of the so-called "banking principle," and the other the advocates of what was known as the "currency principle." The former looked upon the bank note as essentially a form of bank credit, while the latter looked upon it rather as currency serving as a substitute for specie. Believers in the banking principle maintained "that an over-issue could involve no danger either for the issuing bank or for the public so long as the notes remained convertible, for how could such an overissue take place? First, the notes are issued only in the course of banking transactions, that is, in discounting or making advances on securities. amount of the issue therefore depends, not on the wishes of the bank, but on the needs of the public. The number of notes issued by the bank will depend on the amount of the bills presented for discount and this in its turn will depend on the activity of business. In the second place, bank notes only remain in circulation for a very limited time. Hence, even if the bank managed to issue notes in large quantities, it could not keep them in circulation, for if too many notes were issued they would become depreciated and

the least depreciation would be enough to bring them all back to the bank in a body."

CURRENCY PRINCIPLE.—The advocates of the currency principle began their arguments with the statement that there was a certain quantity of gold in the world, of which part was used for monetary purposes, and that under the forces of demand and supply in international trade each country would receive its proper proportion of this gold. If it should receive too much its price level would rise and its interest rates temporarily decline, with the result that gold, being worth less at home than abroad, would be exported; if, on the other hand, the home country should have less than its natural share of gold, its price level would fall, and gold, being dearer there than elsewhere, would be imported from abroad. Natural forces, they maintained, would always assert themselves, if unrestricted, in the direction of maintaining equilibrium. Suppose now a group of banks are given the note issue privilege, with no restrictions as to the total amount that each may issue. Each bank finds it to its interest to keep out as many notes as possible, because the larger its circulation the larger its profits. There is a profit-stimulated competition among banks to keep in circulation a large amount of notes. To this end discount rates will be kept down. As more notes are issued more money will be available to business men-bankers are also often interested in other lines of business—and a higher price level results. This rise in prices leads to an outward movement of money, and since gold is the only form of

money that can be exported, it is gold that is shipped out. Notes are presented for redemption in gold and the gold is exported. The notes are then re-issued and further gold exports result. This procedure leads to an ever-declining proportion of gold in the total circulation. Notes may continue to be convertible even after the proportion of gold becomes dangerously low, the collapse leading to the ultimate suspension of gold payments coming suddenly. At any rate, the advocates of the currency principle maintained, there is a profit-making motive that in the absence of restrictions on the amount of note issue, will sooner or later deprive a country of its fair share of gold, displace the gold with paper, and finally force the country to an inconvertible paper money basis.

LIMITATION OF RIGHT OF ISSUE. The remedies suggested for such conditions were to remove the profit-making competition in the issue of bank notes by limiting the right of issue to one bank, and to prevent that bank from issuing to excess in the interest of profits, by making the amount of notes it could issue against anything but specie (£ for £) a fixed amount—an amount so low that it would never be in excess of the paper money needs of active circulation. Under no circumstances was the vacuum in the circulation created by the export of specie to be filled by the issue of more uncovered notes. Hence an outward flow of gold would soon so contract the currency as to make it scarce and dear, with resulting higher discount rates and falling prices, that would cause a return flow of gold. There could, therefore, be no such progressive decrease in the proportion of gold in the currency circulation as would take place under a system based on the banking principle. While this reasoning contained a large element of truth, the currency principle if fully adopted would leave no room for an elastic bank note issue to meet seasonal or emergency demands, and would result in an ever-increasing proportion of gold in the total circulation, as all increases in the monetary circulation in response to growing trade needs would be in the form of gold or of notes backed pound for pound by gold. It furthermore ignores the important fact that the circulating media may be expanded and gold thereby forced out of the country as truly by an expansion of bank deposits which circulate through checks as by an expansion of notes. Deposits payable by check were of rapidly growing importance in England at the time of this controversy, but their important bearing on the subject of the controversy was little understood. The advocates of the currency principle won, and the Peel Act of 1844 is an embodiment of that principle.

NOTE ISSUE.—Under the Peel Act the Bank of England was given a monopoly of note issue for the future except for the fact that the seventy-two joint stock banks and 207 private banks issuing notes at the time were permitted to continue their issues at amounts not exceeding a fixed limit. A bank failing or going into voluntary liquidation was not permitted to pass on its note issue privilege to any other joint stock bank or private bank, and a bank merging with

another bank lost the privilege of note issue. The Bank of England was permitted to increase its note issue uncovered by specie to an amount equivalent to two-thirds of the amount at any time given up by Notes of banks other than the these hanks Bank of England are not legal tender and circulate usually only locally. The Bank of England was allowed an initial issue of notes up to the amount of fourteen million pounds uncovered by specie. These notes were issued against securities of which £11,-015,100 represented the balance still due on the Government's old perpetual debt to the bank. It was estimated that this amount of Bank of England notes was an absolute minimum that would always be needed for circulation. Above that fourteen million pounds (and additions that might subsequently be made in accordance with the several provisions mentioned in this paragraph) every note issued had to be backed pound for pound by coin or bullion. Bank of England notes, therefore, except for the practically fixed amount backed by securities, were essentially coin certificates. They absolutely lacked the quality of elasticity, thereby conforming strictly to the theory of the advocates of the currency principle.

ISSUE AND BANK DEPARTMENTS.—The bank was divided into two departments, the issue department and the banking department. These departments are entirely distinct, the issue department being concerned only with the rather mechanical work of issuing notes for coin and bullion, redeeming notes in gold, and of keeping in custody the specie and se-

curities back of the notes. The banking business itself in all its various phases is the function of the banking department. On August 31, 1844, the Peel Act went into effect, and the banking department handed over to the issue department fourteen million pounds in securities, and such coin and bullion as the banking department did not need, amounting to £14,351,295. It received in return from the issue department £28,-351,295 in Bank of England notes, which it treated as a cash asset. The silver in the issue department is not permitted by law to exceed one-fourth of the gold. Since 1844 the amounts of these various items have greatly increased, but the balance sheet in most other respects remains unchanged. It is published weekly in the English and American financial press. August 25, 1920, the total note issue was £139,982,-830, of which £18,450,000 was backed by Government debt and other securities and £121,532,830 by gold coin and bullion.

SECURITY OF NOTES.—Bank of England notes are well secured, and cannot well be issued to excess under existing law. There is no danger that their issue will deplete the country's gold supply. They lack, however, the important quality of elasticity and their circulation cannot be increased or decreased in response to the seasonal demands of trade or easily increased in times of crisis or depression. Four times in the history of the bank (1847, 1857, 1866 and 1914) the British Government has authorized the bank in times of crisis to disregard the law, and meet the emergency by issuing additional notes against

securities, with the understanding that the Government would ask Parliament subsequently to legalize the action. Very few additional notes have been issued under such "suspensions of the Act," the knowledge that they could be issued having been usually sufficient to allay the fears of the public. In 1914 an act was passed authorizing the cabinet to suspend this note issue provision of the Peel Act temporarily in case of emergency. During the war Bank of England notes were well protected, and except for a couple of days in August, 1914, while Treasury notes were being printed, Bank of England notes were not issued in excess of the limits imposed by the Act of 1844. There was in England, however, during the period of the Great War, as in all other belligerent countries, a large amount of inflation, but this took the form of an expansion of bank deposit credit which circulated through checks, and of issues of Government Treasury notes, the so-called currency notes.

LOAN AND DEPOSIT FUNCTION.—Although the issue function of the Bank of England was put in a straight jacket by the Peel Act, the loan and deposit functions were left free. The result is that bank credit in England has developed chiefly in the form of deposits that circulate by check, while in France, where the note-issue function has been practically unrestricted, bank credit has developed chiefly in the form of bank notes. Something like 80 to 90 per cent of the business in England is done by means of checks. The bank note feature of the Bank of

England organization is the most distinctive one. The others may be passed over briefly. The Bank of England, although it does a regular banking business with private patrons, receiving deposits, discounting notes and making collateral loans, is pre-eminently a bankers' bank. In this connection its most important function is that of a holder of bank reserves. Most of the leading banks in England carry little cash in their own vaults, usually only enough for till money for day to day use and much of that is carried in the form of Bank of England notes. The bulk of their reserve consists merely of demand deposits in the Bank of England. The reserve item in their balance sheets usually reads "Cash on hand and in the Bank of England," and there is nothing to show in what proportion those amounts are divided. Settlements between banks are largely made through checks on the bankers' accounts in the Bank of England. Here is the central reserve of coin and bullion for England's banking system. On the loan and discount side, as well as on the deposit side, the Bank of England performs important functions as a banker's bank. The bank is the final recourse for funds in time of need, and stands ready at all times to rediscount at its official rate eligible high grade paper for all its banking customers (including joint stock banks, discount houses, acceptance houses, private banks, etc.), the proceeds of the discounts being passed to the credit of the depositors' accounts and thereby serving them as reserve money. As a matter of fact, in pre-war times it was a rare thing for a joint stock bank to borrow of the Bank of England, but what did take place had the same effect on the money market. The joint stock banks made large loans to discount houses, and when the banks felt a heavy pressure for funds, they called these loans. Discount houses thereupon applied to the Bank of England for discount and collateral loans, and paid off their indebtedness to the joint stock banks by checks against the proceeds of these new loans obtained at the Bank of England These checks on being deposited at the Bank of England by the joint stock banks, built up their reserve in the bank as effectively as a direct rediscount of the paper of the discounting houses would have done. Since the war the joint stock banks have been rediscounting directly at the Bank of England.

CONSERVATOR OF MONEY MARKET .-The Bank of England is also the depository of Government funds and the fiscal agent of the Government, administering the Government's debts, and the receipt, transfer, and disbursement of large sums of Government money. From time to time it makes advances to the Government, and since 1914 has managed for the Government the issue and redemption of the Government's currency notes. In an important sense the Bank of England is the conservator of the English money market. Through changes in its discount rate, and in the price it pays for gold (which according to law cannot be less than £3, 17s, 9d an ounce), and in other ways it protects the money market and exercises an important influence on the importation and exportation of gold. A public trustee

in financial matters, the Bank of England is in fact, although not in name. Its stock is entirely owned by private individuals. There is in control a "court" of twenty-six members, consisting of twenty-four directors, a governor and a deputy governor. Repeated re-election from year to year is the custom. A governor and a deputy governor are elected every two years, the deputy governor usually becoming the next governor. Seniority is a controlling factor in the election of governor and deputy governor. Persons who have once been governor continue on the board of directors and constitute one of the board's most important standing committees, "the Committee of Treasury," which is particularly concerned with the relations between the bank and the Government. The joint stock banks loan extensively to merchants and manufacturers on current accounts, a form of overdraft which may be either secured or unsecured. They discount bills of exchange, make collateral loans, accept bills drawn upon themselves, receive both demand and time deposits, and deal in foreign exchange. The private banks are different from the joint stock banks chiefly in the fact that they are not corporations, but partnerships owned and controlled usually by a few partners. Their functions are essentially the same as those of the joint stock banks. In fact many of the joint stock banks started as private banks, while of course many private banks have been absorbed by joint stock banks. From 1832 to 1920 the number of private banks in London declined from sixty-two to seven.

OTHER ELEMENTS OF THE BRITISH SYSTEM.—Other elements in the British banking system are the acceptance houses, the discount houses, and the bill brokers. Acceptance houses were originally large mercantile firms of high financial standing whose acceptances on their own account had gained a high reputation on the market. Lesser merchants, whose names were comparatively unknown and whose paper was therefore not readily marketable, from time to time arranged with these houses, on proper security, to have them accept bills for them, in connection with important business. For the service they paid a commission. The acceptance business in time grew to be the sole business of some of these houses. New acceptance houses have been organized from time to time, and, as previously noted, the joint stock banks have been active in this field during recent years. The discount house is another element of the English money market. These houses are intermediaries between business houses and banks on one side which have bills to sell and bankers and others, both in England and on the continent, on the other side, who buy them as investments. Unlike the American brokerage concerns, these discount houses usually buy the bills outright, endorsing them at time of sale, instead of selling them merely on commission and "without recourse." Their customers are largely the joint stock banks, and it is from them that they receive the bulk of their funds. Other elements in the British banking system which can be merely named in passing, but of which the name is suggestive of the

function, are the colonial banks, with their branches largely in British colonies, and dependencies, and their business chiefly in the field of foreign exchange; the British foreign banks, with their operations largely in foreign countries, and in trade between those countries and England, the United States and Europe; branches and agencies of foreign banks located in England, chiefly in London; the trustee savings banks; and the postal savings banks, established by Gladstone in 1867, and now having deposits of over £257 millions.

French Banking System

DISTINGUISHING FEATURES.—The French banking system is like that of England in many respects. It is controlled, to a large extent, by a great central bank possessing a monopoly of the note-issue privilege, and acting as the depositor and fiscal agent of the Government, a bank which carries on a regular banking business with the public, and which at the same time is the "bankers bank" for the entire country. In France, as in England, the bulk of the commercial banking business is done by about a half dozen large joint stock banks, most of which have numerous branches and sub-branches. These banks are given a very free hand by the laws of France in their fields of operation, and are subject to no Government examination or legal reserve requirements. Like England, France has some small joint stock banks whose business is largely local, and some private banks, although in both countries institutions of this

kind appear to be of declining importance. They cannot stand the competition of the great joint stock banks operating through numerous branches. Both countries have a system of postal savings bank of a broadly similar character. There are, on the other hand, many important respects in which the banking systems of the two countries differ, the chief of which are in the organization and control of the central bank, the character of its bank note issue privilege, and of its portfolio of loans; the relative importance of bank notes and deposit currency, and the relations of the joint stocks banks to the central bank. There also exists in France a highly important system for the transfer of funds from place to place, which is not found in England.

BANK OF FRANCE.—The Bank of France was organized by Napoleon in 1800 and placed under state control in 1806. Although its stock of 182,500,000 francs is all privately owned, there being about 30,000 shareholders, of which approximately 12,000 are owners of not more than one share each, its governor and two deputy governors are appointed by the President of France on the nomination of the Minister of Finance. The terms of office are indefinite. The 200 largest stockholders, all of whom must be French citizens, annually elect the General Council of the bank, which consists of fifteen regents and three censors. The regents have functions similar to those of a board of directors and have authority to vote on all questions. The censors act as comptrollers of the bank and have advisory votes only. The bank has upwards of 200 branches and about 300 agencies. Managers of branches are named by decree of the President of the Republic "on the report of the Minister of Finance, upon the presentation made to him of three candidates by the Governor of the Bank. The Bank of France makes it a rule to leave as much initiative as possible to its managers for current business." They are assisted in the task by the collaboration of members of a local board of directors. Their management is submitted to the control of a regular inspection, and for operations of exceptional importance they must refer specially to the central bank, under whose supreme authority they always remain.

ISSUANCE OF BANK NOTES.—The Bank of France has enjoyed a monopoly of the privilege of issuing bank notes since 1848. Aside from a maximum limit beyond which notes cannot be issued, a limit that is raised from time to time and which on July 17, 1919, was placed at forty billion francs, there are no limitations upon the amount of issue. Notes can be issued against cash or against any paper that the bank is permitted to hold in its portfolio. The notes are unlimited legal tender except in payments by the bank itself. There are no legal reserve requirements. Previous to the war it was the custom of the Bank of France to maintain a metallic reserve against its notes and deposits in the neighborhood of 60 to 70 per cent. A tax of 2 per cent a year is paid by the bank on the circulation of its notes. The enormous assistance rendered by the Bank of France during the war led to an increase in the bank note circulation from

5,950 million francs on July 23, 1914, to 38,666 million francs on September 16, 1920. Between these two dates the percentage reserve (against notes and deposits) had declined from 57 per cent to 9 per cent. The notes of the Bank of France are excellent examples of a practically unrestricted asset currency. They are highly elastic, their circulation increasing and decreasing with the demands of trade.

CHARACTER OF LOANS.—The Bank France is restricted in the character of its loans. makes advances only on paper bearing three or more names, of which at least two must be French names. This rule is subject to the exception that satisfactory collateral may be substituted for the third name. Paper to be acceptable must have a maturity of not more than ninety days, although it is the practice to grant one renewal for agricultural loans. Valuewise a large part of the bank's paper—estimated in 1908 at 70 per cent—bears the signature of one or more banks as endorsers. This bank paper contains many large items. In number of items, the overwhelming number of loans is for individuals, most of the items being small. The average value of bills discounted in 1907 was 732 francs, the minimum amount admitted to discount was five francs, and the number of bills below 100 francs was more than 3,500,000 in a total of 7,-500,000. The use of checks in France is very little developed. Payments are made chiefly with bank notes and coin, and by means of the transfer system to be described later. Recently efforts have been made to encourage wider use of checks in France, and

quite a little progress in that direction is now being made.

REDISCOUNTS.-In France the great joint stock banks depend directly upon the central bank for funds in times of need, instead of indirectly, as in England, through discount houses and bill brokers. It is not bad form but rather the usual practice in France for joint stock banks to rediscount eligible paper at the Bank of France. Their reserves are kept chiefly in the form of deposits with the Bank of France, little cash being kept on hand. The bank of France always stands ready to rediscount eligible paper for its banker customers, in reasonable amounts in time of need, and the banks depend upon this privilege in planning their business. The founder of the Crédit Lyonnais said that if the Bank of France did not exist he would close the Crédit Lyonnais in times of crisis. Deposits at the Bank of France do not draw interest. The Bank of France has only one discount rate—not a market rate for its regular commercial customers and an official rate for its rediscount business like the Bank of England. This discount rate is very stable, being changed much less frequently than those of the Bank of England or the Imperial Bank of Germany. It, moreover, normally rules lower than the rates of those two banks.

DISCOUNT RATES.—This policy of stable and low discount rates has been made possible in France largely by three facts: (1) Up to the time of the war France was a strong creditor nation. The French people are famous the world over for their thrift; and

their investments in the securities of foreign countries gave them usually a heavy favorable balance of trade. (2) The custom of the Bank of France of keeping very large reserves enabled it to be rather indifferent to outward movements of gold that would have been matters of great concern to a central bank like the Bank of England, which was accustomed to carry a much smaller percentage reserve. (3) Since the days when France was a truly bimetallic country, with free and unlimited coinage of both gold and silver, French five franc pieces, new fiduciary coins, have been unlimited legal tender in the Republic. Legally the bank notes of the Bank of France are payable in silver five franc pieces as well as in gold. When the Bank of France fears that the drain of gold is dangerously strong, it may exercise its option of redeeming its notes in silver coin. Persons wishing bar gold must then buy it at the market price-which may mean at a substantial premium over the mint price. Those wishing gold coin must obtain it elsewhere than at the Bank of France. This procedure may retard or even stop the outflow of gold, without the necessity of the banks resorting to what it considers the more heroic measure of raising its discount rate.

THE TRANSFER SYSTEM.—The transfer system of France, which is similar to the famous giro system of Germany, is a system of payments from one place to another in France operated chiefly through the Bank of France and its branches, but also through the joint stock banks; whereby payments are made by means of debits and credits on transfer accounts.

Depositor X in Paris, for example, wishing to make a payment for one thousand francs to depositor Y in Lyons, merely directs his bankers to charge his account in Paris with 1000 francs and to credit the amount to the account of Y in Lyons. This is done without the necessity of any check or other paper passing between X and Y. The bank's branch in Lyons notifies Y that credit has been passed to his account. X may obtain a receipt in duplicate if he wishes and send one copy to Y, but that is not necessary. When the funds transferred are the proceeds of discounts or loans no charge is made for the transfer. Otherwise a small charge is made. The Bank of France, with its hundreds of branches and agencies scattered throughout the Republic, and with its thousands of deposit accounts of individuals and banks, does hundreds of billions of francs of transfer business every year. The joint stock banks lean heavily upon it for transfers, as also does the French Government, for which the Bank of France performs the service without charge. The transfer system is used to make payments within a city as well as from city to city. Its use for home city payments, however, has probably received its greatest and most interesting development in Hamburg, Germany. In France each bank using the transfer system has at its head office and each branch or agency a list of all depositors of the bank anywhere in France. Payments to persons not depositors in the bank are made by what amounts to sending them a draft which they cash or deposit. This transfer system is the principal explanation of why a country like France or Germany can get along so easily without any considerable use of checks.

Canadian Banking System

THE CANADIAN TYPE.—Canada is a country of a few large independent banks, operating under Federal charters, and carrying on their business through large numbers of widely scattered branches. There is no central bank in Canada. Each of the joint stock banks has the note issue privilege. Had it not been for the establishment of the National Banking System under the pressure of the Civil War emergency, it appears probable that the United States would have developed a banking system similar to that of Canada. At least we were developing along those lines, although under State legislation, when the National Bank Act was passed under the stress of war. The Canadian chartered banks operate under a general banking law of the Dominion, which was enacted in 1871 and which is revised every ten years. A minimum capital requirement of \$500,000 is imposed -a requirement that prevents the establishment of small independent banks of the type prevailing in the United States.

BRANCH BANKING IN CANADA.—To the student of banking living in the United States one of the most interesting features of the Canadian banking system is the extensive development of branch banking. Practically all of the loan and deposit business of Canada is done by branch banks. The central of-

fice acts as an administrative office, directing the broad policies of the bank, and serving as a clearing house of information for the branches scattered over the Dominion. There are a few branches in foreign countries. At the head of a branch is the manager, who is appointed by the general manager of the bank, and is responsible to him in the conduct of his office. It is the usual policy of the central bank to give wide discretion in questions of business policy to the managers of the more important branches. Canadian banks have subsidiary branches—sub-agencies, they are called—located in small villages. These subsidiary branches are managed by the representative of a nearby branch bank. Many of them are open only two or three days a week, and some only one day.

BANK NOTES.—Another important characteristic of Canadian banking is its system of bank notes. Dominion notes are Government notes secured by gold and Canadian securities. Against outstanding Dominion notes the law requires the Government to hold as security for the first fifty million dollars, gold and guaranteed securities of Canadian amount equal to 25 per cent of the notes. In normal times all issues in excess of the first fifty million dollars must be backed dollar for dollar in gold, but under the War Finance Act of 1914 the Minister of Finance was empowered to issue Dominion notes to banks upon the deposit of approved securities with the Finance Minister. The Canadian bank note system is one of the best examples to be found in any advanced country of a simple asset currency—the type of bank note currency issued by the First and Second United States Banks, and to-day issued by the Bank of France. Subject to the qualification of a required 5 per cent redemption fund, there are no special assets pledged as security for Canadian bank notes. These notes are backed by the general assets of the issuing banks, just as deposits are, and the borrowing customer takes the proceeds of his loan, at his option, in the form of deposits that circulate by check, or of notes that directly circulate. To the bank it is a matter of comparative indifference which of these two forms of its promises to pay the borrower chooses to take. They are both payable by the bank in legal tender money on demand. Against both forms of liabilities the bank must therefore keep a cash reserve. The bank itself determines the percentage of reserve to be held, as there are no legal reserve requirements of banks in Canada (aside from the requirement that 40 per cent of whatever cash reserves are kept, shall be held in the form of Dominion notes). A Canadian bank usually sends back home the notes of other banks it receives over its counters, for the same reason it sends back the checks on other banks it receives. To hold these notes would be equivalent to lending its competitor money without interest, to pay them out would prevent its paying out its own notes of an equivalent amount, and the more of its own notes it can keep in circulation, within the limits of the law, the larger its profits. After a bank has issued its own notes to the limit it may make an arrangement with another bank to pay out the latter's notes, receiving, of course, some corresponding form of service. Banks must redeem their notes at their own head offices, and at seven redemption cities designated by the government which are the same for all banks. The notes of other banks which a bank receives over its counter are sorted out and handled in essentially the same way as are checks on other banks. They are cleared in the local clearing house in the larger places, in which there are branches of several banks, or they are sent to the nearest redemption city for collection and credit or for cash.

ELASTICITY OF CURRENCY.—The conditions above described give the Canadian bank note a high degree of elasticity. When the demands for money increase, as for example in the crop moving season, more money is borrowed of the banks, note issues increase, and deposits of notes fall off. At such times more notes are carried in the pockets of the people, and held in the cash drawers and vaults of merchants. Large quantities are needed for cash payments in the purchase of crops. After the crop moving season, loans are paid off, and surplus cash is deposited by farmers and others in the banks. This means large receipts of notes over the banks' counters. The notes of other banks are sent home and those of the issuing bank accumulate in its own vaults. In this way the Canadian bank note circulation quickly responds to the demands of trade, increasing when trade demands increase, as at the crop moving season, the spring planting season, and the quarterly settlement dates, and decreasing after those special demands are over. This responsiveness of the bank

note circulation to the demands of trade has been an important factor in enabling Canada to escape many of the money panics that have occurred on this side of the border.

SEASONAL DEMANDS.—Canada being preeminently an agricultural country exhibits pronounced seasonal changes in her demands for money. In order to enable the banks to expand the circulation sufficiently to meet the heavy crop moving demands in the fall, a law was passed in 1908 enabling the banks, on the payment of a tax not exceeding 5 per cent, to issue emergency circulation between October 1 and January 1, to an amount equal to 15 per cent of their capital and surplus. The revised Canadian Bank Act of 1913 authorizes banks to issue additional notes against deposits of the equivalent in gold or Dominion notes, in the "Central Gold Reserve"—a reserve administered by the Canadian Bankers Association and the Ministers of Finance.

ELASTICITY AND SAFETY.—The Canadian bank notes are not only highly elastic, but they are also eminently safe. The total amount that may be issued (aside from that in normal times covered dollar for dollar by gold coin and Dominion notes) is normally limited, as we have seen, to 100 per cent of the issuing bank's paid up capital. At crop moving time, namely, September 1 to February 28, the limit is raised to 115 per cent of the bank's combined paid up capital and surplus. Notes carry a prior lien on the assets of the bank. There is double liability of stockholders, and there is in addition a 5

per cent circulation redemption fund, which must be maintained with the Minister of Finance against all bank notes in circulation. The fund draws interest at 3 per cent, and in case of depletion must be restored to 5 per cent by contributions from banks of issue not exceeding 1 per cent of their respective bank note circulations each year. Notes of a failed bank draw interest at 5 per cent from the date the bank ceases to redeem them to the date announcement is made of the resumption of redemption. In case, however, the bank does not redeem its notes, with the interest due thereon, within two months they may be redeemed by the Minister of Finance out of the 5 per cent redemption fund. The fund has not been drawn upon since 1890. There are many other interesting features of the Canadian banking system in addition to those already discussed, as for example the Canadian banks' methods of securing themselves for loans on grains in process of raising and marketing, their participation in industries, their relationship to the New York and London money markets, and their peculiar relationship to the Canadian Bankers Association.

CHAPTER XII

International Exchange

THE development of money as a common standard of value and medium of exchange provided a common basis for trade, a means by which commodities could be compared, priced and quoted in different markets, and the universal esteem in which the precious metals were held enabled them to be used as a means of effecting exchanges and as standards of value.

TRANSMISSION OF FUNDS. - The actual shipment of coin, however, inevitably involves risk and expense. If a seller in one country were shipping certain goods to another, and at the same time receiving goods from that country, he would find it beneficial to discharge his own obligation by giving his creditor an order on his debtor. If he was not at the moment receiving goods from that country, but expected to make purchases there shortly, he would still find it advantageous to offset the transactions. Provided he was satisfied of the stability of his debtor, and the debtor was willing to pay him interest for the use of the money, he could wait until his purchase was made, and then give his creditor an order on his debtor. If either of these conditions were lacking, he would ask his debtor to pay the amount to someone he trusted, who would hold it to his credit, and pay him interest for its use until drawn against.

FOREIGN CREDITS.—If, on the other hand, the seller contemplated making no purchases, and had no other use for a credit in the other country, he could sell his bill to one of his neighbors who had. In this way, those who dealt with that country could buy and sell bills as suited their convenience. But it would be a simple state of society indeed in which all the parties to import and export trade knew each other; and even if they were inclined to accept each other's obligations freely, it would be difficult to find obligations that exactly offset each other. It was but one step more to the development of the bill-broker or banker who bought and sold bills in all markets. These brokers thus became the bookkeepers and settling agents for the countries in which they dealt in their transactions with the rest of the world.

SETTLEMENT OF TRADE.—The settlement of our domestic trade is in these modern times effected by the banks situated in the trade centers, and of our foreign trade by the banks in the clearing points of international commerce. Local banks throughout the interior of the United States, in their task of collecting for products shipped to the trade centers, accumulate balances or deposits there which are constantly being drawn against in settlement of purchases from these centers. Similarly, our own banks engaged in international trade accumulate and deplete balances in the trade centers of the world.

EXCHANGES.—The transactions which give use to this building up and depletion of foreign balances are customarily classified as the exchange of

goods, securities, services, treasure and travel. A detailed description of each follows:

Goods comprise the shipment of physical commodities, agricultural, mineral and animal products and manufactures. Because of its tangibility, the volume of this kind of foreign trade is easily recorded, and as it, and treasure, are the only items which are incorporated in ordinary statistics of import and export trade, they are termed the "visible" factors.

Securities comprise stocks, bonds, short term notes and acceptances, interest, coupons and dividend payments.

Services comprise payment of freight and passage money to foreign-owned carriers, of insurance premiums to foreign-owned insurance companies, and banking commissions to foreign banks. There are in addition the remittances of immigrants to relatives in their country of origin, which may be classed either as part compensation for importation of their services, or as a separate class.

Treasure comprises the precious metals. Gold and silver, like other goods, move from the cheaper to the dearer market under the impetus of the same fundamental economic forces.

Travel comprises the expenditure for goods and services consumed by travellers whose funds are derived from abroad.

BANKS AS SETTLING AGENTS.—The complexity of modern business has brought about a corresponding diversification in the service banks render as its settling agents. For example, take a for-

eign purchase of goods. If the merchandise is to be paid for before shipment, or after delivery, the buyer can fulfill his obligation by purchasing from his bank a check or telegraphic order for payment to his seller, from the balance the bank has accumulated abroad. If the merchandise is to be paid for upon shipment, the buyer's bank can issue a commercial letter of credit authorizing the correspondent with which this balance is maintained to pay the shipper's invoice out of that fund against delivery of shipping documents, or else inviting its correspondent to negotiate the shipper's documentary draft by undertaking that it will be duly honored. If the delivery of the merchandise is to be made against acceptance, or payment of the seller's draft on the buyer, the seller's bank will undertake to remit the documents and draft to its correspondent in the domicile of the buyer, for collection. If the draft is drawn in the seller's currency, the correspondent will remit in some fashion or other a claim in that currency against a balance in the country of the seller. Where the draft is drawn in the buyer's currency, however, the payment is credited by the correspondent to the balance in that currency maintained there by the buyer's bank.

ILLUSTRATION. — To be concrete, if the United States Cotton Export Company were to export \$10,000 worth of cotton and draw at sight in dollars on the Royal Textile Company of London, the obligation of the London correspondent would be to remit a check in dollars on a New York bank account. To finance this shipment, the New York

bank would discount the draft, taking from its face amount interest for a period sufficient to cover transmission of the draft by mail to London, presentation there, and remittance of the check by mail, plus the commission of its correspondent and itself, and bill stamp when required abroad. The amount remitted would be \$10,000, less the London bank's commission and expenses. The difference between the amount remitted and the proceeds of the discounted draft would give the New York bank its commission and interest for the period during which it had been out of funds. If, on the other hand, the draft had been, as is more customary, drawn at ninety days' sight, in sterling, the transaction would invoke more complicated elements. Such a draft would read:

£2,000. New York, July 1, 1921.

Ninety days after sight of this First of Exchange (Second unpaid) pay to the order of the New York Bank Two Thousand Pounds Sterling. Value received and charge to our account.

United States Cotton Export Company, New York.

To Royal Textile Company, London, England.

The rate of interest that would control the discount of a dollar draft would normally be the New York discount rate. The sterling bill, on the other hand, is rediscountable in London, and the London discount rate would thus control.

TIME REQUIRED.—There is no difference between the time taken to mail to London and present a sterling and that required to present a dollar bill, but the proceeds of the dollar bill do not become available to the New York bank until the remittance has reached New York, while the proceeds of the sterling bill are available as soon as they are credited to its balance in London. A ninety-day sight bill is, however, presented first for acceptance, and the obligation of the drawee to pay it ninety days thereafter is evidenced by writing the word "Accepted," the date of acceptance, and sometimes the place of payment, across the face of the bill, above the signature of the drawee. Assuming that it took eight days for overseas transit, and three days of grace customary in England on time bills, it would be one hundred and one days between the time of purchase of the bill in New York and the time the bank regained the use of its money by payment by the drawee in London. A sight sterling bill for £2,000 would therefore command a better rate than a ninety-day sight sterling bill for the same amount, the difference being interest for ninety-three days, as there would be no days of grace on a sight bill.

DISCOUNT MARKET.—The existence of a broad discount market in London for accepted sterling bills, makes it usually possible for the New York bank to avail itself of the proceeds of a draft, upon which documents are deliverable upon acceptance, immediately after acceptance. In normal times the London discount rules lower than the New York rate.

and when possible, acceptances are immediately rediscounted. If, on the other hand, the London discount rate were higher than in New York, the rediscount would be unprofitable and the draft would be held in portfolio until maturity.

WITHHOLDING UNTIL PAYMENT .-Where the credit standing of the drawee is not beyond question, it is the practice to withhold delivery of the documents until payment. Such bills are not discountable, but they nevertheless sometimes command a better rate than documents against acceptance drafts, because the drawee is likely to pay in advance of maturity in order to get delivery of the goods. A rebate in the form of an interest deduction, for the period elapsing between the time of payment and the maturity of the bill, is allowed for this anticipation. The New York bank avails itself of the sterling fund thus accumulated, by selling to those who purchase goods from England, travel to that country, remit to relatives there for support or for investment, or for any other reason require English funds, cable or letter orders for payment or checks against that account.

BALANCING SALES AND PURCHASES.—Our domestic banks can accumulate their balances in domestic trade centers as claims are offered, and await the creation of a local demand for funds from the centers before disposing of these accretions to their accounts, without concerning themselves with any question except the rate of interest paid on those funds in the trade center, as contrasted with the return they might bring if invested locally. The value

of a foreign account is, on the other hand, subject to constant fluctuation by the operation of circumstances which we will shortly examine. For that reason, the prudent banker must always "hedge" his foreign exchange operations. He must protect every sale by a purchase, and every purchase by a sale. In a normal market this need not be done with each transaction. but the day's totals of sales and purchases of each currency must be made to balance before the day's trading ends. This may be accomplished in several ways. Our New York bank, for instance, could cover its purchase of the £2,000 ninety-day draft by selling at the same time its own ninety-day draft for an aggregate of £2,000. If there were no market for ninetyday drafts, it could ask its correspondent to rediscount the purchased ninety-day bill after sixty days, and sell in New York at the time it buys sixty-day drafts against the proceeds of the rediscount. If there were no market for sixty-day bills, it could ask its correspondent to rediscount the draft immediately upon acceptance, and sell a demand draft against the proceeds. Or if there were no market for sight bills, it could sell an immediate cable transfer, which would create an overdraft on its London account, until the purchased draft had arrived and been accepted, and rediscounted to cover the overdraft. The profit from operations of this character arises from the fact that a lower rate is quoted for the purchase than for the sale of exchange. It is from this difference, or "spread" between the buying and selling rates that legitimate foreign trade profits are derived.

SUPPLY AND DEMAND.—If there were an equilibrium between the supply and demand for New York funds in Chicago, a draft for \$1,000 on New York could be either sold or bought in Chicago for par, i. e., \$1,000, plus or minus the expense of banking service. If, however, the preponderance of demand over supply pushes the cost of a \$1,000 draft on New York in Chicago to \$1,000.45, the operation of the economic law is easily comprehended. To observe the reflection of this same law in a foreign exchange rate, it is necessary to first know the par between the two currencies involved. For instance, the material (gold 11/12 fine) in an English pound sterling of full weight is 113.00156 grains, while the United States gold coins (9/10 fine) contain 23.22 grains to the dollar. Therefore £1 = \$4.8665, which is the unit par of exchange. With supply and demand in equilibrium, therefore, a demand draft on London for £100 would be worth \$486.65 in New York. In practice, under such conditions, a bank would purchase a good commercial bill for that amount for very slightly less and sell its own draft for the same amount for very slightly more.

MOVEMENT OF COMMODITIES.—In anything approaching a normal economic situation, travel and remittance of funds for support of relatives are dictated by personal inclination, and commodities move in response to the demand for them as consumable goods. The movement of gold and silver, and to a lesser extent of stocks and bonds, is not actuated by any independent demand, but by their value as a coun-

terbalance to inequality in the movement of the other factors in foreign exchange.

SEASONAL DEMANDS.—Since all business. in the last analysis, consists of an exchange of products and services, it follows that when the checks and drafts arising from current transactions are brought together in the clearing houses, they practically offset and cancel each other. Nevertheless, a good part of the domestic movement is seasonable, with a resultant seasonal shifting of the direction of flow of balances. If the local demand for funds in a trade center exceeds the local offerings of claims on that center. a bank which wants to continue to meet the demand can build up its balance there by the actual shipment of money. In domestic exchange, paper currency is often chosen for shipment; it is lighter and cheaper to ship than metal, and it serves as well as gold as commercial and savings bank reserve, and till money.

SHIPPING COSTS.—The cost of shipping currency between Chicago and New York is about 45 cents per thousand dollars. This cost includes the transportation rate, insurance premium and loss of interest on the money while in transit. When the premium on New York funds in Chicago rises to that point, and it costs \$1,000.45 to buy a draft there on New York, it becomes profitable to ship currency from Chicago to New York. If, on the other hand, a draft on New York brought but \$999.55 in Chicago, it would be cheaper for the Chicago bank to move its balance to Chicago by a currency shipment than to continue selling drafts at that figure.

FLUCTUATION IN RATES.—Foreign trade, like domestic, is essentially barter, and in the long run, like domestic trade, must settle itself. mally, such fluctuation as exists in foreign exchange rates is attributable to a crop movement, failure of an expected crop, flotation or maturity of a foreign loan, or some other factor which is, from a broad view-point, temporary in character. This fluctuation is kept within limits by shipments of the money metals. In former years, foreign exchange brokers were able to forecast the general trend of the sterling rate during the late summer and autumn, because they knew that, as our great cereal and cotton crops came into the market, they would be offered the sterling bills of exchange which were being drawn by our exporters on London merchants. If a sterling draft for £100 were worth the mint par of exchange of \$486.65 in June, when such bills were scarce, it would move down to \$485 under the stress of competition with the August offerings. If, however, it continued to drop to \$484.50 it would have reached the point at which a countershipment of gold could be profitably employed. To understand how this is, it must be kept in mind that a bill of exchange for £100 is, when due, paid with sovereigns that contain as much gold as \$486.65. Under normal conditions, all the expenses incidental to shipping gold from London to New York, including abrasion, packing, carting, shipping, insurance, and interest during transit, amount to less than the difference between \$486.65 and \$484.50. So the American holder of such a bill of exchange could more profitably send it to London for collection, and have the proceeds remitted to him in gold bars, for which he would receive the coinage value at a United States assay office. If, on the other hand, a scarcity of sterling bills in the New York market brought the quotation up to \$4.88, it would be cheaper to settle one's obligation in London by shipping gold from here to that market, to be used there in the purchase of sovereigns.

REASONS FOR SHIPMENTS.—In actual practice, gold shipments are not made by exporters or importers, nor in settlement of particular transactions. Whenever the exchange rates move to a point which make such a movement possible, it is done by banks and bullion brokers in volume sufficient to make the narrow margin of profit attractive. Sometimes a shipment of gold not directly profitable may be made so by a triangular exchange operation. For instance, a New York banker may desire to build up a balance in London, on which to sell drafts, because drafts on London are selling well in this market. In Paris, drafts on London may be below par. The New York bank can ship gold to Paris, with which to purchase drafts on London, and thus build up a balance there on which it can profitably draw.

GOLD AND SILVER STANDARDS.—Such operations as have been described depend for their success upon the existence of a gold standard and absolute freedom of exportation or importation of the metal. Some countries are on a silver standard. Here there can be no fixed mint par of exchange, and not even

approximate limits to the fluctuations in exchange rates. Exchange rates, in a gold standard country, on a silver standard country move roughly with the rise and fall of silver. Silver moves in and out of the monetary circulation of such a country in such a way as to keep the value of a given quantity of silver approximately the same, either in coin or bullion. If silver falls in the world's market, it moves to the silver standard countries and into its coinage, depreciating its purchasing power and raising prices. If the gold value of silver moves up, coin is melted and exported, while the purchasing price of that remaining appreciates, and prices fall.

PAPER MONEY STANDARD.—When a country is on an inconvertible paper money standard, the rate of exchange in the paper money country would depend chiefly on the cost of gold in terms of paper, and therefore would rise as the paper money depreciated in relation to gold. When each of two trading countries are on a paper basis, the ratio of exchange will depend upon the cost of gold in terms of each paper currency.

MARKET FOR GOLD.—It has already been pointed out that all that has been said is dependent upon an unrestricted market for gold. But there has not been, even in countries in which it was customary, an unrestricted market for gold since the opening of the Great War in 1914. Since then, most governments that were on a gold standard have suspended it in one fashion or another, and their paper currencies are not convertible at the mint par of

exchange into exportable gold. So long as this situation continues, the guaranty against undue fluctuations in exchange rates accorded by unrestricted gold shipments is inoperative.

RATE OF EXCHANGE. - So long as the world's currency was on a gold basis-and all the commercially important currencies were on that basis prior to the Great ar—the rate of exchange could not rise or fall from par beyond the cost of gold shipment to or from the place at which the conversion from currency to gold could be effected. The possibility of an effective prohibition on specie shipments was so little considered that the author of a text-book on international trade and exchange, published in 1914, desiring to theorize upon the basis of such an assumption, permitted himself to "suppose that the medieval theory of prohibiting the export of specie were still in vogue." His conclusion was that the stimulus given to American buying in England afforded by the possibility of purchasing a sight draft on London for £100 at (say) \$4.78, would tend to stabilize the rate. I nthe years since that book was published, the world has put to practical test the author's conclusion that "whatever the relations of the currencies of two trading countries, and whatever the mechanism of settling balances, or whatever the restrictions on the settlement by the use of any special commodity, e. g., gold, an excess flow of trade in one direction introduces always a tendency towards an opposite and balancing flow." That endency did not become operative, however, until Sterling had sunk to \$3.15. At present the dollar has an absolutely unprecedented purchasing power, and, for the first time in history, is quoted above parity with every other currency. Yet our import figures for August 1921 set a low record for recent years and indicate that other factors must be set to work to hasten the evening-up process. After all, it is the demand for consumable goods, as such, rather than for bills of exchange and money, which will supply the corrective.

CENTER OF TRADE.—During the Great War the United States became the leading center of trade of the world's commerce. It is estimated that since 1914 we have sold eighteen billion dollars worth more goods than we have bought. Our claims on the rest of the world for payment of goods are, therefore, far in excess of the claims the rest of the world hold on us. The difference was taken care of in part by shipping gold to us until foreign governments embargoed that movement to conserve their reserves; payment of part of it has been postponed by extension of foreign loans; and a substantial part of it exists at present in the form of unliquidated mercantile claims and in rejected goods in foreign ports.

THE PRESENT NEED.—An unprecedented need created a flow of trade in one direction to an extent that had been hitherto thought impossible. It was, nevertheless, inevitable that it would so change monetary and price conditions as to bring its own termination. It would seem to follow that an attempt to force the present settlement of the obligations the world owes this country would not only be

impossible of success, but that it would destroy our only hope of selling the exportable surplus of our products, estimated at 20% of the total. To help, instead of hinder, us, this balance must be permanently invested in the foreign field, where it can be profitably employed, until the world state of trade interdependence, built up by the slow work of centuries, and destroyed overnight, can reconstitute itself.

THE EDGE ACT.—This dislocation of the balance of trade is so violent that it cannot be regarded simply as a passing phase. It has not only changed the character of American international banking, but has created a new type of American banking institution, the Edge Law banks.

FOREIGN TRADE FINANCING CORPORA-TIONS.—The law known as the Edge Act has amended the Federal Reserve Act so as to authorize the organization and conduct of corporations for the particular purpose of financing foreign trade. The Edge Act permits National banks to subscribe to the capital of corporations organized in accordance with its provisions. They may subscribe in amounts not exceeding in the aggregate ten per cent of the capital and surplus of the subscribing banks. The laws of some of the States permit State banks to do likewise. Individual American citizens, and corporations when owned chiefly by American citizens, may also become stockholders. Edge Act corporations are subject to the supervision and control of the Federal Reserve Board, as provided in the Act. An Edge Act corporation may, under the law, extend long and short term credits, invest in securities, purchase bills of exchange, engage in foreign banking, and in every lawful way aid in financing foreign trade. It may likewise, with the approval of the Federal Reserve Board, issue and sell to the investing public its own notes and debentures to an aggregate amount of ten times its paid-up capital and surplus. It may not engage in the general business of buying or selling goods or commodities in the United States, nor engage in domestic banking, except such as in the judgment of the Federal Reserve Board may be incidental to its international or foreign Edge Law banks have been given the special privilege of accepting drafts up to a year in tenure, which are eligible for purchase or discount by the Federal Reserve banks. They are thus enabled to supply credits of longer duration than National and State banks. Where still longer credits are required, the Edge Law banks will have to operate on a debenture, not an acceptance basis, as the Federal Reserve Board has ruled that acceptances and debentures may not be outstanding at the same time. Several Edge Law banks are now in operation on an acceptance basis, but debenture financing has not yet been attempted, and it is probable that it could not be successful unless accompanied by a large scale campaign of education to acquaint the investing public with this new class of security and thus to popularize it.

EXTENSION OF ACCEPTANCE PRIVI-LEGE.—The extension of the acceptance privilege to National banks has assisted in bringing into American banking usage an instrument which has long been

a factor in international exchange—the commercial letter of credit. The acceptance credit serves the purpose of affording a seller assurance that his contract may not successfully be evaded by cancellation, and that he will get immediate payment when his goods are ready for delivery, and at the same time furnishes the buyer a period of credit. Prior to 1914 there were some private banking firms here who accepted dollar drafts, but the lack of the acceptance privilege on the part of our National banks, and the limited market for dollar exchange, made it necessary for our importers to open all but a negligible part of their credits in sterling, which involved the intervention of English banks. Our import commercial credit business thus took on an English pattern. As the stability of the large British banks was everywhere recognized, and sterling was everywhere saleable, it was not essential to the effectiveness of British bank credits that a correspondent in the domicile of the beneficiary undertake, for account of the British bank and its agent, either to pay the beneficiary local funds, or to negotiate his sterling bill.

BRITISH BANK CREDIT.—All the beneficiary required was authority from the British bank to draw on it, and its undertaking that drafts, negotiated in accordance with the terms stipulated, would meet with due honor on presentation at its banking house in Britain. With such an instrument in his possession, the beneficiary could negotiate his drafts at favorable rates at any bank, whether it was a correspondent of the British bank or not. The British

bank credit was, in banking parlance, a negotiation credit, circular in form, and these essential characteristics are preserved in the American import credit of to-day.

STERLING CREDITS. — When American banks began to open sterling credits, they had a choice of three methods. They could issue their own instrument, authorizing a British bank to honor sterling drafts drawn on it for their account, and undertake that drafts so negotiated would meet with due honor on presentation at the banking house of the British bank named; or, they could issue such an instrument and ask the British bank additionally to confirm by a separate cable or letter to the beneficiary that it would honor such drafts; or, without taking any direct action, they could ask the British bank to issue its usual instrument to the beneficiary, for account of the American bank.

DIFFERENCE IN METHODS.—The essential difference between the three operations is that one, who negotiates a draft in the first instance, has only the obligation of the American bank that the draft will be honored; in the second instance, the obligation of both American and British bank; and in the third, the obligation of the British bank alone. Where the credit standing of the American bank was sufficient to enable the beneficiary to negotiate drafts, it was done the first way. If it was not, the credit standing of the British bank was employed in one of the ways indicated, and it was paid an additional commission for lending its name.

IMPORT CREDITS.—The credit standing of American banks is to-day such that as a general rule their import credits authorize the beneficiary to draw on them here, if the drafts are in dollars, or on a named correspondent in London if in sterling, and the undertaking, in either case, that drafts so drawn will be honored on presentation, is entirely adequate, without more, to enable the beneficiary to negotiate them readily.

EXPORT CREDITS.—One might suppose, therefore, that our export credits—that is, credits furnished by foreign banks to their customers, who import from here-would follow the same model. For instance, a Greek might ask a Greek bank to mail its commercial letter of credit to the American exporter, authorizing him to draw either on it in Athens in drachmas, or on its correspondent in London in sterling, and undertake in either case that drafts so drawn would be honored on presentation. That is what the Greek buyer and the Greek bank would like to do, but they are doing very little of it at present, because the American exporter does not like such a credit. He wants dollars; and he has been unwilling either to take the risk of a depreciation, in the value of sterling or drachmas, before he can entitle himself to sell them by presenting his shipping documents with his draft for negotiation, or to protect himself against this risk by selling his sterling or drachmas for future delivery. And he feels, too, that the Greek bank is too far away to justify him in doing business on the strength of its obligation alone.

DEVELOPED SINCE 1914.—The bulk of our export commercial credit business has developed since 1914, during a period in which our exporters were able to dictate terms, and they have demanded, almost universally, dollar credits, and the obligation of an American bank. Where the British banking tradition is followed, as in Japan, for instance, the importer's bank has mailed its credit instrument to the beneficiary, and asked its American correspondent to confirm that it will protect drafts drawn under its terms. The other European countries have, oddly enough, refrained from dealing directly with the beneficiary, but have asked their American correspondent, by cable or mail, to advise the beneficiary of the issuance of the credit. Such credits are not confirmed, that is, made the obligation of the American bank, unless specific instructions are given to do so.

COMMERCIAL LETTERS OF CREDIT.—
There has been a rapid and widespread development of the use of commercial letters of credit by domestic banks in financing domestic sales within the past several years. The actuating reason for this development was that importers of commodities, like sugar, being compelled to establish import credits in favor of their foreign suppliers, as a safeguard against cancellation, felt it necessary to require a similar protection from their domestic customers to whom they had resold the commodity. An acceptance credit is quite as useful in financing a domestic as a foreign shipment, however, and can profitably be resorted to wherever the durations of the domestic shipment permits the

usance of the accepted draft to be sufficient to furnish credit for a substantial period of time.

THE WORLD'S BANKER.—It is too early to say that New York has usurped the unique position London has so long held as the world's banker. That position was the creation of a combination of circumstances—the stability of the English government the liberality with which foreign bankers were permitted to operate there—the world embracing character of British shipping and British commerce-willingness to invest the proceeds of a favorable balance of trade in foreign countries rather than to attempt to bring them home-knowledge of the technique of international exchange and enough acquaintance with economics to extend credit skillfully. Much of the advantage that was London's is now ours. It is significant that the dollar was chosen as the measure of Germany's reparation payments, though the United States is the least sharer in the reparation fund. So, too, is the action of the Italian National Exchange Institute in replacing the pound sterling by the dollar, as the standard upon which the gold lira is based. But if New York is effectually to supplant London, as the center of international exchange, restrictive laws must be repealed so that foreign banks can enjoy here as much freedom of action as they have had in London. All the world quite naturally turns to us, as the richest and most powerful nation, for assistance, and if we have the vision to avail ourselves of their legacy of experience and administer our new power with sagacity, the leadership is won.

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