IN MEMORY OF
JAMES JACKSON
LOWELL

FIRST SCHOLAR OF THE CLASS
OF 1858 & LEFT THE LAW
SCHOOL AT THE OUTBREAK
OF THE CIVIL WAR TO JOIN
THE 20th MASSACHUSETTS
VOLUNTEER INFANTRY
MORTALLY WOUNDED AT
THE BATTLE OF GLENDALE
JULY 30th 1862

FROM THE GIFT OF HIS SISTER
HARVET LOWELL PUTNAM
M CM XXVII
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stratification of the rocks surrounding the caves of Staffa was made known to naturalists for the first time. Banks became president of the Royal Society in 1777. In 1781 he was made a member of the National Institute in 1802, because to his intercession they owed the recovery of the papers of La Pérouse relating to his voyage, which had fallen into the hands of the British. His library and his collection of natural history are celebrated. Besides other contributions he wrote 'A Short Account of the Causes of the Blight, the Mildew, and the Rust in Corn' (1805). In accordance with a contingent bequest his collections were added to the British Museum. The genus Banksia, of the natural order Proteaceae, was named in honor of him by the younger Linnæus.

BANKS, Louis Albert, American clergyman and author: b. Corvallis, Ore., 12 Nov. 1855. He was educated at Philomath College and at Boston University. He entered the Methodist Episcopal ministry in 1879; was pastor of the Independence Avenue Church, Kansas City, from 1884 to 1891 and since then has been engaged as evangelist in union evangelistic campaigns. He was the Prohibition candidate for governor of Massachusetts in 1893. Among his numerous writings are 'The People's Christ' (1891); 'The White Slaves' (1892); 'Anecdotes and Morals' (1894); 'Honecomb of Life' (1895); 'Christ and His Friends' (1896); 'Live Boys in Oregon' (1897); 'My Young Man' (1899); 'Chats With Young Christians' (1900); 'The Great Saints of the Bible' (1901); 'Youth of Famous Americans' (1902); 'Spurgeon's Illustrative Anecdotes' (1905); 'Christian Themes of the Bible' (1911); 'A Summer in Peter's Garden' (1913); etc., etc.

BANKS, Nathaniel Prentiss, American soldier and statesman: b. Waltham, Mass., 30 Jan. 1816; d. there 1 Sept. 1894. Entirely self-taught, he worked himself up from the position of bobbin-boy in a cotton factory to the editorship of a weekly newspaper. He read law, was admitted to the bar, and began to practise, but soon became active in political life. Elected to the Massachusetts legislature in 1849, he became speaker in 1851-52. In 1853 he was president of the Massachusetts Constitutional Convention, and the same year was elected to Congress as a Coalition Democrat. The session which began 3 Dec. 1855, was memorable for its bitter speakership contest, the candidates being Banks and William Aiken, a large slaveholder of South Carolina. The contest lasted two months, the President's message being withheld, and all legislative business blocked. The Senate had borrowed $20,000 from a Philadelphia bank in order to make advances to needy members of both parties. On the 133d ballot 2 Feb. 1856, Mr. Banks was elected. None of his decisions while speaker were ever reversed by the House. He was governor of Massachusetts, 1857-59. In 1861 President Lincoln tendered him the command of volunteers. He conducted active operations in the Shenandoah Valley and fought with credit at Winchester and Cedar Mountain. In co-operation with Admirals Farragut and Porter he invested Port Hudson and unsuccessfully attempted to carry it by assault. In 1864, much against his judgment, he was placed in command of the Red River Expedition, which resulted most disastrously for the Federal forces. Banks was widely censured and soon relieved of his command. General Grant, years later, in his 'Memoirs' furnished a full vindication of Banks by giving the name of the superior officer responsible for the expedition. From 1866 to 1876 General Banks represented his old district in Congress, and was prominent as chairman of the Committee on Foreign Relations. He was United States marshal for Massachusetts, 1879-88. In 1891 Congress bestowed on him an annual pension of $1,200, a severe mental disorder having come upon him.

BANKS, Thomas, English sculptor: b. Lambeth, 29 Dec. 1875; d. 2 Feb. 1880. He studied sculpture in the Royal Academy, and was sent as one of its students, to Italy. Here he executed several exercises of distinction, a bas-relief representing Caractacus and his family before Claudius, and a Cupid catching a butterfly. Among other works executed by him was a colossal statue showing Achilles enraged for the loss of Briseis, now in the entrance hall of the Royal Academy. It was also the sculptor of the admired monument of Sir Eyre Coote in Westminster Abbey, and of those of Dr. Watts and Woollett. He was elected a member of the Royal Academy in 1785.

BANKS, Sir William Mitchell, Scottish surgeon and anatomist: b. Edinburgh 1842; d. 1904. He was graduated at Edinburgh University in 1864, was appointed demonstrator of anatomy in the University of Glasgow, and later was consulting and operating surgeon at Liverpool. He originated the modern method of operating for cancer of the breast. He reorganized the Liverpool Medical School and founded University College, where he was for a time professor of anatomy. He was chosen first president of the Liverpool Biological Society in 1886. In 1897 he delivered the address in surgery before the British Medical Association at Montreal. He published numerous papers and addresses.

BANKS LAND, an island in the Arctic Ocean, discovered by Parry in 1819, explored by McClure in 1850, and named by him Baring Island. It is separated by Banks Strait from Melville Island, lying to the northwest, and by Prince of Wales Strait from Prince Albert Land, lying eastward.

BANKS AND BANKING. This department has been developed to give a concise digest of banking, financial history of banking, etc. It is subdivided as follows:

1. Origin and Development of Banking.
2. The Functions of Banks.
3. World Systems—Types.
5. Foreign Exchange.
6. Investment Banking.
10. State Banking System.
11. Private Banks.
1. ORIGIN AND DEVELOPMENT OF BANKING. Bank (from the mediæval bancus and banco; the ancient banca, bancus, bench of the purse for money. (Cicer. Verr. 2). Bancus or banco is commonly traced to the bench whereon money-changers sat, when banking merely consisted in the purchase and sale of uncurrenient coins, but as shown in Madox's 'History of the Exchequer,' this is erroneous. Bancus and banco relate only to the judgment-Bench, to which, in the 12th century in England, common causes, "Common Pleas," began to be removed from the King's Bench to local courts. The point is important, because it disposes of the fable that banks owe their origin to the money-changers of the Dark Ages. Primarily a bank or fisc means a place of deposit for money, open to the public. Banks can be traced back to Rome, Greece, Egypt, Babylon, indeed to every country which issued money susceptible of being counted, and whose government was sufficiently powerful to protect their funds from pilferage. Thus, it is to be inferred, the use of the fisc by the bankers of their useful and lawful functions. The word bundhoo, a bank, is even used in the Code of Menu (p. 10), but the date is uncertain.

The earliest settled and permanent governments were pontifical, the sovereign being both king and high priest. Hence the earliest banks in the Occident were the national temples, such as Delphi and Delos in Greece, whose activities in this respect date back to the earliest use of coined money. This money they received on deposit and loaned out at rates of interest varying from 10 to 30 per cent per annum. Following the temple banks, perhaps coeval with them, were those private bankers whom we first hear of in Babylon, tempo Nebuchadnezzar, under the title of "Egibi and Sons," about 600 B.C. (Cuneiform inscription). The state bank at Ilion, mentioned by Boeckh, as paying 10 per cent to depositors for money for the public service, must be dated about the 3d or 2d century B.C. About the same period Theocritus, whose "Idylls" date 260 B.C., mentions a banker at Alexandria, by name Carcus, who paid interest on deposits withdrawable at pleasure, and payable by him in business hours, but at any time of day or night. (Epit. XXI. iii. Livy (VII. 21), mentions bankers (argentari) in Rome, 354 B.C. Tacitus and Suetonius both allude to banks in Rome during the reigns of Augustus and Tiberius. Adam (Rom. Ant.) cites numerous instances of private banks and banking terms and incidents during the early empire, such as the deposit and withdrawal of money, payment of interest, checks or orders for payment, acceptance, bankers' books of account kept by double entry, transfers of accounts, etc. From these early years an iron safe deposit has been dug up of the time of Hadrian, attached to which is a body of regulations, very similar to those now in vogue. It would appear that the emperors had become the sole bankers of the empire. Following the method which he adopted with respect to the pontifical, ceremonial, and religious functions of the state, Augustus absorbed the most important financial powers into his own person, becoming himself essentially a corporation sole; for of this character was the office inherited and administered by his official successors. The public treasury was called Aeurium, the imperial treasury (ἀπολλυτής the national bank), the Fiscum. It received and paid out deposits of money, it loaned money at interest, it accepted heritages (some persons bequeathed their entire fortunes to it), and it devoted large funds to public purposes.

The functions performed at Rome by the Imperial fisc were committed to the "Judicata Bench" to which, in the 12th century in England, common causes, "Common Pleas," began to be removed from the King's Bench to local courts. The point is important, because it disposes of the fable that banks owe their origin to the money-changers of the Dark Ages. Primarily a bank or fisc means a place of deposit for money, open to the public. Banks can be traced back to Rome, Greece, Egypt, Babylon, indeed to every country which issued money susceptible of being counted, and whose government was sufficiently powerful to protect their funds from pilferage. Thus, it is to be inferred, the use of the fisc by the bankers of their useful and lawful functions. The word bundhoo, a bank, is even used in the Code of Menu (p. 10), but the date is uncertain. (Bury, I. 44). The interdiction against the taking of interest for money which these changes involved began a new period in the history of banks. The capital of the empire had been transferred to Byzantium (Constantinople), so that Europe, once in the reach, was now far removed from the court. What the government denied, private interest afforded; the Jews braved its displeasure and its penalties by providing a means to relieve the necessities of the poor: a species of poverty banks, or lending houses, first mentioned by Prudentius, as having been established in Italy about A.D. 400. For a period of two or three centuries during the Dark Ages these establishments appear to have been the only means of procuring loans of money.

About the 8th century the poverty banks were taken over by charitable foundations of monks and confirmed by the Popes as mones pietatis; the right to exact collateral security and to charge interest being affirmed by several pontiffs, especially Pius II and Sixtus IV. After the fall of Constantinople in 1204 the monks were superseded in this lucrative business by the Lombard goldsmiths and money-changers, whose various names of Bardis, Corsini, etc., neither shielded them from popular aversion, nor prevented them from driving a lucrative trade. So influential did they become, that in 1311 one of their number, Raoul the goldsmith, was ennobled by his patron, Louis X; the first instance of the sort known to history. In 1313 there was a Lombard bank at Delft, and in 1320 another one at (probably) Calais, which latter loaned 5,000 marks (about 16,000 gold dollars) to Edward III of England. The banks of Geneva, 1345, and of Florence, circ. 1350, were probably the forerunners of the powerful goldsmiths, just as the latter were evolved from the mones pietatis and these again from the poverty banks of the Jews.

For the first time in 400 years, a circum-
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stance entirely overlooked in works of reference, Christian gold coins now began to be struck in Europe outside of Constantinople, where the privileges of the Basileus were jealously guarded. This had much to do with the progress of banks, for it provided a more portable and reliable money than the heterogeneous and often debased and degraded silver coins of the various principalities and kingdoms. They were authorized upon the ruins of the empire. The first Christian gold coins of western Europe were the augustals of Frederick II, 1225, followed by the ducats of Portugal, same year, the pavilions and agnus of Louis IX of France, the ducats of Florence and Genoa, 1253, and the seixas or ducats of Venice, 1276. Consult Del Mar, 'Science of Money,' p. 74.

Confusing the term bank to its more modern sense, what may be regarded as one of the earliest, perhaps the earliest, Christian institution of this character, was the Bank of Barcelona. As a part of this bank's business, there was a bearing upon the affairs of America, they claim especial interest. In Spain, by the ordinance of Valencia, made by King John, who conquered the kingdom of Aragon, it is expressly provided that reals shall only be coined in Valencia and that mints shall be supervised by two well-known citizens; so that no fraud shall be committed as to material or weight (Grimaudet, 'Law of Payment,' New York edition, p. 14). The coin referred to is the familiar Spanish real de plata, of eight to the dollar. This coin was lawful money in the United States down to 1853 and well received in America, was afterward extended to Barcelona, where it furnished the basis for the extensive dealings of its bank in the exchange of full-weighted reals and reales de a ocho (dollar pieces of eight reals) for the heterogeneous coins which flowed from all parts of Europe into the general emporium; among them the coinsages of Moslem Spain (Granada). From Barcelona King John's test of the coins, called in England 'The Trial of the Pyx,' was carried from Spain into the Spanish-American mints of Mexico and Peru and adopted by the United States government from the period of its inception. This supervision and testing of the coins is still conducted in the American mints under a commission of civilians appointed by the Secretary of the Treasury. It constitutes the groundwork and basis of honest money and banking.

The Bank of Barcelona also received, on deposit and disbursed the revenues, or part of them, of the four great ecclesiastico-military orders and kept the accounts of about a dozen other orders of knighthood, like those of Calatrava, St. James, Golden Fleece, St. George, etc., some of which were ecclesiastical and some merely chivalrous. The church's treasure, formerly deposited in the castle of Segovia, is believed to have been removed to the Bank of Barcelona, because the Contador-General is known to have drawn some of his warrants for public expenses upon that institution. In 1480 Isabella, holding court at Toledo, signed a decree which greatly affected the bank. To support the government of Castile Henry IV had issued certain annuities on the public revenue of annuities assigned on the public revenue, and these by purchase had become the property of the nobles, who in turn had borrowed money on them from the bank. Isabella's decree, denouncing and annulling these certificates—virtually an act of repudiation—was entrusted to the execution to her confessor, Ferdaad de Talavera, who performed this task with such fidelity that it saved 30,000,000 maravedis annually to the Crown (Prescott). If the bank survived the depletion of its resources in 1480, it could scarcely have weathered the civil war of 1517–22, during which period of turbulence the bank, despairing of a return to peace and security, appears to have quietly discharged its obligations, wound up its affairs and honorably dissolved.

Between the Bank of Barcelona (baring the Bank of St. George at Genoa, 1407), that is to say between 1401 and the formation of the Bank of Amsterdam, 1607, works of reference will be searched in vain for any notice of a public bank in Europe. The significant absence of a bank in any kingdom or principality of the civilized world for an interval of over two centuries, is not even commented upon. The so-called Bank of Venice, which is assigned to the year 1157, was not a public bank until 1619, when it was reorganized as the Banco di Rialto, which converted it into a public bank of deposit and withdrawal. Meanwhile the Bank of Venice was merely a chamber of Loans (Camera degli Impresti) into which patriotic capital was invited to assist the government of Venice. Even had it been a public bank it was not in a position to exercise the proper functions of a European bank, namely, the aggregation of private capital, to be distributed in loans helpful to European commerce and enterprise. How could a Venetian bank promote or assist the trade of Spain, France, England, the Netherlands or Germany? It could not, and in fact it did not do anything of the sort. Between the dissolution of the Bank of Barcelona, rather between the date when its commercial activities ceased, about 1532, and the Bank of Amsterdam, 1607, and Hamburg, 1619, an entire century elapsed. What institution of security and commercial credit or convenience filled the void?

This interval witnessed the greatest of all commercial events, the discovery, conquest and colonization of America, the abstraction and removal of its enormous treasures in gold and silver, their coinage into money, the opening to plunder and afterwar to commerce of India, China and Japan, the consolidation of the German empire, the rise of prices and the progress of the Reformation. Where are the institutions into whose hands these conquered treasures might be placed, to whom could the impatient European commerce of this period apply for assistance? There seems but one reply.

Charles I, King of Spain and sovereign of America, elected Emperor of Germany as Charles V, in 1519, having been assisted to this elevation by the banking house of the Fuggers of Augsburg, turned over to them the entire
the banking business of his extensive empire. He assigned (farmed) to them the monopoly of quarantine (Almaden), Guadalcanal silver mines and virtual control of many of the mines in America. He transferred to them the vast accounts and balances of the military and episcopal orders. He even granted to them the royal and imperial prerogative of coining (1584). They conducted the mints of Valencia, Augsburg, Weissenhorn (Bavaria) and other places. They even were privileged to stamp their names and titles upon the golden florins, for example, Ant. Fugger D. in Weissenhorn, 1530-60. For upwards of a century, such of the American treasure as escaped capture by the English, Dutch and French cruisers passed through their hands, leaving them a fortune estimated at 60,000,000 florins or ducats, say $150,000,000. They became bishops, barons, dukes, even princes, and their house survives to the present day. Such was the bank of the 16th century.

Beyond the jurisdiction of England, France, the Netherlands and some of the Italian republics, the sole assistance which commerce enjoyed from the vast stores of the precious metals which flowed into Europe during this period came from or through the house of Fuggers. It was not until the reign of Charles II, 1665, some say Charles III, that Spain was enabled to establish a public bank for the convenience of the public: that of San Carlos. Meanwhile the Inquisition, by burning or banishing the Moors and Jews, had so thoroughly destroyed banking industry that it imparted to this little known institution but a feeble existence. To American readers it is only known through the pages of Blanqui.

Mention has already been made of the banks of Amsterdam and Hamburg. Between them came the Bank of Middleberg, 1616, and after them the banks of Rotterdam, 1635, and the Swedish Riksbank of 1656. All of these institutions were of Protestant origin, opposed to the Catholic house of Fugger, which after the Peace of Westphalia in 1648 lost much of its imperial support and influence. These northern institutions became the effective promoters of that enormous expansion of commerce, industry and the arts, which bestowed upon the 17th century the name of the Halcyon Age. They promoted and supported the English and Dutch East and West India companies, the African Company and the numerous other cosmopolitan enterprises of a marvelous period; and they imparted to the commerce of the British, French, Dutch and Scandinavian ports an impetus which they have ever since retained. Until 1656, when the Riksbank of Sweden issued circulating notes, they received almost solely of receiving funds on deposit for safety, and loaning them out upon commercial or governmental bills of exchange, promissory notes or bonds. Some of them were endowed with special privileges or monopolies, as the banks of Amsterdam, England and France (Comptoir des Escomptes). All of them served to commerce, indeed the Bank of Amsterdam went so far, in its secret loans to the Dutch East India Company, that it became insolvent about 1760 and was liquidated in 1819.

Meanwhile a new empire had arisen beyond the Atlantic, whose growing commerce demanded the convenience and assistance of public banks, as we shall see. In 1667, Massachusetts found it necessary (for it was no mere act of wantonness or of profit-seeking by the colony), to defy the Royal authority by erecting a Mint and striking Pine-Tree shillings. The origin of this silver is not known. In 1662 some of the silver smuggled out of Mexico or captured from the Spanish fleet on its way to the Chesapeake and was coined in Maryland. These events presaged a bank. In 1680 a bank was established for the convenience of planters in South Carolina, which William Paterson, afterward promoter of the Bank of England, now fresh from the Darien colony on the Isthmus of Panama, is said to have investigated. Five or six years later, 1666, John Blackwell and his coadjutors united to establish a bank of issue in Boston, also in defiance of British authority; and on 3 Feb. 1690, the colony of Massachusetts issued its own bills of credit. It has been suggested that these bills were to pay off the soldiers who shipped on the Phips campaign to Quebec, whereas in fact the notes which were issued before the Phips expedition was resolved upon. One of these notes is still in existence. (A copy will be found in Del Mar's 'History of Money in America,' p. 79). On 2 July 1692, the colonial government of Massachusetts made these notes legal tender for the payment of all debts and obligations, except those which had been contracted in special moneys. The amount of the notes outstanding was between £30,000 and £40,000.

The pressing necessity for circulating money and the creation of banks, two subjects unavoidably connected for sustaining and developing the exchanges and commerce of the British-American colonies, manifested itself almost at the outset of their settlement; and had no little to do with their subsequent revolt from royal authority. The position of the Crown, as laid down in the celebrated case of the Mixt Moneys, 1604, was that the creation and issuing of money was a royal prerogative, which could not lawfully be exercised by any other power than the King; a prerogative not delegated to the colonies. Hence, whatever coins, or substitutes for coins, were needed for their exchanges, had to come from England. Such, too, had been the position of the Spanish Crown; yet the necessities of Hispaniola, Puerto Rico and other Spanish possessions in America, had compelled their inhabitants, so early as 1586, to employ leather money in their dealings. Consult Lewes, Robert, 'Map of Commerce,' London 1711, p. 16.

Strengthened by this example, the attitude of the British colonies was laid down in 1665 no less positively than the Mixt Moneys decision. They say, writes a commissioner of Massachusetts, 'that so long as they pay (to the Crown) a fifth of the gold and silver (found or captured), according to the terms of the Charter, they are not obliged to do anything.' (Sir J. R. Seeley, 'Expansion of England,' Norman Angell, citante, p. 376). Such became their justification for the Pine Tree coinage, for John Blackwell's bank and for colonial bills of credit.

The subsequent institution of American
colonial banks and issues of money are treated under appropriate heads.

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2. THE FUNCTIONS OF BANKS. The functions of banks may conveniently be divided into those relating to loans and investments, and those relating to money and the substitutes for coined money provided by banks. Savings banks, the simplest class of banking institutions, are concerned with the first of these functions. The inducement of the interest return brings to them deposits, most of which remain undisturbed for long periods. Safety of principal and the income yield are therefore the considerations which determine the characteristics of this class of savings banks. State and municipal bonds, the bonds of established public service corporations with a good dividend record and real estate mortgage loans meet these requirements and make up the bulk of the investments of this class of banks. Through the facilities which they supply, thrift is encouraged and much otherwise might be wasted is made available to increase the total capital of the community.

Loans and Investments.—Income yield and safety are quite as important for other banks, but they must be sought in a narrower investment field. With them the quality of liquidity is also essential, since most of the funds which they employ are payable on demand, and large and unexpected payments must frequently be made. The deposits of these banks, commonly known as commercial or credit banks, consist mainly of cash resources which are being currently used for business purposes, or for personal expenditure. They are therefore subject to continued change, being constantly drawn upon by their owners. To meet this situation the funds of commercial banks must, in large measure, be kept in those investments which can quickly be converted into cash. In other words, they must be liquid.

Securities for which there is a broad market, such as most of those which are listed on stock exchanges, meet this requirement of liquidity. A far more important avenue for the employment of the funds of commercial banks, however, arises from the demand for short periods of time which comes to the banks from everyone engaged in active business. Working capital requirements in many lines of business vary with the seasons, and in every line of business with the volume of dealings. In satisfying these requirements the banks secure investments ideally suited to their own needs. At the same time a valuable service is rendered to the community. Capital is economized. It is not necessary for each business to supply itself permanently with sufficient capital to take care of its maximum requirements. The supply of capital is also made more elastic, and finally the trained foresight of the banker is exercised in selecting from the mass of would-be borrowers those who have manifested capacity to employ capital wisely and effectively.

Commercial banks, including the banking departments of trust companies, unlike savings banks, do not limit their loans and other investments to the funds received from depositors and shareholders. They lend their credit and thus create a large part of the funds utilized by borrowers. They are able to do this because they provide more or less generally acceptable substitutes for coined money. The bank note, the promise of a bank to pay money on demand, is obviously a credit instrument which is a substitute for money. But partly because of legislation limiting the power to issue notes, and even more because the check has become a substitute for money. But partly because of legislation limiting the power to issue notes, and even more because the check has become a more flexible medium than the note. The check is a substitute for money. But partly because of legislation limiting the power to issue notes, and even more because the check has become a more flexible medium than the note. The check is an order on a bank to pay money, not being currently used for business purposes, or for personal expenditure. They are therefore subject to continued change, being constantly drawn upon by their owners. To meet this situation the funds of commercial banks must, in large measure, be kept in those investments which can quickly be converted into cash. In other words, they must be liquid.

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It may indeed happen that a bank receives, let us say, $1,000 in money from a depositor, and is on that account in position to lend more than might otherwise be advisable; but even here it is not the deposit which it lends but either the $1,000 or (and this is far more likely) a new right to draw $1,000, both transactions—creating absolutely similar deposit obligations.

It is the general use of the check that makes it possible for banks to create deposits through their lending operations. If borrowers made all payments with money, it would be necessary for them to withdraw the proceeds of their loans from the banks in the form of money. The business of commercial banks, like that of savings banks, would then be limited to the funds received from depositors and shareholders, and possibly some slight amounts in addition. But, since borrowers would presumably not immediately draw out the entire proceeds of their loans.

It may, however, be objected that even though the borrower does use checks, the bank will be obliged to make payment almost as speedily as local banks. To see that they may not circulate indefinitely; they are quickly presented for payment over the counter, or by other banks in which they have been deposited. Assuming that a bank were abruptly to double its deposit obligations by granting many new loans, it would unquestionably be confronted almost at once with heavy demands for payment of the largely increased number of checks that would certainly be drawn upon it. If, however, and this is the usual case, all the banks of a locality increase their loans at the same time with a consequent expansion of deposits, each bank will have a greater number of checks drawn upon it, but it will also receive from its depositors a greater number of checks drawn on the other banks. There would be a greater number of checks drawn, but not a corresponding greater amount of cash needed in making settlements between the banks. This increase in loans, if made by the banks of a single locality, would probably lead to increased purchases from producers elsewhere, thus occasioning a balance of indebtedness against one another. Having had their currency would have to be shipped to the banks in other parts of the country, and this would soon prevent further expansion and might make contraction necessary; but again, if expansion of banks loans were country wide, this difficulty would not be experienced unless gold exports were thinned, but later credit would not present itself if the expansion of credit were world-wide.

The general expansion of credit cannot continue indefinitely. An increasing volume of checks like an increase in the quantity of money has the same tendency to bring about an advance in prices. Rapidly rising prices invariably stimulate unhealthy business activities. Sooner or later the expansion of credit is checked by the deterioration in the average quality of the loans of the banks; failures become more numerous; confidence, not only in the future of business, but also in the banks, is weakened; a crisis breaks out followed by a period of depression; the volume of credit is then reduced through a slackening in the demand for loans, and through the liquidation of loans previously made.

However universal the use of checks may become, the individual bank does not on that account cease to be subject to constant demands for cash. A bank cannot exert control over the use its depositors make of their accounts from day to day; checks deposited, however, never exactly balance checks presented for payment; there will be wide variation, sometimes favorable, sometimes unfavorable. In the latter contingency reliance may be placed upon a speedy change in favor of the bank. More positive action is, however, certain to become necessary from time to time in the experience of every bank. The requirements of depositors will occasionally result in a succession of unfavorable balances, and further, every bank must face the possibility that unfounded rumors may subject it to a run. It is temperate, one may be justified in saying, if a bank were able to pay large amounts of money on demand, and also be in position quickly to replenish depleted reserves. Its assets, or at least a considerable portion of them, must be of such a character that they can be quickly converted into money. The degree of liquidness in all assets is not a requisite. Immediate conversion into cash of a portion of the assets of a bank will ordinarily serve for the building up of reserve depleted on account of unusually large requirements on the part of depositors, and the gradual conversion of the remaining assets is all that can be deemed necessary for exceptional contingencies. 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.

Central Banks.—In the development of commercial banking in most countries, there has been a general tendency toward the establishment of a special class of institutions, the primary function of which is to enable other banks to convert their assets into cash in periods of stress. These special banks, commonly known as central banks, maintain themselves in ordinary times in a position of great strength. They endeavor to exercise a restraining influence during periods of rapid credit expansion, but when the emergency presents itself, central banks themselves freely grant loans. The Bank of England is the oldest and most famous institution of this kind. The very great advantages it has secured through its central bank have been the result of similar institutions in other European countries led to the establishment of the Federal Reserve System by an Act of Congress in 1913.
the business community in serious financial difficulties.

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3. WORLD SYSTEMS—TYPES. The banking institutions of Europe, with the increase of capital, the development of industry and the growth of international relations, have naturally conformed to these influences, with the result that there is an accommodation even where certain standards or types for the different classes of banking operations. Such differences in organization and practice as remain are not fundamental, and afford little occasion for comparison or argument as to their advantages or desirability, but are explained by their origin and the established customs of the people.

Central Banks of Issue.—In every country there is now a central bank, which is recognized to be the head of the system, and is charged with certain responsibilities. It is the fiscal agent of the government and the custodian of treasury funds; it issues the paper currency, carries the gold reserve and holds a dominating position in the foreign exchanges and the domestic credit situation. It is the final depository of the other banks of the country, and, as a bank of re-discount, with the power of note-issue, it is expected to have at all times a reserve of available credit which will be used as needed for the support of the banking and general business situation. This reserve of credit is maintained by judicious use of the discount rate, which is raised and lowered to control the demand for credit. In all European countries judgment has been given in favor of confiding the power of note-issue to a single bank, but in Great Britain, Germany and Italy a few banks which were in possession of the right of note-issue when the present system was determined upon were allowed to retain a restricted right.

These central banks, by reason of the peculiar responsibilities with which they are charged, are required to confine their credit operations to the main business of short commercial loans, usually not exceeding four months, which facilitate current trade and industry. Bills of exchange, arising out of specific transactions, and financing the movement of commodities to market, constitute the principal class of investments. Loans to the government, however, are authorized, and advances upon government securities and other approved collateral are made at a higher rate of interest and in limited amount. Nothing but gold and short commercial bills are considered a proper cover for note-issues.

The capital of these central banks, with the exception of the Russian Imperial Bank, is supplied by private shareholders, but in many cases the executive officers, and in the case of the Reichsbank the executive board, are named by the government. The Bank of England which is the oldest of the great banks, and which led in the demonstration of the main important functions of a central institution, is a completely private institution in its organization, but its policy is none the less governed by a sense of public responsibility. All of these institutions are bound to safeguard and promote the public interest, as their first consideration.

The most noteworthy difference in the operations of these banks has been in the management of the note issues. The Bank of England is authorized to issue notes to the amount of £18,450,000 upon the security of government bonds and other securities of gold and possession, but all issues in excess of this must be fully covered by gold in its vaults. This requirement, which was imposed upon it by the Act of 1844, was prompted by a belief that excessive note issues had promoted over-expansion of credit, the exportation of gold and the recurrence of financial crises. The effect was to make the note-issue absolutely fixed save as thestock of gold in the bank was increased or decreased. This restraint upon issues occasioned less inconveniences in England than it would have caused on the Continent, for the reason that even before 1844 the bank check had become to a great extent in England a substitute for the bank note. With the growth of the joint-stock banks the custom of keeping bank accounts and making payments by check has been steadily spreading, while on the Continent it remains the general custom to make payments in currency. The restriction of the Act of 1844 not only failed to prevent the recurrence of crises in England, but it actually hampered the bank in dealing with them to such an extent that in 1847, 1857 and 1866, when confronted by emergencies of this character, the Ministry requested the bank to disregard the provisions of the law, and Parliament in each instance afterward gave its approval by passing an act of indemnity. The situation upon each of these occasions was the public confidence in the general state of credit, and in the condition of certain private banking institutions, was shaken, but there was no want of confidence in the Bank of England. The latter, by disregarding the law, and issuing its own notes to the banks and firms which were able to give security, relieved the pressure and stopped the panic. This demonstration of the effectiveness of flexible note-issues under the control of a strong central banking institution has had a powerful influence in shaping the banking systems of other countries. In England no immediate change in the Bank Act was made, but an important change was made in the management of the bank. It was discovered that by raising the discount rate the tendency to over-expansion could be checked and the gold reserve of the bank increased, thus permitting an enlargement of credits, either by deposit accounts or note issues. Since 1866 this knowledge has been used so skillfully that the arguments in favor of a liberalization of note-issues have not been pressed. In 1914, however, following the outbreak of the European War, Parliament passed an act giving the Ministry authority to permit the Bank to issue notes without the statutory reserve.

The statutes governing the Bank of France fix a maximum limit upon its issues, but this has always been high enough to give practical freedom to the management of the bank. The limit named is without restraint. The framers of the law governing the Reichsbank introduced a novel feature, which has been since adopted in many countries, including the United States. This is a provision levying a
tax upon issues in excess of a named amount, which is assumed to be sufficient for normal requirements. This is accompanied, however, by another provision, requiring that at all times a minimum reserve of 33 1/3 per cent against outstanding notes shall be maintained. The German tax upon excess issues is 5 per cent; in the United States, in applying the plan to the Federal Reserve banks, the tax is a progressive one, increasing as the percentage of reserve diminishes.

In a number of the countries where the central banks are owned by private shareholders, the profits are divided with the Treasury or there are other compensations to the Treasury for the charter privileges.

Commercial Banks and Discount Houses. — In all countries the bulk of the banking business with the public is transacted by what are commonly called "joint-stock" banks, although the distinction between these banks and the central banks is not in the fact that they are joint-stock corporations but in their more private character. In England there must be included in any study of the commercial credit system, the discount houses or bill brokers, and the accepting houses which are auxiliaries of the banking system. These are specialists in credit, and intermediaries between the borrows and the banks, although the discount houses accept deposits and pay interest on them. They borrow largely from the banks, and their chief function is to specialize in the several lines of trade. By doing this, and endorsing the paper they handle, they give the paper to a higher grade of credit, which will command a lower rate of interest. In this difference between the rate which this paper would have to bear without their endorsement and the rate at which they place it with the banks, they find their compensation. The accepting houses perform a similar function in a different manner. It has long been the custom for the seller of goods to draw a draft on the buyer, payable at some date agreed upon in the future, which the buyer accepts as soon as it is presented by writing the word "accepted" across its face and signing his name thereon. The draft, when assigned by the drawer becomes two-name commercial paper, and is usually sold on the market. Evidently much depends upon the character of the names, and if the buyer is not well known he can afford to pay a commission to a house of high standing which will accept for him. This custom developed gradually, first within a trade where the houses knew each other, until it became a regular business. Back of these discount houses and accepting houses are the joint-stock banks, which are usually in the market for high-class paper, and back of all is the Bank of England, which is under obligation to always buy paper at some rate. When the war broke out, and paralysis fell upon the banks, it was immediately clear to the houses overlap and dovetail, and how sharp is the competition in the credit field.

The joint-stock banks of Great Britain are organized under the General Companies Act. There are no requirements as to reserves or regulating the character of the business. The practices of the banks have been established by the lessons of experience and the teachings and writings of men recognized as authorities. It has become an accepted doctrine that bank investments must be of a temporary and liquid character, and that banks shall not take a proprietary interest in any business.

On the Continent, as in England, the joint-stock banks other than the central banks are organized under the general incorporation acts, and are quite as free as to the character of business they may do. There are no requirements as to reserves and, in most countries, no governmental inspection or supervision. The joint-stock banks of Germany have developed their business on broader lines than perhaps any other corporate banking institutions, and with practically the freedom of private banking houses. This has been due largely to the rapid development of German industry and over-seas trade since 1890, and the demands which have fallen upon the banks in connection with it. The need for capital to finance growing and profitable industries has been before their eyes, and they have gone further than British banks have been accustomed to go in supplying capital which could not be readily withdrawn. In doing this they have considered it advisable, instead of restricting their interests to loans, to take at times proprietary interests, evidenced by stock and to be represented in the directorate of such companies. They have organized companies to take over private businesses and to enable these companies to increase their capital, offering the bonds and shares to the public over their counters, through their branches and upon the stock exchanges. The stock exchanges are for the most part controlled by the banks, and most of the transactions are through the banks. The head of the leading German joint-stock banks stated to the American Monetary Commission in 1908 that that bank had 50 members of the Berlin Stock Exchange to attend to its business. All of this is different from banking in England, and, as to relations, with the stock exchange, from banking in the United States, but it is not so different as possibly at first sight appears from common banking practice in America, so far as capital advances are concerned. It is common knowledge that the banks of this country, particularly in the smaller towns, have had a large part of their assets in the form of loans which represent fixed investments. The country has been growing rapidly, every branch of industry has required additional capital, and the only source of supply has been the local credit institutions. As a result, few American banks outside of the large cities would stand the theoretical test as to liquid conditions any better probably than the German joint-stock banks, and many of them not so
1. There have been disasters from it, on the whale banks in a condition as to liquid assets that was scarcely open to criticism. In an article written for the National Monetary Commission in 1908, Herr Mueller, a director of the Dresden Bank, and who served upon the Imperial Commission to consider a revision of the law regulating the Reichsbank, stated that in most of great German banks the principle was adhered to of not allowing the total amount of tied-up assets, such as bank sites and other fixed investments and interests, to exceed the bank's own paid-up capital, plus the capital standing in the form of State and called surplus and undivided profits. The great capital of these banks permits them even then to have large fixed investments.

2. In France there has not been the pressure for capital for industrial purposes which there has been in Germany, and the joint-stock banks or credit societies, as they are called, have confined themselves closely to the financing of current trade. In other countries of Europe the practice varies, and everywhere there is almost complete freedom from legal restraints.

3. **Investment and Mortgage Banks.** — The Credit Mobilier, founded in France in 1852, was the original of a type of investment banks. It sold its own debentures or collateral bonds against holdings in its own possession of various securities which it was a master spirit in promoting. It had a successful career for a time, but after about 15 years was forced into liquidation as the result of heavy losses. The type of the Credit Mobilier, the name of which signifies a mobilizing of credit, has been followed to some extent in many countries, but its mistakes have been a warning against the policy of using such an organization to promote new enterprises. The English investment companies issue their own debentures based upon securities which they have purchased, but their purchases are confined to the issues of established enterprises.

4. The mortgage banks of Europe are organized upon the above principle. The Credit Foncier, which has almost a monopoly of the land mortgage business of France, is a semi-public institution, the capital being supplied by private shareholders, although originally the government gave it a subsidy. The governor and the director are appointed by the government. It is allowed to receive a limited amount of deposits and these are invested in commercial bills, but its principal business is lending upon mortgage, accepting either urban or rural estate as security. Against these mortgages in its own possession it issues bonds. The theory of their organization being similar to that of the mutual insurance societies, or orders, now prevalent in many countries. The unlimited liability of all members helped them to get deposits, but was a deterrent to membership for those who did not want to borrow. Later, societies were organized which issued shares and in which the liability of shareholders was limited in various degrees. It might be double the par value of the stock, or greater, as determined by each society for itself. The societies are independent in their management, but have an association and a central clearing agency. The Schulze-Delitzsch societies do practically a commercial banking business. The Raiffeisen societies are upon much the same plan, and lend money upon several years' time, but the membership is chiefly among farmers. There is a central bank in Berlin for these societies, to which the state of Prussia has subscribed a capital of 50,000,000 marks. It is strictly a state institution. There are similar societies in other states of Germany. The total membership within the empire is nearly 2,000,000, paid-in capital is approximately 350,000,000 marks; deposits, about 2,335,000,000 marks. The Schulze-Delitzsch...
and Raiffeisen systems have an extensive development in Austria.

In France the Credit Agricole Mutuel represents a development of the Raiffeisen idea. Small local societies had been doing business with moderate success, but the movement was given new recognition and encouragement by law in 1897, when, upon a renewal of the charter of the Bank of France, a gratuitous loan of 40,000,000 francs, and also a certain share in the annual earnings of that institution, was exacted from it and diverted to the use of the agricultural banks. The law provided for their organization of district banks, which lend the available funds to the local societies, the distribution being made by a committee of public men, including the governor of the Bank of France. The peculiarity of the system seems to be that it depends chiefly upon the funds received from the Bank of France, which it is allowed to use gratuitously. These funds are loaned below the ordinary market rate, but as they are limited in amount the growth of the system is restricted. It lends only to provide temporary credit to farmers.

There are mutual credit associations in Russia of limited liability, whose capital is created by the payment on the part of each member of a sum equal to one-tenth of the credit granted them. Associations of this kind may be established by the Zemstvos. In 1907, the sum total of these loans and discounts was approximately 245,000,000 rubles. A project is pending for the establishment of a central bank for these associations. See Co-operative Banking; Federal Farm Loan Act; Land Credit.

Savings Banks, Municipal, Postal, Private.—A system of municipal savings banks has its most important development in Germany and Russia. In both countries the banks are public institutions, supported by the credit of the municipalities and conducted under their supervision. The profits go to the surplus fund of the banks, or may be in part expended for public purposes, such as the support of hospitals, parks, etc. In Russia the municipal banks do a general banking business and also lend money on real estate security, but in Germany the investments are confined to trustee securities, as fixed by law, and to the purchase of a limited amount of commercial bills.

The municipal savings bank is to be found in other countries of Europe, and there are also stock company savings banks, but they are without special features. Mutual societies supply, to a great extent, the facilities for saving. Postal savings banks have been established in many countries, Germany being an exception, due to its high development of the municipal savings banks.

Public Loan Banks.—In France, in 1830 and in 1848, in Prussia in 1848, 1866 and in 1870, and in the German empire in 1914, the governments resorted to the establishment of public loan banks, or more properly, loan-offices, as a means of facilitating an emergency the flotation of public loans. The function of these banks was to serve in a subsidiary capacity to the central banks, by making loans upon collateral security. In Germany, in 1914, one of these banks was established in every city where there was a branch of the Reichsbank. They were authorized to make loans upon collateral or goods, and, in doing so, to issue notes to the maximum aggregate of 3,000,000,000 marks. These notes were not legal tender but were acceptable at the Reichsbank and made good as basis for note-issues by the latter. It was an emergency measure, designed to aid in mobilizing the financial resources of the nation. These banks are known as "Darlehnskassen."


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4. INTERNATIONAL BANKING. Prior to the enactment of the Federal Reserve Law (q.v.) under which National banks have obtained authority to establish branches in foreign countries, international banking upon the part of the United States had been mainly confined to investment banking, and efforts to place American securities in Great Britain and the countries of western Europe. The most ambitious effort to enter the commercial field had been made by the International Banking Corporation, chartered in 1902 by the State of Connecticut, which began business with a paid-up capital of $3,000,000 and surplus fund of $3,000,000. It had at that time 15 offices abroad, most of them in Asiatic countries.

The Need of Foreign Banking Facilities.—Although the slow development of American banking operations in the foreign field may be attributed in part to the fact that the national banking system, to which most of our large banking institutions in the past have belonged, until recently made no provision for such extension, it is also true that there has been little inclination among American bankers to so extend their business. The fact that branch banking has had small development within the United States will partially explain the seeming lack of interest in American bankers toward comparatively few branch establishments that are maintained in this country, with few exceptions, are located in the same city with the head office, and the great bulk of the banking business is done by independent, locally owned, institutions which have but a single office. Our people have been inexperienced in branch banking, and not accustomed to entrusting large powers to scattered officials at great distances.

The chief explanation, however, for the indifference of American bankers to international opportunities is to be found in the same general situation which accounts for the development of American interest in foreign investments and foreign trade, to-wit: the all-absorbing needs and attractions of the home field. There has been no inducement for banking capital to go from the United States to other fields for the mere profits of commercial banking. All foreign fields are already occupied by domestic banking institutions, which are likely to have the preference for purely domestic business, and by British or European banking corporations which are more or less allied with other important investments in the same countries, and with interests that are developed in trade with these countries. It has been evident
that American banks abroad would have little reason for their existence unless they were serviceable to American trade and American capital. It is for this reason that German banks have been serviceable to the trade and investments of those countries.

With the development of this country, the growth of its industries and the accumulation of capital, the attitude of its people toward trade and industry have undergone a change. Our exports no longer consist almost exclusively of natural and crude products. The United States has become the leading producer and a heavy exporter of steel and machinery, and is rapidly increasing its exports of a great variety of manufactures. At this stage banking facilities abroad become a factor in the development. If American banks in foreign countries require for their prosperity that there shall be American trade with those countries, so does American trade have need for an extension of its own banking facilities.

The services which a foreign bank can render for his client in foreign countries are in most particulars the same that he renders at home, but obviously there is greater dependence upon them abroad than at home, and there are special services incidental to the fact that goods are delivered and collections are made in foreign countries. The distances are great, mails are slow and cables costly; the habits and customs of the people are different, trade conditions are different, the language is usually different, and the chances of misunderstandings and disagreements are more numerous than in trade at home. There is great help to the exporting house in having an interested representative on the ground where deliveries and collections are made, and next in efficiency to his own exclusive agent is the branch office of an American bank. Collections may be, indeed, made at home. 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to develop the dormant resources of countries not so far advanced as ourselves. There will be an economic gain to ourselves and to the world community in doing so, just as there was an economic gain to New England and the United States from the use of New England capital in the development of the Western States of this country. This investment of United States capital in other countries will be guided and stimulated by the development of international banking facilities with headquarters in this country.

6.9. The重要意义 of Commercial Bills.- There is yet another class of international banking which is comparatively new in this country but which is developing, and that is the class of banking which has made London the chief market of the world for short loans and commercial bills. Here again the defects of our national banking in the past have militated against us, National banks not being permitted to accept drafts for future payment. Even our own foreign trade, both exports and imports, has been financed through bills upon London. Most of the time there has been no real excess of funds in this country because it has been possible to carry the drafts at a lower rate of interest in London than in New York. In the future, however, this situation is likely to be different, not so much because of a probable change in the London situation as because of the changes effected here by the Federal Reserve system. In the past the financial banking reserves of the United States have been kept in the large National banks of New York city, which, by custom and as a result of competitive conditions, paid a uniform rate of 2 per cent upon them. This interest burden made it incumbent upon them to keep the funds employed upon the most favorable terms possible, and this employment was commonly found in loans on stock exchange collateral. The Federal Reserve system transfers the banking reserves to the Federal Reserve banks, and forbids their employment in loans upon stocks or bonds. They can only be used in rediscounting paper arising out of commercial transactions. Coincident with the creation of this great fund, restricted to commercial paper, has come permission for National banks to accept paper arising out of international trade, a permission which extends not only to our trade with other countries but to trade between all countries. These acceptances are the most desirable paper available for the Federal Reserve banks, and as they pay no interest on deposits, and large earnings with them are subordinated to the policy of having liquid assets and establishing a great discount market, it may be expected that the rate on this class of paper will hereafter be as low in New York as in any market of the world. The availability of the New York market for trade bills ultimately payable elsewhere will of course be affected by other factors as well as the discount rate, and particularly by the general position of New York in the world's exchanges, but it is and can be confidently predicted that with the resources of the Federal Reserve system behind it, and with the United States developing as a creditor country, New York in the future will play a much more important part in international banking than in the past.

As a result of the European War, and the closing of European markets to foreign loans, an important aggregate of loans to foreign governments has been made in the American market. Since there is reason to believe that capital will continue to accumulate rapidly in the United States, and that there will be less difference in interest rates between New York and European markets than in the past, it is probable that New York will continue to be a factor in transactions of this class. The development of any country in international banking is dependent finally upon its people to international affairs. There must be an important body of traders and investors with international interests and cosmopolitan views. See Co-operative Banking; Federal Reserve System (article 12); Foreign Exchange (article 15); World Systems (article 3).

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5. FOREIGN EXCHANGE. Foreign exchange may best be described as the system by which payments are made between countries having different monetary systems. The terms "Exchange" and "Foreign Exchange" are also used as meaning the drafts drawn by merchants and bankers resident in one country upon merchants and bankers resident in another.

Origin.—Concerning the origin of the foreign exchange system as it exists at present there is a good deal of doubt. The best opinion is that the system as we now have it came into existence early in the Middle Ages as a result of the commercial dealings between the northern Italian republics and the Levant. Venetian merchants, for instance, purchasing goods in Alexandria, found that on account of the prevalence of piracy in the Mediterranean payment for such goods in gold was extremely hazardous. It being the case that the merchants of Alexandria were also purchasers of goods in Venice, a system was devised whereby, instead of actual gold being shipped back and forth, merchants in Venice having money owed to them from Alexandria were able to receive it from other merchants in Venice who had payments to make in Alexandria. Gradually it came about, as a result of these arrangements, that Alexandria kept balances in Venice and vice-versa. Payments instead of being made by means of actual gold shipments came gradually to be paid by drafts drawn on such balances.

The Principle Stated.—A clear understanding of the basic principle underlying foreign exchange transactions may probably best be had from consideration of an actual international transaction. A merchant in Memphis, Tenn., we will say, has sold a hundred bales of cotton to a spinner in Liverpool, England. For the merchant in Memphis the important thing is to realize upon his sale, at the earliest possible opportunity, United States currency or credit at bank. This payment he can receive in two ways. Either he can draw a draft upon the buyer of the goods in Liverpool in sterling (the currency of the buyer) and sell such draft in Memphis or New York at the current rate of exchange for American dollars, or (2) the buyer of the cotton in Liverpool can send to the merchant in Memphis a draft drawn on some point in the United States.
and payable in United States currency. Whenever the transaction is arranged, the depositor obtains from the seller of the goods in Memphis immediately receives payment in bankable funds.

The banking machinery requisite for the conversion of sterling drafts drawn, for instance, in Memphis, into United States dollars, or for the furnishing of drafts drawn in sterling terms, to the foreign merchant, is relatively simple. It consists simply of a number of banks and bankers with the necessary facilities for purchasing the drafts drawn on foreign points in foreign currencies offered them, and for selling to their clients such drafts drawn on foreign points in foreign currencies as may be desired. It must, however, be clearly understood that the foreign exchange banker is not merely a broker in bills, buying bills from parties who have them to sell and selling the same bills to other parties who want to buy them. Having bought exchange drafts in a foreign currency on a foreign point, the foreign exchange banker does not resell those same bills, but instead sells a draft made by himself upon his correspondent bank abroad. The balance abroad out of which these bankers' drafts are paid is being continually replenished by remittances from this side, of foreign exchange which the banker buys in the regular course of business.

The foreign exchange banker, in other words, maintains a depositary abroad with whom he deposits the bills of exchange he buys and upon whom he draws the drafts which he sells to his clients. Day by day these balances are being drawn upon and replenished. At all times they are maintained at a certain point, that, of course, depending upon the standing of the banker and the extent of the foreign exchange business in which he is engaged. Some foreign exchange bankers carry balances at only one or two of the most important foreign money centres. Others carry balances at as many as 20 or 30 foreign points.

As a result of the arrangements they have with their foreign correspondents and the balances they carry abroad, foreign exchange bankers at primary points are always in a position to accept any exchange which may be offered them, and to sell any exchange which may be required. A large packing house in Chicago, for instance, may have made a shipment of meat to Amsterdam and as a result be offering its drafts drawn in guilders at 15 days' sight upon the buyer of the goods in Holland, or upon some Dutch bank designated by him. Of these drafts the packer, if his standing is good, will have no difficulty in disposing at whatever happens to be the current rate of exchange at the time for bills of this character. Some banker or bank will obtain them out of his hands, knowing that he, the banker, can sell the bills to his correspondent bank in Amsterdam for credit of his account, later drawing his own bills upon the balance thus created. Very possibly at the time that he buys the bills drawn against the meat shipment, the foreign exchange banker may have on hand with which he can sell drafts drawn by himself at a rate of exchange which will show him a profit on the transaction. Nor does it make any difference whether the drafts he buys are drawn against meat or wheat or copper or whether they are payable at sight or at 15 days' sight or at 90 days' sight. All is gain, that comes to the foreign exchange banker's mill. His account with his foreign correspondent is a melting pot into which he can put bills of exchange of every variety, the whole appearing after collection and discount as a cash balance upon which he can draw his own drafts.

The profit made by the foreign exchange banker comes from the fact that he can regularly secure a better rate of exchange for the drafts drawn by himself, which he sells to his clients, than he has to pay for the mercantile bills of exchange which he buys from other clients and with which he is continually replenishing his balance abroad. Between bankers' bills and mercantile bills, however good the latter may be, there is always a difference in the rate of exchange. Between the bill drawn by the banker of good standing and the merchant of good standing this difference is comparatively slight, but as between the bill of the banker and the merchant whose paper is not so well known, although it may be perfectly good, there is a very considerable difference in the rate. It is just here that the foreign exchange banker makes the bulk of his profits. The bill of this mercantile house he knows is perfectly good, but because the paper is not particularly well known it does not perhaps command the full market price. This paper the banker buys knowing that it is good and that it will be paid upon maturity, and against this paper he sells his own bills at a considerably higher rate of exchange.

Aside from the trading on rates described above, there are, of course, great speculative possibilities in the foreign exchange market for those who choose to take them up. By buying bills, for instance, and accumulating a large balance abroad without selling his own drafts against such balance, the banker puts himself in a position where he will greatly profit through any rise in rates which may take place —or vice-versa. Foreign exchange bankers, too, sell exchange for future delivery and contract to purchase drafts at fixed times in the future, at rates which are high above or below them a profit. These, of course, are only one or two examples. The opportunities for speculative operations in foreign exchange are practically unlimited.

The par of exchange between two countries having different monetary standards as, for instance, Great Britain with the pound sterling and the United States with the dollar, is the price of the gold unit of one country expressed in the currency of the other. In a new gold pound sterling (sovereign), for instance, there is an amount of gold which, at any sub-Treasury in the United States, is worth $4.8665. This sum is, therefore, the par of exchange between Great Britain and the United States.

From this par of exchange the rate fluctuates upward and downward according to the supply and demand. If American merchants or bankers have large payments to make on the other side and drafts drawn he can sell drafts drawn by himself at a rate of exchange in great demand, it naturally follows that the price in dollars which must be paid for each pound sterling, mark or franc, as the case may be, will increase (that the rate of exchange will
If, on the other hand, a large amount of drafts drawn on foreign points in foreign currencies are being offered for sale to bankers engaged in the foreign exchange business, it stands to reason that less American dollars will be paid for each pound sterling, mark or franc, as the case may be (that the rate of exchange will decline).

The principal influences having a tendency to cause the rate of exchange at any given point to rise are as follows:

**Heavy Imports of Merchandise.**—Merchandise imported must be paid for—usually by a draft drawn in the currency of the country from which the goods are coming. If, thus, imports run heavy, there is necessarily a big demand for drafts to send over to the shippers from whom the goods are coming. The natural effect is to cause a rise in the rate at which bankers are willing to sell such drafts.

**Heavy Imports of Securities.**—Exactly as merchandise imported into the country must be paid for, so securities imported into the country must be paid for. The moment a market begins to repurchase on a large scale its securities held abroad, or to purchase foreign securities, there is set up a strong demand for bills of exchange drawn on the market where the buying is being done to settle for these securities. A time when New York, for example, is buying stocks heavily in London, is apt to be a time when the demand for sterling drafts is so great as to give the sterling exchange market a strong upward tendency.

**A Decline in Money Rates Below the Level Prevailing at Other Important Foreign Centres.**—As money rates decline there is a strong tendency for capital to seek points at which a better rate is offered for its use. Transfer of capital can be effected only through remittances of exchange to points where the capital is to be employed. A period of extremely low money rates at a point like New York, for example, with London offering a better rate for capital, is likely to be a time when there is a big demand for bills of exchange with which to make remittances to London.

The principal influences tending to cause a decline at any given point in exchange rates are as follows:

**Heavy Exports of Merchandise.**—Payment for merchandise exported from the United States is made largely by drafts drawn in the currency of the country to which the goods are shipped, upon the buyer of the goods or upon some bank abroad designated by him. A time when merchandise is moving freely out of the country is a time when a large amount of such drafts are being offered to foreign exchange bankers. The result is, naturally, to cause a decline in the rate which bankers are willing to pay for such drafts.

**Heavy Exports of Securities.**—Securities shipped out of the country, as is the case with merchandise, are generally paid for by a draft drawn by the seller upon the buyer. A time when, for any reason, large amounts of stocks or bonds are being shipped out is, naturally, a time when large amounts of exchange are being drawn and offered, with a consequent decline in the rate of exchange.

**A Rise in the Rate for Money Above That Prevailing at Other Primary Points Abroad.**—Just as banking capital tends to flow out of a market where the money rate is declining, so it tends to flow into a market where the money rate is rising. Let money rates at New York, for instance, rise considerably above those prevailing in London or Paris, and immediately foreign capital begins to flow this way and American bankers begin to recall to this market for their own use a substantial part of the funds they have been carrying abroad. This recalling of balances is effected by drawing drafts on correspondents abroad and by offering these drafts for sale in this market, the effect being to lower the rate of exchange.

There is, however, a limit beyond which, under normal circumstances, the rate of exchange between two countries having the gold standard cannot rise, and a limit beyond which it cannot fall.

The extent to which the exchange can rise is limited by the point at which it becomes cheaper for parties, having payments to make abroad, to send the actual gold than to send a banker's bill drawn in the currency of the place where the payment is to be made. If, for instance, a merchant in the United States is ready to make a payment in Great Britain finds that each pound sterling of the draft he wants to buy will cost him $4.89, he can go to any United States sub-Treasury, purchase the exact amount of gold which when laid down abroad will yield one pound sterling, and send it to the other side at a total cost to him of considerably less than $4.89. The American merchant's idea being to discharge his obligation abroad with the least possible expenditure of American dollars, he will elect to send the actual gold rather than to purchase and send a banker's draft.

The extent to which the exchange can fall at a point like New York, for instance, is limited by the point at which a new gold sovereign laid down in New York yields net a greater amount of dollars and cents than each pound sterling of a prime banker's draft drawn on London would yield. As an example, has money on deposit in London which it wishes to withdraw to New York. It will sell its drafts only down to the point at which that process yields more dollars than if gold were imported. Below that point the rate of exchange cannot fall.

The above, however, applies only where there is a free interchange of gold between markets. If for any reason the natural flow of gold one way or the other is obstructed or restricted, exchange may rise far above or fall far below what would be the normal gold export or gold import point, depending with the natural outflow of gold from London through raising the discount rate and through buying up all available supplies of gold bullion in the market, the Bank of England, for instance, has on numerous occasions brought about a condition where the rate of exchange in New York on London fell far below the gold import point without any gold being shipped to the United States. Similarly the rate of exchange both at Berlin and at Paris not infrequently rises far above the point at which gold can be profitably exported for the simple reason that, through the interference of the governmental authorities, no gold for export can be obtained.
Under such circumstances those who have remittances to make can do it by means of bills of exchange, and must pay whatever price is asked.

Gold exports and imports, it must be borne in mind, are exclusively in the hands of the bankers because it is only the banker who has the facilities necessary for dealing in bullion. Upon the exchange rate rising, for instance, to the gold-exposed points, the shipments of gold which take place are not made by merchants but by bankers who through thus replenishing their balances abroad keep themselves in a position to sell to merchants the needed bills of exchange. The rate on London at New York, for example, rises to $4.88, at which rate conditions at the time happen to be such that a remittance made in the form of gold and a remittance made by means of a bill of exchange cost the sender exactly the same amount of dollars and cents. At this point bankers will begin to ship gold knowing well that they will be able to sell their drafts against the balances thus created at a slightly higher rate than $4.88, for the simple reason that merchants, having no facilities for handling bullion, are willing to pay, say, a quarter of a cent in the pound sterling in order to avoid the necessity of having to ship the actual gold themselves. The rise in the exchange to the gold export point thus means the shipping of gold on the part of bankers, and the consequent creation of a fresh supply of bills of exchange out of which mercantile needs are satisfied.

What has been said above applies only to the exchange relationship between countries having the gold standard or the gold exchange standard, i.e., where the government, as in the case of the Philippines or in India, guarantees a gold value to the silver medium of exchange. Where the exchange relationship is between a country on the gold standard and a country on the silver standard, the dominant factor in the rate of exchange is the price of silver. A rise in the price of silver in China, for instance, overshadows everything else as an influence upon the rate of exchange on London, and invariably causes a fall in the price at which the pound sterling will exchange for the local silver currency. Conversely a fall in silver invariably brings about a rise in the exchange.


Franklin Escher, Lecturer on Foreign Exchanges.

6. INVESTMENT BANKING. Investment banking is the system by which investment bankers make the use of industrial enterprise; (2) for civil loans, i.e., loans to municipalities, states and countries. An enterprise is in need of capital, or a state or county, for instance, needs money for the construction of roads or public buildings. It is the duty of the investment banker to stand between his clients who have money to lend and the corporation or municipality which wants to borrow, and to see that the needed capital is provided.

The whole system of investment banking as constituted to-day presupposes the ability on the part of those engaged in it to acquire from their clients for whatever purpose required. The X Y Z Railroad, we will say, which operates a system of electric lines, decides to spend a million dollars on certain improvements which, it feels, will greatly increase its revenue. The road itself no longer has any free cash on hand to pay some investment banking house for the mortgage on the property to be acquired. This proposition having been made, the investment banker needs to make an independent examination, and, his engineers having satisfied themselves as to the safety and productivity of the loan, informs the railroad that he stands ready to advance the capital required—in other words, that he will purchase from them at a certain price such-and-such a sum of bonds or stock issued under such-and-such conditions. It is not, of course, his own money which the investment banker figures on advancing. Familiarity with the markets, the price of capital and the standing of the concern which wants to borrow enables him to estimate at just about what price he will be able to dispose of the securities to be issued. For a certain type of stock or bond issued by a certain type of borrower, he knows his clientele will be willing to pay just about such-and-such a price. He figures, for instance, that, counting all costs of retailing, he will be able to parcel out a million dollars' worth of high grade bonds at a net price to him of 98. A price somewhere between 90 and 95 would, therefore, be about what he would offer the railroad for the bonds. The difference between what he paid for the bonds and what he got for them constitutes his net profit on the transaction.

In theory, a corporation wanting to borrow money by selling new securities advertises in the investment market that it wants to issue securities to the highest bidder. In practice, nearly every large railroad or industrial concern has its own bankers to whom the business is invariably given. For this there is good reason. The investment house which is going to interest its clients largely in the securities of a corporation assumes a certain moral obligation. To be safe, in other words, the banker has got to be close to the property he is financing and to remain close to it and in close touch with its affairs. He cannot, therefore, spread his efforts in too many directions. Gradually, in consequence, each investment banking house gathers around itself a certain number of enterprises with whose affairs it is particularly familiar and whose securities it becomes particularly fitted to handle.

The methods by which the investment banking house, having purchased and paid for a block of new securities, proceeds to distribute these securities and thus reimburse itself, vary according to the nature and size of the issue. If the issue is a very large one, the chances are that the bonds will be resold not to the individual investment banker but rather to a syndicate of smaller investment houses, by whom the final distribution will be effected. If, on the other hand, the issue is a moderate
one in size, the chances are against its passing through any other bankers' hands. The house purchasing the bonds in that case is far more likely to offer the bonds direct to its own clients.

There are a number of ways in which this is done. Circularizing and direct personal salesmanship are the two most important. Every investment banking house of any account has a large list of actual and prospective clients. To this list (which in the case of some of the larger houses runs up to 20,000 or even 30,000 names) the new securities are offered. By no means, however, is the offering necessarily limited to the existing list. Advertising, both in newspapers and magazines, to-day plays an important part in investment banking. Through it countless new names are each year added to investment bankers' lists and through it vast amounts of new securities are each year being actually sold.

In the investment banking business the day of large profits is a thing of the past. It used to be the case that, for the banker bringing out the securities even of a corporation of established credit, there was a profit running often in excess of 10 per cent. The establishment of public service commissions all over the country and the greater degree of supervision now exercised by the Interstate Commerce Commission over the railroads' finances has put a stop to that. Industrial and manufacturing concerns, not being subject to such supervision, are in some instances still being made to pay heavily for the service, but even here the profits of the investment banker are nothing like what they used to be.

Investment banking is by no means to be confused with promotion—that is to say the providing of capital for new and untried enterprises. To the investment banker of reputation and who is in the business to stay, the primary consideration is by no means the amount of the profit he is going to make, but rather the safety and desirability of the investment he is offering his clients. A clientele financially strong, and which can be relied upon at the banker's suggestion to absorb any issue of securities offered, is an asset which can be acquired only by years of careful, patient and intelligent effort. The true investment banker, having established such an outlet for any new securities he may want to handle, takes the greatest care that no securities reach clients which may impair his opinion of his own integrity and judgment.


7. THE CLEARING HOUSE. The principle of offset—the application of credits to debits and the settlement of any balance remaining—applied to banking is defined as the clearing principle. Economically it is an evolution of the ancient system of barter by which goods were exchanged for goods, the trade being made even by giving something "to boot"; that is, to equalize any difference in the value of the goods exchanged. In money exchanges this principle is not involved since the amount of money given can always be made to equalize the value of the goods taken. As soon as negotiable instruments or substitutes for value are employed, this inequality of exchange must again be provided for as is the case with original barter, except that money instead of some other commodity is used to make the trade equal.

History.—The clearing principle now in operation between and among banks must have been employed as early as the general introduction of bills of exchange into the commercial world. The origin of the first clearing house in the modern sense is, however, clouded in some obscurity. London claims the distinction of having the original bank clearing house, which was organized about the year 1773. It was the custom of the early London banks to send messengers from one to the other, presenting checks and other bills payable at their respective counters for payment in money. Two of these messengers, so the legend goes, formed the habit of meeting daily at a convenient coffee-house where they would exchange their items, paying the difference with cash which they had brought along for the purpose. Although this plan saved considerable time and the handing of much money, the characteristic dislike of the conservative English bankers for anything varying from established custom asserted itself and the offending clerks who had thus violated precedent were properly disciplined. The merits of the idea having finally prevailed, the London Bankers' Clearing House was established and is said to be the first exchange conducted in a building set aside exclusively for that purpose.

Owing to the unsettled state of finance and the lack of a coherent banking system, it was not until 1853 that the first clearing house was established in the United States, the New York Clearing House having been founded in that year. Albert Gallatin, an eminent financier, had proposed such an organization many years earlier, but without success. Following the example of New York similar associations were formed in other large cities and immediately after the National Bank Act had taxed State bank note issues out of existence (1863-64), the deposit-and-check system of banking brought into general use, the use of personal checks that clearing houses multiplied very rapidly. The so-called Suffolk system used by the Boston banks from 1818 to 1864 was a clearing plan adopted to facilitate the exchange and redemption of New England State bank notes, but its functions and methods were not those of the true clearing house in the generally accepted meaning of the term.

The Work of the Clearing House.—The clearing house is a plan, rather than a tangible entity, although in one sense the term is used to designate the building in which the actual exchanges take place, and in another the voluntary association of the banks having the membership. As between any two banks, there will be a simple offset of checks which each holds against the other, payment of the difference or balance being either deferred and included in the following day's transactions or else settled daily in cash. When three or more banks are involved, and the offset is accomplished through a clearing house, the operation
of exchange is identical, except that each member bank assumes in accounting that all checks payable by its neighbors are drawn upon but other banks which the manager of the clearing house deposits with one member, drawing his own drafts against this deposit in favor of the creditor banks. In many clearing houses the clearing house acts merely as the agent for the debtor bank, counting and recounting large sums of money is avoided, nor is there danger of loss in carrying the money through the streets.

In acting as clearing houses for their members as the Federal Reserve banks are required to do under the terms of the Federal Reserve Act, the same accounting principles are employed, with due allowance for the fact that the reserve banks are separated within their own districts by at least one day's mail time from their clearing house, in this instance the Reserve Bank. The checks are sent by mail instead of by messenger as in the case of a local clearing house and the balances are adjusted by debits and credits to accounts with the Reserve Bank.

The 12 Federal Reserve banks also use the clearing principle in making settlement with each other through the operations of a Gold Settlement Fund held at Washington under the supervision of the Federal Reserve Board. Each reserve bank keeps a portion of its gold reserve in the form of United States gold certificates on deposit in the Settlement Fund. Once a week each reserve bank telegraphs the amount owing by it to every other reserve bank. These totals are then offset and the balances are adjusted by debits and credits in the fund. Settlements representing the exchange transactions between the different sections of the country are thus effected by a change in ownership of the gold which is not in any physical way disturbed. Before the establishment of this National Clearing House it was necessary to transfer large amounts of gold and currency from one section of the country to the other as the trade balance varied in accordance with the seasons.

Government.—In order that the transactions of the clearing house may be properly conducted, certain regulations are adopted. Rules govern the nature of items which may be passed through the exchanges, how they shall be endorsed, the hour of clearing and settlement, fines are imposed for lateness or errors; and the kinds of money which may be used in paying debit balances are agreed upon. This necessity for regulation has led to further clearing house developments in which the banks act as an association for uniformity and the common good. Many clearing houses operate as the agent of their members and make collection. In this way better terms and quicker returns can be secured than if each bank acted independently. Country checks handled by a clearing house are collected and not cleared. The clearing house in this case may serve as the agent of all its members and deals with the out-of-town banks much as the member banks do in
collecting checks through individual arrangement with their country correspondents.

The larger clearing house associations employ their own examiners who work independently of State or Federal officials. These local examiners not only make the usual audit and examination of the cash and books of the member banks, but they also make a careful investigation of the bank’s loans and discounts from the viewpoint of the credit risk. In this way each member bank is assured that other banks in the city are being carefully managed and in position to secure expert advice if it is needed. The records of the clearing house examiner are confidential and cannot be secured by any of the banks. All detail reports are given to the officers and directors of the bank examined and their attention is called to any assets which are of questionable value. The judgment of the clearing house examiner is usually to be depended upon in this connection, since indirectly he represents the combined credit skill of the officers of all the banks which he investigates. It is a matter of record that no depositor has lost a dollar through the failure of a bank subject to clearing house examinations. This system of examination was first adopted by the Chicago Clearing House in 1906.

It is expected that many of the activities of clearing houses in the United States will gradually give way in favor of the Reserve banks as these institutions develop in their supervisory capacity. The clearing function, however, for as long as banking establishments are primarily established, is of sufficient importance in banking to insure the continued existence of bank clearing houses under any present or future banking system.


O. Howard Wolfe,
Cashier Philadelphia National Bank; formerly Secretary Clearing House Section, American Bankers Association.

6. Banking in the United States. Prior to the adoption of the Constitution in 1787 there was but little banking done, because one of the chief elements of that business—a sound and stable monetary system—was lacking, the Continental currency having depreciated to the point of practical worthlessness. With the enactment of the law of 2 April 1792, establishing a mint and regulating the coins of the United States, a new situation was created. The Constitution itself prohibited the States from coining money, emitting bills of credit and from making anything but gold and silver coin a tender in payment of debts. Upon Congress was conferred, by the same instrument, sole authority to coin money and to regulate the value thereof.

Early Banking in the United States.—The first banks in the United States owed their origin to Robert Morris and Alexander Hamilton. As early as 1763 Morris had conceived the plan for establishing a bank to assist in promoting American trade, and in 1776 Hamilton had proposed the establishment of “The Company of the Bank of the United States.” Before their plans were put into execution, however, a bank was organized, conceived in a patriotic spirit, but destined to be short-lived.

In 1780, moved by the distressing situation in which Washington’s army was then placed, Thomas Paine, who was a clerk in the assembly of Pennsylvania, wrote to Mr. Blair McLechenachan, suggesting a subscription to support the army with the necessary supplies. At a meeting in Philadelphia on 7 June 1780 subscriptions amounting to £400 in specie and £103,360 in Continental money were raised. On 17 June another meeting was held, and it was resolved to increase the subscription to £300,000 Pennsylvania currency, and the full amount was soon subscribed. Robert Morris and Blair McLechenachan each subscribing £10,000. This association was called the Pennsylvania Bank. In the preamble to the resolutions of Congress accepting this patriotic offer of assistance it was recited that the subscribers had established the bank for the sole purpose of obtaining and transporting the said supplies with the greater facility and dispatch. And, whereas, on the one hand, the subscribers, animated to this laudable exertion by a desire to relieve the public necessities, mean not to derive from it the least pecuniary advantage, etc.

The directors were authorized to borrow money on the credit of the bank and to issue notes bearing 6 per cent interest. All the money borrowed or received from Congress was to be used for purchasing supplies for the Continental army and otherwise aiding the patriots. Congress, it was expected, would reimburse the bank for these expenditures. The bank commenced business 17 July 1780 and continued open for about a year and a half. Its affairs were finally wound up in the latter part of 1784. This bank was of great assistance in procuring supplies for the army that could not have been procured otherwise without the greatest difficulty. It furnished the army 3,000,000 rations and 300 barrels of rum.

The first bank, as we have seen, had its origin in patriotic impulses, and its establishment appears to have been due to the suggestion of Thomas Paine.

This institution was not a modern commercial bank, however, and it was reserved for Morris and Hamilton to become the founders of the bank whose career was to be the recorded and that was to live in the history of the country as the first regularly incorporated commercial bank. Like its predecessor, it was established to aid the cause of American independence. Year after year, its president, writing to the Comptroller of the Currency, repeated this fact by saying: “This bank was created avowedly to aid the United States.”

Early in 1780 Hamilton wrote to Morris strongly urging the establishment of a national bank as one of the steps necessary to put the country on a sound financial footing and to aid in carrying on the war. Hamilton was then but 23 years old, but his views revealed the possession of unusual financial talents which were to win him distinction in later years. His purpose in forming the bank was to unite the moneyed classes in the support of the government credit. The purchasing and banking corporation in private hands, but backed and partly controlled by the gov-
BANKS

1 Bank of Toronto, Toronto, Canada. (Carrere & Hastings, Archts.)
2 First National Bank, Richmond, Va. (Clinton, Russell and A. C. Bosson, Archts.)
1 National City Bank, New York
2 Bankers Trust Co., New York. (Montague Flagg, Arch.)

Courtesy The Gorham Co.
erminment. Hamilton's suggestions were renewed in later letters to James Duane, a member of Congress from New York, and to Isaac Sears of New York. To the latter Hamilton wrote: "We must have a bank on the true principles of a bank." In the spring of 1781 he again wrote to Robert Morris renewing his suggestions for a national bank. Morris was then Superintendent of Finance, and was elected to that position 20 Feb. 1781. Hamilton favored a bank with a capital of not less than $3,000,000. Morris, while coinciding with his views on the main, thought a more modestly capitalized institution would better meet the requirements of the times. He accordingly drew up a plan which he presented to Congress on 17 May 1781. It provided for the establishment of the Bank of North America, for which a subscription of $400,000 was to be raised, payable in gold or silver. Its bank notes, payable on demand, were to be receivable for duties and taxes in every State. The plan having been approved by Congress, the Superintendent of Finance published it on 28 May, accompanied by an address, in which he said:

"A depreciating paper currency has unhappily been the source of infinite private mischief, numberless frauds and the greatest distress. The states have moved with an equal pace, and the public credit has received the deepest injury. The exigencies of the United States require an anticipation of our revenue; while at the same time, there is not such confidence established as will call out, for that purpose, the funds of individual citizens. The national calamities have been caused by the debt of the Government by their moneys and credit for which they will have every proper reward and security, to gain from individuals that credit which property, abilities and integrity never failed to command, to supply the last of that paper money which, becoming more and more useless, calls every day more loudly for its final redemption, and to give a new spring to commerce, in the moment when, on the removal of all its restrictions, the citizens of America shall enjoy and possess that freedom for which they contends."

The facts above referred to in regard to the depreciation of the paper currency are substantiated from the following extracts from a newspaper of that period:

"The Congress is finally bankrupt. Last night a large body of the inhabitants, with paper dollars in their hats, by way of cockades, paraded the streets of Philadelphia, carrying colors flying, with a dog tarred, and instead of the usual appendage and ornaments of feathers, his back was covered with the Congress paper dollars. This example was directly followed by the trader, who refused accepting the bills in purchase of a glass of rum, and afterwards by the traders of the city, who shut up their shops, declining to sell any more goods but for gold and silver."

The purchasing power of government paper was at an end, and Congress turned to a bank, organizing the basis of relief from the evils of a depreciated currency.

On 1 Nov. 1781 the Bank of North America was organized, Thomas Willing being chosen president, and a few days later Tench Francis was elected cashier. It began business 7 Jan. 1782, and has continued from that time until the present, a worthy memorial to the genius and wisdom of its founders, an honor to the city of Philadelphia and always a strong supporter of the public credit.

The Bank of North America had a charter from the Federal Congress and from the States of Delaware and Pennsylvania. In 1864 it entered the national banking system. In view of its age, and other circumstances connected with its history, it was permitted to retain its original title. All other national banks are required to have the word "National" as a part of their name.

In the early financial history of the United States no two names occupy a more distinguished place than those of Morris and Hamilton. The contributions of the former to relieve the sufferings of the patriots attest alike his patriotism and humanity, and he also possessed financial genius of a high order.

In the spring of 1781 Alexander Hamilton, the then Secretary of the Treasury under the Federal Constitution, laid the foundations of our financial system and firmly established the public credit. On his accession to this high office it was to be expected that he would soon attempt to carry into effect his views in regard to a government bank.

Hamilton's first aim was to strengthen the Federal Union, and one of his plans for doing this was to put the public credit beyond question and thus gain confidence for the new government. He favored the payment of the foreign and domestic debt and the assumption of the State debts by the Federal government. The first proposition was readily agreed to, the latter was carried with some difficulty, and the proposal to assume the State debts was at first defeated, but was afterward carried by an alliance formed between Hamilton and Jefferson, by which Hamilton agreed to use his influence to secure the permanent location of the capital on the Potomac in return for Jefferson's assistance in getting votes in Congress for the debt assumption plan. This compact was effectual. Hamilton did not consider the location of the capital as a question involving any essential principle, while he regarded the financial policy he had marked out as being necessary to the welfare of the country. Jefferson and he were both members of the cabinet, and the differences which were to divide them in later years had not yet developed.

The Bank of New York, located in New York city, is another historic institution. It commenced business on 9 June 1784. The constitution of the bank, which was written by Alexander Hamilton, provided that the capital stock should consist of $500,000 gold or silver. Though the bank commenced business in 1784 it did not get a charter from the New York legislature until 21 March 1791.

The Massachusetts Bank was incorporated at Boston 7 Feb. 1784 and commenced business on 5 July of that year, $253,500 of its capital, of $300,000 being paid in.

The incorporation of these banks marks the change from the period of depreciated Continental and State currency to a system of bank notes redeemable in specie. This is the beginning of an important epoch in American banking history.
The proposed plan was arranged under 24 heads. The capital of the proposed bank was fixed at $10,000,000; one-fourth of all the private and corporate subscriptions was to be paid in gold and silver and three-fourths in United States stock bearing 6 per cent interest. Two million dollars were to be subscribed by the United States, a loan of equal amount being made in return by the bank, which was to be reimbursed in 10 equal annual instalments in United States stocks bearing 6 per cent interest, and payable in 10 equal annual instalments beginning in 1793. The bank was very well managed and was of great benefit to the government and the people at large. It assisted the Treasury with loans whenever called on and it forced the State banks to keep their issues within reasonable bounds. It received and paid out compensations. The bills and notes of the bank were made receivable in payment of all debts to the United States. The total amount of debts which the corporation might at any time owe in any way, except for moneys actually called in, was never to exceed $10,000,000 and if this limit was exceeded the directors under whose administration the excess might occur were to be personally liable for the amount. The corporation was allowed to sell the evidences of the public debt subscribed to its stock, but was not to purchase any public debt whatever. Notes were allowed to be issued, payable to any person or persons, assignable and negotiable, or to bearer assignable by delivery. The directors were permitted to establish offices for discount and deposit only, wherever they should think fit, in the United States. A report of the condition of the bank was to be furnished whenever the Secretary of the Treasury required it, but not oftener than once a week. The charter was to expire 4 March 1811.

Although the bill for chartering the bank was opposed by Madison and Jefferson, as well as by Randolph, the Attorney-General, Hamilton's wishes prevailed and the bill for chartering the bank became a law 25 Feb. 1791.

The charter of the bank became a law 25 Feb. 1791. Contrasting the superiority of the proposed bank to an emission of United States notes, Hamilton pointed out that the right to issue paper of this character was so certain of being abused that the wisdom of the government will be shown in never trusting itself with the use of so seducing and dangerous an experiment.

The average dividends of the bank from its organization to March 1809 were at the rate of 8½ per cent per annum. The 5,000 shares of $400 each owned by the United States were disposed of in the years 1796 to 1802 at a considerable profit, 2,220 shares having been sold in the last-mentioned year at a premium of 45 per cent. According to the treasury records the government subscription, with the addition of the interest which was paid by the United States on stock issued for it, amounted to $3,773,580, the profit realized by the government being $573,580, or nearly 28.7 per cent upon the original investment.

In addition to the Act of December 1791, chartering the bank, four supplementary acts were passed by Congress in reference to it: one on 2 March 1794, which varied the manner in which the capital stock was to be subscribed for and paid in; two passed in 1798 and 1807, respectively, having reference to
counterfeiting its notes and papers or otherwise defrauding it; and one in 1804 permitting the establishment of offices of deposit and discount in the Territories and dependencies.

Application for a renewal of the charter of the bank was made in 1808. Secretary Gallatin, in his annual report for 1809, favored the renewal, with certain modifications, but after a protracted debate in both Houses of Congress the application of the bank was rejected.

The banking house and most of the assets of the Bank of the United States, including over $5,000,000 in specie, were purchased by Stephen Girard, of Philadelphia, who at once started the Girard Bank, which, converted to a National bank in 1865, continues to this day. The purchase and transfer came about in this way. In 1810 Girard had large balances with the Barings, amounting to $116,701. In 1811 the indebtedness of that firm to him was nearly $200,000. The difficulties in trade with the Continent and the Barings were a danger. Mr. Girard sent two agents to London to do what they could to withdraw the amount due and transmit it to America. Part of the funds were invested in goods and part in American 6 per cent stocks and United States Bank shares at about $430 (45 10s.) per share. The Barings, it will be remembered, had purchased a large amount of the bank stock from the United States government in 1804. The stock Girard had purchased gave him a large interest in the bank; and, in the spring of 1812, he found by consultation with George Simpson, the cashier of the old institution, that the bank building and cashier's house could be purchased for $120,000, less than one-third of its cost. The purchase was made, the property was transferred to Girard, and his new bank commenced operations on 12 May 1812, with $1,200,000 capital, which was afterward increased to $1,300,000.

Much of the business of the Bank of the United States was transferred to Girard's Bank, together with $5,000,000 in specie. The officers and employees of the old bank were retained at the same salaries. Girard bought the stock except that of the Bank of the United States to be renewed. If this had occurred he would have made a fortune by the rise in stock. But, as it was, he saved himself by the purchase of the old bank. He did not use the old circulating notes, but paid out notes of State banks till his own were printed, which bore the device of a ship under full sail and an American eagle.

The stockholders of the Bank of the United States received, on the final winding up of the institution, $434 per share, which, with dividends averaging about 8 per cent per annum, made it no bad investment. Many, however, had bought and sold at much higher rates some years previous to the expiration of its charter. The United States government sold to the Barings for a premium of 45 per cent in 1802, or $580 per share.

In view of the success of the bank, it is interesting to quote some of the expressions in regard to it, appearing in the debates in Congress. Mr. Boyd considered the bank "a great swindle"; Mr. Desha referred to the recharter proposed as one to "foster a viper in the bosom of our country"; Mr. Wright said the charter was "a cancer upon the body politic." In the press it was referred to as "an hydra," "a cerberus," a "gorgon," a "vulture" and a "viper." These expressions typify the prejudice then existing, and which still exists, in this country against concentrated banking power, and all the denunciations above quoted can be matched from debates and newspaper articles on banking at the present day.

SECOND BANK OF THE UNITED STATES.

Early in 1814 proposals were made to organize a national bank, and on 10 February of that year a bill was introduced in the House for the incorporation of such an institution with a capital of $30,000,000, but the bill failed, and other attempts were unsuccessful also, until finally a bill based upon the suggestions of Mr. Dallas, the Secretary of the Treasury, became a law by the signature of President Madison 10 April 1816.

Mr. Dallas on 6 Dec. 1815, sent to the speaker of the House a proposition relating to the national circulating medium. He considered four questions: Whether it was practicable to renew the circulation of gold and silver coins; whether the State banks could be successfully employed to furnish a uniform currency; whether a national bank would be more advantageously employed for the purpose; and, last, whether the government itself could supply and maintain a paper medium of exchange. In regard to the State banks, while acknowledging the valuable services and liberality of some of them, he said: "The truth is, that the charter restrictions of some of the banks, the mutual relation and dependence of the banks of the same State, and even of the banks of the different States, and the duty which the directors of each bank conceive they owe to their immediate constituents upon points of security or emolument, interpose an insuperable obstacle to any voluntary arrangement upon national considerations alone for the establishment of a national medium through the agencies of the State banks."

He concluded against the possibility of specie alone, against government issues, and finally that a national bank was the best and perhaps the only resource. At the request of the National Currency Committee of the House, Mr. Dallas, on 24 Dec. 1815, presented a plan for a national bank. He proposed a bank for 20 years with a capital of $35,000,000, $7,000,000 of which was to be subscribed by the officers and employees of the old bank. The stockholders of the Bank of the United States received, on the final winding up of the institution, $434 per share, which, with dividends averaging about 8 per cent per annum, made it no bad investment. Many, however, had bought and sold at much higher rates some years previous to the expiration of its charter. The United States government sold to the Barings for a premium of 45 per cent in 1802, or $580 per share. In view of the success of the bank, it is interesting to quote some of the expressions in regard to it, appearing in the debates in Congress. Mr. Boyd considered the bank "a great swindle"; Mr. Desha referred to the recharter proposed as one to "foster a viper in the bosom of our country"; Mr. Wright said the charter was "a cancer upon the body politic." In the press it was referred to as "an hydra," "a cerberus," a "gorgon," a "vulture" and a "viper." These expressions typify the prejudice then existing, and which still exists, in this country against concentrated banking power, and all the denunciations above quoted can be matched from debates and newspaper articles on banking at the present day.
the government financially; it now appeared that the general government could no longer depend upon them. A national bank seemed to him now not only necessary, but indispensable. At one time Philadelphia was struck out and New York selected as the principal seat of the bank by a vote of 70 to 64, but this was reconsidered and Philadelphia replaced. The bill finally passed the House without important amendment, on 14 March 1816, by a vote of 80 to 71. It was introduced in the Senate on 22 March and passed on 3 April with one or two amendments that, when the bill came to the House next day, Mr. Calhoun pronounced to be slight. Upon 5 April they were concurred in and on 10 April the bill received President Madison's signature.

Provisions of the Charter.—The charter was limited to 20 years, expiring on 3 March 1836. The capital was fixed at $35,000,000, $7,000,000 of which was to be subscribed by the government payable in coin or in stock of the United States, bearing interest at 5 per cent and redeemable at the pleasure of the government. The remaining stock was to be subscribed for by individuals and corporations, one-fourth being payable in coin and three-fourths in coin or in the funded debt of the United States. Five of the directors were to be appointed by the President, and all of them were required to be resident citizens of the United States, and to serve without compensation. The amount of the indebtedness, exclusive of deposits, was not to exceed the capital of the bank. The directors were empowered to establish branches, and the notes of the bank, payable on demand, were receivable in all payments to the United States. The penalty for refusing to pay its notes or deposits in coin, on demand, was 12 per cent per annum until fully paid. The bank was required to give the necessary facilities, without charge, for transferring the funds of the government to different portions of the Union and for negotiating public loans. The moneys of the government were to be deposited in the bank and its branches, unless the Secretary of the Treasury should otherwise direct. No notes were to be issued of a less denomination than $5, and all notes smaller than $100 were to be made payable on demand. The bank was not directly or indirectly to deal in anything except bills of exchange, gold or silver bullion, goods pledged for money lent, or in the sale of goods really and truly pledged for loans, or of the proceeds of its lands. No other bank was to be established by authority of Congress during the continuance of the corporation, except such as might be organized in the District of Columbia with an aggregate capital not exceeding $6,000,000; and, in consideration of all the grants of the charter, the bank was to pay to the United States a bonus of $1,500,000 in three annual instalments.

Mr. Dallas, whose first plan for a national bank was so unceremoniously rejected, was appointed Secretary of the Treasury by President Madison in February 1814. His predecessor, Mr. Gallatin, who had been appointed Commissioner to Russia to negotiate a treaty of peace and commerce with Great Britain and treaty of commerce with Russia, left the country in May 1815, and the Treasury without a head. In June the Senate refused to confirm Mr. Gallatin as commissioner, and Madison still regarded him, though absent, as head of the Treasury. Under these circumstances Mr. Mason moved a resolution in the Senate on 24 Jan. 1814, declaring the secretariiship of the Treasury vacant, but the subject was postponed inasmuch as it was reported that the President would appoint a secretary in a few days, which promise was fulfilled.

The Bank Commences Business.—Section 22 of its charter required the bank to commence operations by the first Monday in April 1817. The bank went into operation on 7 Jan. 1817. This was at the worst stage of the monetary troubles, beginning with the suspension of specie payments in 1814 and continuing until the general crash in 1819 and 1820. At this time lands and agricultural products had fallen to one-half the prices which were readily obtainable in 1806 and 1810, and to one-third of the value they possessed when the excessive indebtedness of the people was incurred—namely, during the inflation years of the State banks. The contraction of the circulation and the general failures of the State banks began in 1818. The second United States Bank, therefore, came into existence at the very verge of a great monetary crisis. When it commenced business the first instalment of capital, amounting to $1,400,000 in specie and $7,000,000 in United States stocks, had been paid. The subscription had been opened 7 July 1816. The payment of the second instalment of capital became due on 7 Jan. 1817. The law required this to be paid $10 in specie and $25 in United States stock or specie. It appears, however, that instead of requiring the stockholders to pay in this instalment from outside sources, the bank on 7 January began to discount the notes of stockholders upon the pledge of their stock to the amount required to pay the specie part, and in some cases to the full amount of both specie and United States stock required to make up the whole instalment. After a time discounts were made to the full value of the bank stock, and the stockholders not only to pay up in full, but even to draw out what they had first advanced. The discounts were made in the bank's bills, which were considered equal to specie. Of the $28,000,000 capital subscribed by individuals $7,000,000 was to have been paid in specie and $21,000,000 in United States stock. The bank appears to have actually received nearly $2,000,000 in specie and $13,872,610 in public stocks. The difference represents about the amount made up by stocks. The bank, therefore, was forced to import the coin it needed and up to November 1816 it had thus imported $7,311,750 in specie at an expense of $525,297.

Speculation in Bank's Stock.—The directors of the new institution appear to have made every effort to boom the stock in the market. Not only did they facilitate the payments of the instalments by discounting the full amount of the stock, but also encouraged trading in stock by authorizing the renewal of stock notes as they fell due and by urging the purchaser to substitute his note, secured by the purchased stock, for that of the previous holder. Further than this, they soon began to authorize discounts on pledge of stock to its
full market value. One could purchase bank shares without the advance of a cent. It was only necessary to apply for a loan, and the amount paid in United States stocks had its effect in enhancing the credit of the government loans. It exerted sufficient influence upon the currency to make itself very unpopular with the State banks during the financial crisis of 1818, although those who were hostile to it admitted its policy toward the State institutions had been marked by great consideration and leniency. In fact, on this point its enemies were obliged to fall back on the charge that by this very leniency and consideration it had led the State banks to unduly extend their business, had drawn them into temptation and made them unfit to meet the financial storm. It did not accustom the local banks to pay specie soon enough, and by putting off the evil day found them unprepared at last. Up to August 1818 the bank redeemed its notes, both of the parent bank or its branches, at any of its offices where they might be presented, but after that date redeemed its bills only at the office which put them in circulation. This change was made because the bills were largely used for purposes of remittance, and in the localities where a sound local currency was most needed the bill was brought in to pay for a loan and made the field to the inferior State bank circulation. A more important reason was that the change enabled the bank to realize a profit by the sale of its drafts. This change was persevered in and afterward afforded the basis of President Jackson's assertion that the bank did not furnish a uniform currency.

Although some losses were sustained by the Baltimore branch of the bank, the institution went along without encountering any particular political hostility until 1829, when President Jackson in his annual message to Congress raised the question of the constitutionality of the bank, claiming at the same time that "it has failed in the great end of establishing a uniform and sound currency." He suggested that if a national bank was necessary one might be devised founded upon the credit of the government and its revenues, thus avoiding the questions of speculation and duty.

At the beginning of the administration of General Jackson, says Mr. Parton, the Bank of the United States was a truly imposing institution. Its capital was $35,000,000. The public money deposited in its vaults averaged six or seven millions; its private deposits six millions more; its circulation twelve millions; its discounts more than forty millions; its annual profits more than three millions. Its capital was, therefore, about one-quarter, and its loans, circulation and deposits about one-fifth of the whole amount held and issued by all the banks of the country. Besides the parent bank at Philadelphia, with its marble palace and 100 clerks, there were 25 branches in the towns and cities of the Union, each of which had its president, cashier and board of directors. The employees of the bank were more than 500 in number, all men of standing and influence, all liberally salaried. In every State of the Union and in many foreign nations of the globe were stockholders of the Bank of the United States. One-fifth of the stock was owned by foreigners. One-tenth of its stock was held by women, orphans and trustees of charity funds. Its bank notes were as good as gold in every part of the country. From Maine to Georgia, from Georgia to Astoria, a man could travel and pass these notes at every point without discount, and it is said that in London, Paris, Rome, Cairo, Calcutta, Saint Petersburg and other prominent cities, the notes of the Bank of the United States were within a fraction more or a fraction less than their real worth at home, according to the current rate of exchange. They could actually be sold at a premium at the remotest commercial centres. It was not uncommon for the stock of the bank to be sold at a premium of 40 per cent. The directors of the bank were 25 in number, of whom five were appointed by the President of the United States. The bank and its branches received and disbursed the entire revenue of the nation.

The first real attack upon the second Bank of the United States originated in a political controversy. Jeremiah Mason had been elected president of the branch of the bank at Portsmouth, N. H. On his accession to this position he instituted some reforms in the management which rendered him unpopular. This gave to Levi Woodbury, a political antagonist, an opportunity to demand his removal. The charges against Mason and others of like nature affecting the branches in Kentucky and Louisiana were transmitted by Secretary Ingham to Nicholas Biddle, president of the bank. The attacks upon Mason and the Portsmouth branch continued and grew more violent, and the political hostility of President Jackson was increasing. In his message for 1831 he again called the attention of Congress to the question of recharter. A bill with this object in view passed both Houses of Congress in the following year, but was vetoed by President Jackson on 10 July.

Jackson's inconsistency in his message and in his veto are thus summed up. In 1829, when the charter had yet seven years to run, he calls attention to the necessity of prompt action as to the recharter in order to avoid precipitancy. In 1830 when the charter had yet six years to run, he advocates timely action. In 1831 when the recharter was the only remaining life of the bank, he advocates adroit delay. But although the veto was exceedingly vul-
nerable from almost every standpoint, it served its purpose in arousing the popular feeling against the bank and in favor of Jackson. Benton, who in the Senate defended the veto against the attacks of Webster, Clay, Calhoun and Ewing, voiced the whole spirit of the party he represented when he said:

"You may continue to be for a bank and for Jackson, but you cannot be for this bank and for Jackson. The bank is now the open, as it has long been the secret, enemy of Jackson. The war is now upon Jackson, and if he is defeated all the rest will fall an easy prey. What individual could stand in the States against the power of that bank, and that bank flushed with a victory over the conquerors of Bonaparte? The whole Government will fall into the hands of the moneyed power. An oligarchy would be immediately established, and that oligarchy in a few generations would ripen into a monarchy."

The bill for the recharter could not secure the necessary two-thirds vote for the passage over the veto. Nor did the supporters of the bank fully realize, even then, the effect of the President's opposition. They thought the people would be disgusted at Jackson's unrelenting attitude. Nicholas Biddle wrote Clay that he was delighted with the veto. The campaign of 1832 was fought on the bank issue. It was the hero of New Orleans against the "monster monopoly." It was Jackson like a hero of romance fighting against Old Nick's Money" and "Clay's Rags." The bank, having foolishly gone into politics, was defeated and Jackson again elected. The support of the people was at once claimed for all past and future warfare on the bank, and the result of the election sealed its doom. The attack postponed on the stump began at once.

In his message in 1832, after his re-election in November of that year, the President again fulminated against a recharter of the institution, recommending that the seven millions of stock of the bank held by the United States should be sold, and going further intimates that the United States deposits be sold, and going further intimates that the United States deposits be taken away from it the public funds it might use to corrupt Congress to secure an extension of its existence. In consequence of the message bank stock fell from 112 to 104. A Treasury agent who made an examination of the institution reported it solvent and the stock went back to 112. Congress did not coincide with the views expressed by the President, and refusing to sell the bank stock, passed a resolution, by a vote of 110 to 46, of confidence in the safety of the bank deposits.

The President had made up his mind to cripple the bank by taking away from it the public deposits, and the then Secretary of the Treasury, Mr. Duane, refusing to carry out his wishes, he was superseded by Attorney-General Taney, who on 26 Sept. 1833, issued the order which the following resolution was introduced in the Senate by Mr. Clay: "That the President, in the late executive proceedings in relation to the public revenue, has assumed on himself authority and power not conferred by the Constitution and laws but in derogation thereof."

This, known as the "censure resolution," was passed by a vote of 26 to 20. On 29 March, 1834, this resolution was expunged from the records of the Senate.

Jackson's opposition, on one ground or another, continued, and the bank gave up all hopes of obtaining a new lease of life, but on 13 Feb. 1836, 13 days before the expiration of its charter, obtained a charter from the legislature of Pennsylvania. The subsequent career of the bank was short and disastrous. A constantly increasing amount of loans on stocks gradually tied up its resources, so that by 1840 it was found that the assets of the institution consisted chiefly of all kinds of internal improvement stocks and bonds as well as of State stocks and bonds and bank stocks.

But the United States was not a loser by the bank's failure.

The $7,000,000 of stock held by the United States, previous to the change to a State charter, was paid back in full, and the government realized a handsome profit on its investment, as will appear by the following statement derived from the records of the Treasury Department:

<table>
<thead>
<tr>
<th>Type of Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$18,043,167</td>
</tr>
<tr>
<td>Subscription</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Dividends</td>
<td>7,118,416</td>
</tr>
<tr>
<td>Proceeds</td>
<td>9,424,750</td>
</tr>
<tr>
<td>Profit on investment</td>
<td>$6,093,167</td>
</tr>
</tbody>
</table>

The history of the United States Bank under its Pennsylvania charter, subsequent to the crisis of 1837, was a most disastrous one. It suspended specie payments during the ticklish period from 1837 to 1841 as often as other State banks, and finally went down under circumstances that might, with prudent management, have been turned to a successful result. It made three several assignments in 1841 to secure various liabilities of the bank, which were paid in full, principal and interest, and the government took over the stockholders of the bank; the whole twenty-eight millions of dollars were a total loss to them.

Nicholas Biddle was president of the bank from January 1823 to March 1839, being president of the Philadelphia National Bank who was the last survivor of its numerous assignees.

The final result of the liquidation of the bank was briefly stated in a letter from Thomas Robins, Esq., then president of the Philadelphia National Bank who was the last survivor of its numerous assignees:

"All the circulating notes of the Bank of the United States, together with the deposits, were paid in full, principal and interest, and the accounts of the assignees were finally settled in 1856. There were no funds, and no dividend was paid to the stockholders of the bank; the whole twenty-eight millions of dollars were a total loss to them."

Nicholas Biddle was president of the bank from January 1823 to March 1839, being president of the Bank of the United States until its charter expired in 1836, and for the next three years president of the United States Bank of Pennsylvania. At the time of his resignation the shares were selling at 111, having in 1837 sold at 137; but, in 1843, after the failure, its shares were quoted at 14 3/4 per cent.

Both the first and second Banks of the United States were killed by the prejudice against banks, which exists to an even greater
1 First National Bank, Youngstown, O. (Albert Kahn, Archt.)
2 Second National Bank, Boston, Mass. (Parker, Thomas and Rice, Archts.)

Courtesy The Gorham Co.
1 First National Bank of Denver, Denver, Colo. (Weary & Alford Co., Archts.)
2 United States Trust Co., Washington, D. C. (B. Stanley Simmons, Archts.)
extent to-day. The fall of the latter institution was hastened by bad management.

**THE SPECIE CIRCULAR.**

The order for the removal of the public deposits from the Bank of the United States was dated 26 Sept. 1833. After this date the money collected from customs and other sources of revenue was deposited in the Federal bank, but was deposited with selected State banks, called "pet banks" by the opponents of the Administration. The payment of the public debt and the great increase in the sales of public lands caused the surplus of revenue over expenditures to increase in an unprecedented manner. The Bank of the United States in its most prosperous days had never had in its vaults much over $8,000,000 of the public moneys at any one time; but by 1 Nov. 1836, 88 State banks in 24 States with a capital of $77,576,649, held public deposits amounting to $49,377,986. Their ordinary individual deposits at the same time were only a little over $25,000,000. That there was any very clear apprehension of the extent to which this accumulation of wealth would take place may be doubted, but it is certain that as early as 1832 there was a demand for public funds. The usual course of loans, and the consequent suffering started a demand for the distribution of the accumulating surplus among the several States. The State banks had thrown their influence against the Federal bank in aid of the Administration, and they were allowed to reap their reward by the use of the public moneys (q.v.), but the Secretary of the Treasury is still clothed with large discretionary powers in the handling of the public funds. Charges have been made at times that the surplus revenues were being employed for the benefit of Wall street speculation, and at others that they were being deposited in banks in the attempt to prevent panic. Whatever truth there may be in these charges, it is certain that the alternate deposit and withdrawal of large amounts of public funds have exercised an artificial influence on the money market.

### BANKING POWER OF THE UNITED STATES, 20 JUNE 1917:

<table>
<thead>
<tr>
<th></th>
<th>National banks</th>
<th>Reporting State banks</th>
<th>Non-reporting private banks</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Number of banks</td>
<td>7,604</td>
<td>20,319</td>
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<td>30,753</td>
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<tr>
<td>Capital paid in</td>
<td>$1,082.8</td>
<td>$1,191.4</td>
<td>$50.0</td>
<td>$2,324.2</td>
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<tr>
<td>Surplus and profits</td>
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<td>$1,484.8</td>
<td>$30.0</td>
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<tr>
<td>Deposits</td>
<td>$9,746.2</td>
<td>$16,782.9</td>
<td>$450.0</td>
<td>$26,979.1</td>
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<tr>
<td>circulation and</td>
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<tr>
<td>Federal reserve</td>
<td></td>
<td></td>
<td></td>
<td>$1,150.9</td>
</tr>
<tr>
<td>notes</td>
<td></td>
<td></td>
<td></td>
<td>$34,473.1</td>
</tr>
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1 Includes dividends unpaid, postal savings and United States deposits, but not amounts due to banks, except in case of reserve requirements with Federal reserve banks, which banks are required to maintain in gold and lawful money a reserve of not less than 5 per cent against deposits.

2 Estimated on basis of capital, etc., of reporting private banks.

Following experiences with the Bank of the United States and the State banks as custodians of public funds, the Independent Treasury System, by which the government might take charge of its own funds, came into existence by the Act of 4 July 1840, though the law was repealed in the following year, and was not re-enacted until 6 Aug. 1846. The operations of this law were substantially changed by the National Currency Act of 1863, and the latter in turn by the Federal Reserve Act of 1913.

The method of handling the Treasury receipts has been the subject of much criticism. Instead of depositing made upon an anticipated surplus of revenue as an aid to party advancement, either by means of the bank or in spite of it. The financial stringency of 1834 indicated that the removal of the public funds to the State banks had seriously disturbed the usual course of loans, and the consequent suffering started a demand for the distribution of the accumulating surplus among the several States. The State banks had thrown their influence against the Federal bank in aid of the Administration, and they were allowed to reap their reward by the use of the public moneys entrusted to them as a basis of extending their loans and for enormous issues of their own notes. Banks were started for the sole purpose of issuing notes that might be turned in for payment of the public lands. He also pocketed a bill passed by Congress to compel the receipt of the notes of specie-paying banks.

### INDEPENDENT TREASURY SYSTEM.

The fall of the latter institution was hastened by bad management.

**THE SPECIE CIRCULAR.**

The order for the removal of the public deposits from the Bank of the United States was dated 26 Sept. 1833. After this date the money collected from customs and other sources of revenue was deposited in the Federal bank, but was deposited with selected State banks, called "pet banks" by the opponents of the Administration. The payment of the public debt and the great increase in the sales of public lands caused the surplus of revenue over expenditures to increase in an unprecedented manner. The Bank of the United States in its most prosperous days had never had in its vaults much over $8,000,000 of the public moneys at any one time; but by 1 Nov. 1836, 88 State banks in 24 States with a capital of $77,576,649, held public deposits amounting to $49,377,986. Their ordinary individual deposits at the same time were only a little over $25,000,000. That there was any very clear apprehension of the extent to which this accumulation of wealth would take place may be doubted, but it is certain that as early as 1832 there was a demand for public funds. The usual course of loans, and the consequent suffering started a demand for the distribution of the accumulating surplus among the several States. The State banks had thrown their influence against the Federal bank in aid of the Administration, and they were allowed to reap their reward by the use of the public moneys (q.v.), but the Secretary of the Treasury is still clothed with large discretionary powers in the handling of the public funds. Charges have been made at times that the surplus revenues were being employed for the benefit of Wall street speculation, and at others that they were being deposited in banks in the attempt to prevent panic. Whatever truth there may be in these charges, it is certain that the alternate deposit and withdrawal of large amounts of public funds have exercised an artificial influence on the money market. This would be obviated were the receipts of the government deposited in the banks and withdrawn in the ordinary course in accordance with usual business practice.

### BANKING POWER OF THE UNITED STATES, 20 JUNE 1917:

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2 Estimated on basis of capital, etc., of reporting private banks.
Banking Statistics.—Statement of the principal items of resources and liabilities of 27,935 reporting banks, including the Federal reserve banks in the United States and island possessions June 1917:

<table>
<thead>
<tr>
<th>Resources</th>
<th>27,935 reporting banks</th>
<th>12 Federal reserve banks</th>
<th>Total, 27,935 banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and discounts</td>
<td>$20,594,228,088 91</td>
<td>$435,287,000 00</td>
<td>$21,029,515,088 91</td>
</tr>
<tr>
<td>Investments</td>
<td>8,005,819,982 90</td>
<td>117,362,000 00</td>
<td>8,123,181,982 90</td>
</tr>
<tr>
<td>Banking house, furniture and fixtures</td>
<td>709,065,343 55</td>
<td>709,065,343 55</td>
<td>709,065,343 55</td>
</tr>
<tr>
<td>Other real estate owned</td>
<td>253,901,867 77</td>
<td>1,933,901,867 77</td>
<td>2,187,803,735 54</td>
</tr>
<tr>
<td>Due from banks</td>
<td>4,793,167,162 83</td>
<td>1,986,387,000 00</td>
<td>6,779,554,229 83</td>
</tr>
<tr>
<td>Checks and other cash items</td>
<td>272,008,629 09</td>
<td>272,008,629 09</td>
<td>272,008,629 09</td>
</tr>
<tr>
<td>Exchanges for clearing houses</td>
<td>466,082,803 20</td>
<td>466,082,803 20</td>
<td>466,082,803 20</td>
</tr>
<tr>
<td>Cash on hand</td>
<td>1,502,502,076 06</td>
<td>1,247,696,000 00</td>
<td>2,750,198,076 06</td>
</tr>
<tr>
<td>Other resources</td>
<td>564,188,012 08</td>
<td>906,000 00</td>
<td>660,094,012 08</td>
</tr>
<tr>
<td>Total resources</td>
<td>$37,126,763,138 31</td>
<td>$1,999,642,000 00</td>
<td>$39,126,405,138 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>27,935 reporting banks</th>
<th>12 Federal reserve banks</th>
<th>Total, 27,935 banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital stock paid in</td>
<td>$2,274,200,153 48</td>
<td>$857,171,000 00</td>
<td>$3,131,375,153 48</td>
</tr>
<tr>
<td>Surplus</td>
<td>1,945,543,680 73</td>
<td>1,945,543,680 73</td>
<td>1,945,543,680 73</td>
</tr>
<tr>
<td>Undivided profits</td>
<td>674,190,643 25</td>
<td>674,190,643 25</td>
<td>674,190,643 25</td>
</tr>
<tr>
<td>National bank circulation</td>
<td>600,431,000 00</td>
<td>600,431,000 00</td>
<td>600,431,000 00</td>
</tr>
<tr>
<td>Due to banks</td>
<td>3,913,944,423 51</td>
<td>4,934,790,000 00</td>
<td>8,848,734,423 51</td>
</tr>
<tr>
<td>Federal reserve note circulation</td>
<td>6,585,947 01</td>
<td>560,497,000 00</td>
<td>6,146,444 01</td>
</tr>
<tr>
<td>Dividends declared</td>
<td>26,280,708,159 14</td>
<td>26,280,708,159 14</td>
<td>26,280,708,159 14</td>
</tr>
<tr>
<td>United States deposits</td>
<td>132,965,000 00</td>
<td>965,807,000 00</td>
<td>1,098,772,000 00</td>
</tr>
<tr>
<td>Notes and bills rediscounted</td>
<td>167,470,882 78</td>
<td>167,470,882 78</td>
<td>167,470,882 78</td>
</tr>
<tr>
<td>Bills payable</td>
<td>317,851,113 00</td>
<td>317,851,113 00</td>
<td>317,851,113 00</td>
</tr>
<tr>
<td>other liabilities</td>
<td>643,996,728 85</td>
<td>2,377,000 00</td>
<td>646,373,728 85</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>$37,126,763,138 31</td>
<td>$1,999,642,000 00</td>
<td>$39,126,405,138 31</td>
</tr>
</tbody>
</table>

<p>| Number of savings banks in the United States, number of depositors, amount of savings deposits, average amount due each depositor in the years 1903 to 1917, and average per capita in the United States in the years given |
|-------------|----------------|----------------|----------------|</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Banks</th>
<th>Depositors</th>
<th>Deposits</th>
<th>Average due each depositor</th>
<th>Average per capita in the United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>1903</td>
<td>1,078</td>
<td>7,035,228</td>
<td>$2,935,204,845</td>
<td>$417.20</td>
<td>$36.57</td>
</tr>
<tr>
<td>1904</td>
<td>1,127</td>
<td>7,305,443</td>
<td>$3,060,175,811</td>
<td>$418.89</td>
<td>$37.23</td>
</tr>
<tr>
<td>1905</td>
<td>1,237</td>
<td>7,696,229</td>
<td>$3,261,236,119</td>
<td>$423.74</td>
<td>$39.17</td>
</tr>
<tr>
<td>1906</td>
<td>1,319</td>
<td>8,027,192</td>
<td>$3,482,137,198</td>
<td>$432.77</td>
<td>$41.13</td>
</tr>
<tr>
<td>1907</td>
<td>1,445</td>
<td>8,588,811</td>
<td>$3,600,078,495</td>
<td>$429.64</td>
<td>$42.87</td>
</tr>
<tr>
<td>1908</td>
<td>1,453</td>
<td>8,705,848</td>
<td>$3,660,553,945</td>
<td>$430.47</td>
<td>$43.84</td>
</tr>
<tr>
<td>1909</td>
<td>1,703</td>
<td>8,831,863</td>
<td>$3,713,405,710</td>
<td>$420.45</td>
<td>$41.75</td>
</tr>
<tr>
<td>1910</td>
<td>1,759</td>
<td>9,142,908</td>
<td>$4,070,486,246</td>
<td>$443.20</td>
<td>$46.05</td>
</tr>
<tr>
<td>1911</td>
<td>1,884</td>
<td>9,794,647</td>
<td>$4,212,583,598</td>
<td>$430.90</td>
<td>$44.82</td>
</tr>
<tr>
<td>1912</td>
<td>1,915</td>
<td>10,010,304</td>
<td>$4,451,818,522</td>
<td>$444.77</td>
<td>$46.33</td>
</tr>
<tr>
<td>1913</td>
<td>1,978</td>
<td>10,766,936</td>
<td>$4,727,403,950</td>
<td>$439.07</td>
<td>$48.56</td>
</tr>
<tr>
<td>1914</td>
<td>2,100</td>
<td>11,199,499</td>
<td>$4,910,591,649</td>
<td>$446.35</td>
<td>$49.95</td>
</tr>
<tr>
<td>1915</td>
<td>2,499</td>
<td>13,283,755</td>
<td>$5,997,706,013</td>
<td>$442.83</td>
<td>$50.91</td>
</tr>
<tr>
<td>1916</td>
<td>2,621</td>
<td>8,592,271</td>
<td>$4,186,976,600</td>
<td>$487.30</td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>2,621</td>
<td>2,556,121</td>
<td>$4,010,610,693</td>
<td>$492.34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,621</td>
<td>8,935,055</td>
<td>$4,422,489,384</td>
<td>$494.96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,185</td>
<td>2,431,958</td>
<td>$905,532,890</td>
<td>$406.35</td>
<td></td>
</tr>
</tbody>
</table>

1 The relatively small amount of deposits reported for stock savings banks is due to the fact that the returns from many States include this class of banks with commercial banks.

2 Includes time deposits, $9,889,107, and commercial deposits amounting to $47,374,709.

3 69 banks, with deposits aggregating $41,896,000 and depositors numbering 334,970, included with figures for stock savings banks in 1916, are included with statistics for State banks for the current year for the reason that State banking departments did not compile the returns separately.

4 In the assembling of data in relation to savings banks the classification of banks as made by the State banking departments is closely followed, in consequence of which a number of so-called State savings banks, formerly treated by the comptroller of the currency office as savings banks, are now regarded as commercial banks, and the returns therefrom are combined with the latter.

In the foregoing table the figures for 1903 to 1908, inclusive, but not subsequently, include the number of depositors and the amount of deposits in the State banks of Illinois having savings departments, but not the number of such banks, by reason of the fact that general returns from these institutions are incorporated in State banks' returns.
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The 12 Federal reserve banks opened for business on 16 Nov. 1914. Statements of their assets and liabilities are issued weekly. The consolidated statements of the banks for the stated date in November 1914, 1915, 1916 and 1917 are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Assets</th>
<th>Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Nov. 1914</td>
<td>$270,018,000</td>
<td>$270,018,000</td>
</tr>
<tr>
<td>26 Nov. 1915</td>
<td>$465,342,000</td>
<td>$465,342,000</td>
</tr>
<tr>
<td>24 Nov. 1916</td>
<td>$735,060,000</td>
<td>$735,060,000</td>
</tr>
<tr>
<td>16 Nov. 1917</td>
<td>$3,012,406,000</td>
<td>$3,012,406,000</td>
</tr>
</tbody>
</table>

1 United States government long and short term securities. 2 In actual circulation.

COMPARATIVE STATEMENT OF RESOURCES AND LIABILITIES OF ALL BANKS 1914–1917.

The following statement shows the principal items of resources and liabilities of national and other banks (Federal reserve banks not included) for the years 1914 to 1917:

<table>
<thead>
<tr>
<th>Classification</th>
<th>1914 (26,765 banks)</th>
<th>1915 (27,062 banks)</th>
<th>1916 (27,513 banks)</th>
<th>1917 (27,923 banks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan and discounts</td>
<td>$15,728,357,283</td>
<td>$15,722,440,177</td>
<td>$15,711,605,164</td>
<td>$15,702,208,091</td>
</tr>
<tr>
<td>Due on acts of deposit</td>
<td>1,670,210</td>
<td>1,672,462</td>
<td>1,674,615</td>
<td>1,676,784</td>
</tr>
<tr>
<td>Bonds stocks and other securities</td>
<td>5,584,242,886</td>
<td>5,581,031,375</td>
<td>5,769,569,640</td>
<td>5,933,819,982</td>
</tr>
<tr>
<td>Due from other banks and bankers</td>
<td>40,739,275,126</td>
<td>42,233,942,829</td>
<td>42,422,135,378</td>
<td>42,793,567,552</td>
</tr>
<tr>
<td>Real estate, furniture, etc.</td>
<td>739,506,988</td>
<td>750,404</td>
<td>823,657</td>
<td>862,567</td>
</tr>
<tr>
<td>Cash on hand</td>
<td>1,437,219,162,79</td>
<td>1,457,702,138,31</td>
<td>1,486,118,521,95</td>
<td>1,502,923,076,06</td>
</tr>
<tr>
<td>Other resources</td>
<td>2,403,890,77</td>
<td>2,001,600,624</td>
<td>509,542,144,35</td>
<td>564,150,012,08</td>
</tr>
<tr>
<td>Total</td>
<td>$26,971,398,030,96</td>
<td>$27,804,129,677,56</td>
<td>$32,271,237,696,93</td>
<td>$37,126,763,138,31</td>
</tr>
<tr>
<td>Liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surplus fund</td>
<td>1,714,486,142,85</td>
<td>1,732,918,047,19</td>
<td>1,849,693,074,48</td>
<td>1,954,540,673,87</td>
</tr>
<tr>
<td>Other undivided profits</td>
<td>562,238,378,66</td>
<td>564,337,990,68</td>
<td>617,140,793,17</td>
<td>723,490,397,95</td>
</tr>
<tr>
<td>Circulation (national banks)</td>
<td>7,22,554,719,00</td>
<td>7,22,703,856,50</td>
<td>678,116,000,00</td>
<td>660,431,000,00</td>
</tr>
<tr>
<td>Dividends unpaid</td>
<td>30,133,899,35</td>
<td>43,241,968,34</td>
<td>48,900,868,81</td>
<td>54,858,947,01</td>
</tr>
<tr>
<td>Individual deposits – net</td>
<td>18,517,733,879,01</td>
<td>19,135,380,200,45</td>
<td>22,773,714,076,98</td>
<td>26,289,708,139,14</td>
</tr>
<tr>
<td>Postal savings deposits</td>
<td>40,245,588,30</td>
<td>59,771,103,54</td>
<td>71,087,526,37</td>
<td>101,873,406,56</td>
</tr>
<tr>
<td>United States deposits</td>
<td>65,541,582,53</td>
<td>68,964,257,31</td>
<td>79,457,000,00</td>
<td>132,965,000,00</td>
</tr>
<tr>
<td>Due to banks and bankers</td>
<td>2,718,648,394,14</td>
<td>2,783,312,258,22</td>
<td>3,463,259,713,01</td>
<td>3,139,283,513,51</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>480,519,504,74</td>
<td>514,219,285,90</td>
<td>609,431,106,50</td>
<td>1,129,320,724,63</td>
</tr>
<tr>
<td>Total</td>
<td>$26,971,398,030,96</td>
<td>$27,804,129,677,56</td>
<td>$32,271,237,696,93</td>
<td>$37,126,763,138,31</td>
</tr>
</tbody>
</table>

1 Includes other real estate owned. 2 Includes exchanges for clearing house. 3 Includes rediscounts.

Elmer H. Youngman,
Editor The Bankers’ Magazine.

9. THE NATIONAL BANKING SYSTEM. At the outbreak of the Civil War the statesmen of that epoch were confronted with financial problems of first magnitude. Should they meet them by the usual expedient of resorting to large issues of paper money or adopt some safer method? In his annual report for 1861 Secretary Chase declared against a banking system whose principal features would be a circulation of notes bearing a common impression and authenticated by a common authority; second, the redemption of these notes by the associations and institutions to which they may be delivered for issue; and, third, the security of that redemption by the pledge of United States stocks and an adequate provision of specie. The Secretary declared that the proposed notes would, in his judgment, form the safest currency which this country has ever enjoyed; while their receivability for all government debts, except customs, would make them, wherever payable, of equal value as a currency in every part of the Union.

The statesmen of the Civil War epoch in formulating the financial policy that was to assist the nation through this perilous period gave full weight to the inborn American predilection against concentrated banking power, and instead of establishing a powerful bank of issue, which might have been of inestimable service in steering the lumbering ship of state through the stormy waters, and whose cur-
rency based upon commercial transactions and gold might have stayed the ruinous rise in price in 1863, and to substitute a bank currency for government paper have proved futile.

No subject connected with the Civil War finances has been more fiercely debated than the departure from what many regarded as sound financial policy in refusing to depend upon the banks and in resorting to the issue of legal-tender Treasury notes. Yet the latter policy was not the one originally contemplated by Secretary Chase and others who had the shaping of the finances of the war. Mr. Chase in his report of 1861 had recommended a system of national banks with note issues based upon the public stocks, and Mr. Spaulding had been asked to draw a bill to carry out this recommendation. He fulfilled this duty, but before the measure was introduced in the House it became evident that it could not be enacted in time to be of service to the government in the dire straits in which it was then placed. A section of Mr. Spaulding's bill providing for the incidental issue of Treasury notes was substituted for the banking bill and, in a form slightly altered from the original draft, became law.

Two important loan acts were passed at the extra sessions of Congress in July and August 1861. The first act was approved 17 July and the second 5 August. By section six of the above-mentioned act, the Sub-Treasury Act, passed in 1846, was so far suspended as to allow the Secretary of the Treasury 'To deposit any of the moneys obtained on any of the loans now authorized by law, to the credit of the Treasurer of the United States, in such solvent, specie-paying banks as he may select; and the said moneys, so deposited, may be withdrawn from such deposit, for deposit with the regular authorized depositories, or for the payment of public dues, or paid in the redemption of the notes authorized to be issued under the Act of 5 Aug. 1861; and paid coin; taken from the reserves of the banks, or balances settled through the clearing-house, and redeemed their circulating notes in coin, and the loan to the government was made with the expectation that the money would be deposited in the banks, and be checked out under the direction of the Secretary, in pursuance of the sixth section above referred to. The Secretary of the Treasury refused to use the discretionary power conferred upon him by that section, and would not check on the banks for the expenses of the war, so that current bank notes could be paid or balances settled through the clearing-house, but insisted that the banks should pay the money loaned into the Sub-Treasury in gold or gold Treasury notes, and from thence it was distributed for war purposes and scattered in different parts of the country. By far the greater part of this loan was paid in gold coin, taken from the reserves of the banks, commencing on the nineteenth of August 1861. This unnecessary mode of requiring the payment of the loans so weakened the banks that it brought on a panic, and hastened their extinction. The payments during the last days of December 1861. Notwithstanding the banks commenced making advances to the government about 19 Aug. 1861, yet none of the securities to be issued by the government for the loans was turned over to them until 14 Jan. 1862.

The banks having been committed to making the loans, and having made partial advances on account of the same, were obliged to complete the loan notwithstanding the Secretary of the Treasury deemed it incompatible with his views of duty, and the traditions of the Sub-Treasury Law, to use such banks as disbursing agents of the government even under the extraordinary exigency under which the loans were made. The call upon the banks for a large extent, they would pass through the New York Clearing-House and the clearing-houses of other cities, cancelled by offset without drawing large amounts of specie. This mode of payment would have enabled the Secretary more easily to effect such loans and make his large disbursements without materially disturbing the coin reserves held by the banks and well protected by these reserves in their vaults.

*This mode of making the disbursements for the large war expenses was regarded by me at that early period of the war as of vital consequence to the stability of the finances of both government and banks. The departure from what many regarded as sound financial policy in refusing to depend upon the banks and in resorting to the issue of legal-tender Treasury notes was substituted for the banking bill, and a system of national banks with note issues based upon the public stocks was recommended. Mr. Chase and myself had in view, in preparing this section of the bill, the necessity of securing a money loaned into the Sub-Treasury in gold or of gold Treasury notes, and from thence it was distributed for war purposes and scattered in different parts of the country. By far the greater part of this loan was paid in gold coin, taken from the reserves of the banks, commencing on the nineteenth of August 1861. This unnecessary mode of requiring the payment of the loans so weakened the banks that it brought on a panic, and hastened their extinction. The payments during the last days of December 1861. Notwithstanding the banks commenced making advances to the government about 19 Aug. 1861, yet none of the securities to be issued by the government for the loans was turned over to them until 14 Jan. 1862. The banks having been committed to making the loans, and having made partial advances on account of the same, were obliged to complete the loan notwithstanding the Secretary of the Treasury deemed it incompatible with his views of duty, and the traditions of the Sub-Treasury Law, to use such banks as disbursing agents of the government even under the extraordinary exigency under which the loans were made. The call upon the banks for
payment into the government depository of the remaining instalments of the loan, either in coin or gold Treasury notes, was persistently urged by the Secretary until the final closing transaction on the third of February, 1862.

"This was the first material mistake of the Secretary of the Treasury, and was the first step in the wrong direction, which combined with other important events, led to the necessity of passing the Legal-Tender Act..."

Mr. Sherman in his "Recollections," p. 269, says:

"The Secretary of the Treasury had ample and complete authority given him by the act of July 1861, to borrow money on the credit of the government, but he could not deal with the system of State banks then existing in the several States. He was forbidden by the Sub-Treasury Act of Aug. 1846 to receive notes of State banks, and was required to receive into and pay from the Treasury only the coin of the United States; but by the Act of Aug. 1861, he was permitted to deposit to the credit of the Treasurer of the United States, in such solvent specie-paying banks as he might select, any of the moneys obtained from loans, the money thus deposited to be withdrawn only for transfer to the regularly authorized depositories, or for the payment of public dues, including certain notes payable on demand, as he might deem expedient. He had, however, no authority to receive from individuals or banks any money but coin.

"The only coin received from the Boston, New York and Philadelphia banks, in payment of their subscription to the government loans, to the amount of nearly $150,000,000, had to be sent to every point in the United States to meet public obligations, and when thus scattered was not readily returnable to the banks, thus exhausting their resources and their ability to loan again."

Mr. Sherman is very positive regarding the nature of the legal tender as a war measure. In his "Recollections" (p. 281), he makes this statement:

"The Legal-Tender Act, with its provision for coin receipts to pay interest on bonds, whatever may be said to the contrary by theorists, was the only measure that could have enabled the government to carry on successfully the vast operations of the war."

Hugh McCulloch, the first Comptroller of the Currency and twice Secretary of the Treasury, in his "Men and Measures of Half a Century,"8 says this to say of the failure of Secretary Chase to make use of bank checks in disbursing government funds:

"For a considerable time, even after the war had begun, the specie standard was maintained, and hopes were indulged that the war might be carried on a specie basis. These hopes were dissipated by the action of Secretary Chase in his dealings with the New York, Philadelphia and Boston banks, which had agreed to advance to the government on its 73 notes $150,000,000 ($50,000,000 in August, $50,000,000 in October and $50,000,000 in November, 1861) under the expectation that the Treasury drafts for the money would be presented through the clearing-houses and be paid without large reductions of their coin. The Secretary did not, however, feel at liberty to meet their expectations, and the drain upon their coin reserve soon became so great that they were forced to suspend specie payments. Their suspension was soon followed by the suspension of nearly all the banks in the country."

When Chase, as Spaulding said, broke the banks and the sub-Treasury at the same time and discredited both, an unwise and a mistaken measure for strengthening the weakened credit of the country. It soon became apparent that the issue of legal-tender notes alone would not suffice, as the frightful depreciation of these forced instruments of credit foreshadowed a time when they would approximate the same degree of worthlessness reached by the Continental currency in the struggle for independence, and made it incumbent upon Mr. Lincoln's financial advisers to devise some efficient means for holding this depreciation in check by a resort to the borrowing powers of the government. The precarious and uncertain condition of the country was involved injuriously affected its credit abroad, and made it desirable, if bonds were to be sold in large volume without ruinous depreciation, to create a home demand for them. The device of using the public debt as a basis for currency issued through banks was an old one. It had been proposed by Hamilton when asked by Washington, "What is to be done with our terrible debt?" answered, "Bank on it as our only available capital, and the best in the world." Many of the States had tried the experiment of chartering banks to issue currency against a pledge of State stocks, often with disastrous results. There were other States—of which New York was a conspicuous example—where the banking laws were good and the banking system sound. It is well known that the law of the State named was relied on largely in framing the act creating the national banking system.

More than two years before the bill providing for the organization of national banks became a law, the banks of the country had suspended specie payment, and could not be restored again until 1879. The effect of this suspension was to link the national bank notes to the legal tenders, in which they were redeemable rather than to gold. Of course, the bank notes were no better and no worse than the money in which they were payable. They were not as good as gold, but neither were the legal-tender notes, the latter and the bank bills substantially keeping together as compared with gold.

In reality, though nominally issued by banks and bearing on their face the name of the bank emitting them, the national bank notes are government paper money. Those issued by bonds of the United States, deposited with the Treasurer at Washington, in which city they are redeemed in lawful money, and though the law provides for redemption of the notes at the counters of the issuing banks this is almost totally unknown, for the notes are not redeemed through the clearings as are the notes of the Canadian banks. The government guarantees the payment of the notes, running no risk whatever in so doing, since it always has in hand an amount of its own securities equal to the face of the notes issued.

Devised as the national banking system
to give the country sound and uniform currency and to aid in replenishing the Treasury, it hardly succeeded in either of these aims. The currency has been of uniform value and a vast improvement on a great deal of the State bank circulation which it displaced, but it has through its inelasticity developed serious defects. In so far as the new banking system was relied on to furnish currency, it did not fulfill the function of the war, the result was very satisfactory. When the war closed the national bank notes were in the neighborhood of $100,000,000 in amount—only a small fraction of the loans placed to carry on the war. Had the channels of circulation not been so well supplied by legal-tender notes, the national bank notes at the close of the war would have been much greater in volume. After the war, when the government was still for a long time heavily in debt, the national banks were of immense help in sustaining the public credit.

But it is as a system of discount and deposit banks that the national associations have won their greatest success and established themselves firmly in the public confidence. It was, of course, one of the aims of Secretary Chase to supplement the somewhat inharmonious State banking systems then existing with something having at least uniform laws to govern them, and all watched over from Washington, yet he could hardly have foreseen how surprisingly large proportions the national banks were to attain through discount and deposit operations in the first half-century of their existence.

Marvelous as has been the record of national bank growth, it might easily have been much greater had Congress earlier enlarged the functions of the banks, thus forestalling the rapid rise of the trust company and the tremendous accumulations of deposits in savings banks.

The history of the national banking system contains few important dates—points that mark any striking growth. There are two exceptions to this statement, however. After the original act was passed in 1863, the growth of the banks was slow until the 10 per cent tax was imposed on State bank notes in 1865. But the real impetus to national banking was given in 1900, when the minimum capital was reduced from $50,000 to $25,000, and the issue of circulation placed upon a somewhat more liberal basis.

Another landmark in the history of the system was the passage of the Federal Reserve Act (q.v.), 23 Dec. 1913. This act changed completely the method of redepositing reserves, provided for rediscounting and accepting and for a system of note issues based on coin and commercial paper. It also made other important changes in the Banking Law. Perhaps the strongest feature of the new law was in linking all the national banks together for their common defense; that is, a centralization of the reserves whereby they become, in a sense, the common property of all the banks so far as relates to their use.

Elements of safety in the national banking system have been the requirement in regard to the actual paying in of capital, the supervision exercised by the government and the admirable features of the law with regard to loans, and the double liability of shareholders. Compared to the colossal sums handled by these banks, their losses have been trifling, and they are growing proportionally smaller.

The national banks have furnished a remarkably safe and efficient system of banking, and have been factors of immense benefit in local development and in the augmentation of the national wealth and prosperity. If they have fallen short, it has been due to the slowness of the national legislature in adapting the law to meet changing conditions.

Elmer H. Youngman,
Editor The Bankers' Magazine.

10. STATE BANKING SYSTEM. Banking, in the early history of the United States, was the prerogative of the privileged few. Charters were obtained by subterfuges of one kind or another, by favoritism or by bribery. Familiar examples of the devices employed to get banking authority under some other guise are the Chemical Bank of New York, chartered as a chemical company; the Manhattan Company Bank, also of New York, chartered as a water company; and the Wisconsin Marine and Fire Insurance Company, whose original business is indicated by the title, the word "bank" being an afterthought.

But with the enactment of the Free Banking Law of New York in 1838, banking by special charter gradually disappeared, for the provision of the New York law conferring banking powers on all associations of persons complying with the terms of the act was generally copied in the banking legislation of other States, as it was later in the National Banking Act. From being a monopoly enjoyed by only a favored few, banking became so free as to encourage the rapid multiplication of banks until their number has grown to larger proportions than in any other country. The absolute freedom which was long given to any body of persons complying with the laws in organizing banks has been somewhat restricted in recent years, and the Comptroller of the Currency, in the case of national banks, and the supervising officers of State banks, are generally showing a disposition to discourage the organization of banks where they will tend to cause undue competition, and to refuse altogether applications for authority to organize banks by the professional bank promoter.

While in the early banking history of the country some of the States devised sound banking systems, a great many did not. There was, in many localities, a lack of banking capital or of capital of any kind. Attempts were made to remedy this lack of capital by starting banks for issuing notes, a favorite device being to decide on an extensive policy of public improvements, to issue bonds for this purpose, the bonds being purchased by the banks and notes emitted against them. These efforts nearly all proved disastrous, but the States adhering to sound principles of banking and to correct methods of emitting notes had different experiences. (See Bank Note Issues, article 19). Indeed, when the national banking system came to be established on a basis, in important respects, on the banking laws of New York, Massachusetts and other States whose legislation had been wisely planned. In turn, the National Banking Act itself became
the model for banking legislation in many of the States, until to-day, with rare exceptions, the standards of banking as formulated by the banking acts of the various States are substantially different from that of the national banking system. The State banks, in fact, found it advantageous to maintain a position of safety at least approximating that of the national banks, otherwise their growth would have been checked. They could, on the other hand, transact some kind of business denied their Federal competitors, and this, perhaps, made them better adapted to the needs of rural communities. This difference in the functions of the two classes of banks was greatly modified by the Federal Reserve system (q.v.), inaugurated in 1913. The State banks outnumber the national banks more than two to one—a fact due partly to the larger capital required of the latter (before 1900 it was fixed at a minimum of $50,000 and is now $25,000) and to other causes.

Massachusetts has no State banks of discount and deposit; New York has such institutions; California and Texas and some other States, in their banking laws, authorize corporations to transact discount and deposit banking, savings bank business and trust company business all under one charter. Substantially this principle (department-store banking it is sometimes called) has been embodied in the Federal Reserve Act. Prior to the enactment of the law referred to, relations between National and State banks were generally amicable, their lines of business diverging considerably. With the removal of most of these differences at least to an extent, it becomes a question as to whether the State banks may not find it less easy than heretofore to compete with the National institutions.

The distinguishing feature of the banking system of the United States, contrasted with that of nearly all the world, is that we have a very large number (between 20,000 and 30,000) of small independent banks, locally owned and managed. In the European countries, and in Australia and Canada, there are a few large banks with head offices and numerous branches. In the United States the permission to establish branches of either National or State banks is limited in scope, but it has shown a tendency to extension of late years.

Elmer H. Youngman, Editor The Bankers' Magazine.

11. PRIVATE BANKS. For the ordinary functions of deposit and discount, the private banker in the United States is being rapidly superseded by institutions organized under State and Federal laws. The private banker might engage in business with little or no capital, and what he had he was at liberty to invest as he chose, and this freedom in the manner of investing his capital extended to the investment of deposits entrusted to him for keeping; these he might employ either in his own business or embark them in any enterprise which appealed to his fancy. The incorporated bank, on the other hand, enjoys no such license. It must have a prescribed capital, which must be maintained unimpaired; and, in addition, the banking laws generally require that a definite surplus fund—so much in proportion to capital—shall be accumulated and maintained. These banks, unlike the private banks, must submit to frequent official visitation and examination and must publish detailed reports of condition one or more times a year. Some of the States have found it expedient to prohibit private banking altogether.

As against the objections to private banking as above set forth it may be stated that where the State and national bank stockholders are only liable, in case of insolvency of the bank, for an additional amount equal to their shares, the private banker is liable for the debts of his bank without limitation. (The adoption of the principle of limited liability in England grew out of some disastrous bank failures where the stockholders were heavily assessed, losing in some instances their entire fortunes). Furthermore, the restrictions on the investments and operations of incorporated banks, while tending to greater safety, yet restrain the banks from opportunities of making profits which may be taken advantage of by the shrewd private banker.

Now, as in the earliest days of banking in Europe, some of the greatest transactions of domestic and foreign finance are carried on by private bankers; but they are not, in the ordinary sense, doing a discount and deposit banking business. They are rather the skilled intermediaries of governments and of great corporations, representing their interests among the banks and the investing public, and as such perform a highly useful service. In integrity they compare most favorably with the largest of the incorporated banks, while their operations are not infrequently greater than even the largest of such institutions taken singly. The private banker, in arranging loans for governments and corporations, does not use his own funds, but by his standing and skill is able to mass together the resources of various banks, often in numerous and widely separated localities. He has to do with foreign exchange, the handling of specie on international account and provides the capital for the immense industrial and financial enterprises which constitute such an important part of the country's business life.

The private banker of to-day is a financial expert without whose service the operations of trade and finance could hardly be carried on, but in performing this service he uses his reputation and skill rather than his own funds or even the funds of others accumulated in his own particular office. He selects, analyzes and classifies the various lines of sound investments and brings to their support, not his own funds alone nor yet those of individuals admitted to his care, but the funds of many groups of investors and of banks that have confidence in his integrity and judgment.

Elmer H. Youngman, Editor The Bankers' Magazine.

12. FEDERAL RESERVE SYSTEM.
The. The Federal Reserve Act, passed 23 Dec. 1913, is the underlying measure upon which the Federal Reserve system depends. It itself consists of 12 Federal Reserve banks and their branches, situated in districts defined as in the accompanying map;
partly with other banks. Under the National Bank Act, three classes of banks had been created—country, reserve city, and central reserve city; their reserves varying from 15 to 25 per cent. Only central reserve city banks were required to keep all of their reserves in their own vaults. Particular complaints had long been made of the bank currency furnished by National institutions. The banks bought government bonds, deposited them in trust with the Treasurer of the United States, and received from the Comptroller of the Currency notes for circulation. These notes were "inelastic"—i.e., could not be expanded or contracted at will in response to business requirements, because they depended upon the volume and price of bonds as determining factors governing their own amount. Due to lack of elastic currency and to wide diffusion of reserves the banking system was liable to disorder in times of financial pressure. In times of quiet it was unable to exert any control over the development of credit or to regulate the country's gold supply, in relation to that of other nations.

Although there had been much discussion of the banking question, no definite legislation designed to improve conditions had been adopted since the Civil War, except only the so-called Aldrich-Vreeland Act of 1908. The "Gold Standard Act of 1909" had dealt almost entirely with the monetary, and only incidentally with the banking problem. In the Aldrich-Vreeland Act, provision was made for informal unions or associations of banks to be known as "national currency associations" whose function it was to issue notes secured by specified collateral on request of their members. Practically no such associations had, however, been organized under the law until after the adoption of the Federal Reserve Act, so that when the latter measure became law the nation was still on the old basis of banking.

The Federal Reserve Act, however, sought not only to provide the improved and responsive currency which had been called for in the older measures of banking reform, but went much deeper. In recognition that the essential difficulty in American banking lay in its undue decentralization and consequent dissipation of strength. Fundamentally, therefore, it sought to give relief by changing the organization of banking so as to provide for combination of reserves and for joint control of and oversight over banking. To this end it provided for district organizations, which were essentially to be bankers' banks, dealing chiefly with their own members—the commercial banks of the district.

The number of such districts to be created was the subject of much difference of opinion, but ultimately Congress set the number at not
BANKS AND BANKING — FEDERAL RESERVE SYSTEM (12)

less than eight nor more than 12, while it placed in the hands of an organization committee, consistent with the capitalization of the Treasury, the Secretary of Agriculture and the Comptroller of the Currency the duty of determining how many should first be established and of drawing their outlines. This organization committee was, under the act, to establish in each district a Federal Reserve bank to whose capital national banks must become subscribers in an amount in each case not less than 6 per cent of their own capital (3 per cent to be paid in and 3 per cent to be subject to call). Every such Federal Reserve bank was to have a minimum capitalization of $4,000,000, of which one-half was to be paid up.

The central feature of the act was found in the plan it presented for changing the reserve organization of the country. The old reserve requirements were to be abolished, reserves being transferred, during a period of three years, to the new institutions. Eventually they were to be held only in the member banks' own vaults or in the reserve banks. By the Act of 21 June 1917 all reserves were transferred to the reserve banks and cash on hand with members was left to the latter's disposal. In consideration of the reserve conveyance to it with reserve banks could be obtained not merely by depositing money, but by discounting paper of specified kinds with the new institutions. The act made full provision for foreign exchange business, clearance of checks, regulation of commercial paper and other essentials.

It was provided that the governing body of the new system be entitled the Federal Reserve Board and consist of five members (two of them bankers) to be named by the President and confirmed by the Senate, together with the Comptroller of the Currency and the Secretary of the Treasury ex officio. This body was duly appointed and took office on 10 Aug. 1914. The Secretary of the Treasury had been authorized by the act to name the date for the opening of the banks. The preliminaries of organization had been completed by the Board the Secretary accordingly opened the banks on 16 Nov. 1914. Prior to this date the capital of the banks had been duly paid in, largely in gold, and the transfer of a first installment of reserves quickly followed. The act had offered to State banks and trust companies the option of membership, but only a few availed themselves of the opportunity until after the entry of the United States into the European War. The movement then became much more rapid and by the end of 1917 between $4,000,000,000 and $5,000,000,000 of banking assets belonging to State institutions had been brought into the system.

In each Federal Reserve bank the control and operation of the institution is entrusted to a board of directors consisting of nine members. Of these nine, three ("Class A") are representative of the member banks and three ("Class B") are business men (non-bankers), although chosen by the member banks. In voting for these directors the banks are divided according to capitalization into three groups, so that each group is represented on the Board by one Class A and one Class B director. The remaining directors, three in number ("Class C"), are chosen by the Federal Reserve Board. Each director is chosen for three years and their terms are so arranged as to have three such terms expire at the close of each year.

Of the three government directors one, under the law, is designated by the Federal Reserve Board as "Federal Reserve Agent" and as chairman of his local board of directors. As chairman, he presides over meetings and as Federal Reserve Agent he discharges all local duties assigned him by the Board in the operation of the bank. The actual management and conduct of the institution is left to the Board of Directors which names such executive officers as it sees fit. Of these the chief, corresponding to the president of a commercial bank, is called "governor." Under his direction there is developed at each bank the usual staff, including administrative, accounting and credit officers. The Federal Reserve Agent has a second department under his own jurisdiction, including one or more assistants and a clerical force. He takes charge of the function of note issue and is entrusted with the custody of commercial paper and gold held to protect notes.

Regulations issued from time to time by the Federal Reserve Board, and binding upon all reserve banks, constitute the operating basis of the system and ensure harmony of practice. Under the terms of the act each local board proposes rates of discount which are passed upon by the Federal Reserve Board and go into effect only after being approved by it. Full reports are transmitted daily by each bank and the Board issues a weekly condition report.

Every Federal Reserve bank has its own office arranged much like that of an ordinary bank; and several have purchased or are erecting buildings of their own. Six Federal Reserve banks have established branches equipped like a Federal Reserve bank. Some of these are assigned a sub-district or part of the Federal Reserve Bank's territory; others have no definite assignment of territory, but are merely offices for the convenience of member banks. The accompanying tabulation shows the location, capital and chief items of resources of the several banks at a recent date.

The outlines of the 12 districts into which the system is divided are presented in the foregoing map which shows the condition at the close of the year 1917. During 1915-16 several changes in boundaries were made by the Board upon petition of member banks and the lines at first drawn by the Organization Committee were accordingly altered; but none of these changes was of much importance to the general structure of the system.

The earliest work of the Federal Reserve system, like so much of its later operations, was of an unexpected nature. The system had not yet been organized when the breaking out of the European War brought unexpected demands to bear upon the country. There was a heavy drain of gold to Europe and Congress hastily revised the Aldrich-Vreeland Act in an effort to prevent panic.

Many currency associations were organized and about $400,000,000 of notes were issued during the autumn. When the reserve banks came into formal existence in November they
found themselves called upon to assist in the operation of retiring these notes—an important function, but one that brought little actual profit to them.

Moreover, the abnormal movement of gold out of the country which had occurred during the first days of the European War was followed by an equally abnormal movement of gold into this country. Very great sales of our finished goods and manufactured goods abroad were paid for largely in gold and bank reserves were thus much raised. The change in reserve requirements made by the Federal Reserve Act had also set free a large balance of lending power. Due to those two factors, the demand for accommodation at Federal Reserve banks was not great. It was only after the entry of the United States into the European War that they really became active in their rediscount operations. Earnings for the first two years, 1914–15, were only 2.7 per cent above expenses; for 1916 about 5 per cent; but in 1917 they reached about 18 per cent.

The law requires that the Federal Reserve banks, after paying all necessary expenses, together with 6 per cent cumulative dividends to their stockholders, shall carry one-half of excess profits remaining to their surplus fund until the surplus amounts to 40 per cent of the capital, and shall pay the other half of excess profits to the United States government as a franchise tax the sum of $1,134,234.48, the amounts being paid by the United States as a franchise tax the sum of $1,134,234.48, the amounts being paid by the banks as follows:

<table>
<thead>
<tr>
<th>City</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston</td>
<td>$75,100.00</td>
</tr>
<tr>
<td>New York</td>
<td>$649,363.57</td>
</tr>
<tr>
<td>Chicago</td>
<td>$215,799.18</td>
</tr>
<tr>
<td>Atlanta</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>Richmond</td>
<td>$116,471.73</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>$37,500.00</td>
</tr>
</tbody>
</table>

These banks have also established on their books a surplus fund in amounts equal to the sums paid the government. As noted, however, that practically since their opening the banks have been subject to very abnormal conditions,—first, in consequence of lack of demand and later because of the existence of unusual and exceptional demand for accommodation based on a very special kind of paper—that secured by government obligations. The banks have not, therefore, had full opportunity to exert their influence upon the commercial paper of the country or to do more than take the preliminary steps toward the creation of an open discount market.

In a view to the creation of this discount market that the act gave to the Federal Reserve Board power to regulate the conditions under which commercial paper should be made and discounted at reserve banks. Pursuant to the permission thus given, the Board early defined the chief types of commercial paper, the bill of exchange accepted and unaccepted, the promissory single-name note and the commodity note—with warehouse receipts as collateral. In all cases the paper was required to be the result of genuine commercial non-speculative transactions and to have a specified amount of security. Acting further in accordance with the terms of the law, the Board authorized the Reserve banks to buy discountable paper in the "open market"—that is, without member bank endorsement, should they desire.

This open market power was availed of by the Reserve banks during their first two years of slack earnings. They bought widely of acceptances and also of government and municipal obligations and at one time had thus invested more than $200,000,000,000 as a means of earning needed revenues.

The first two years' development in commercial paper was, however, notable for the introduction of the acceptance or accepted bill of exchange into American banking practice. Unusual stimulus to our foreign trade gave to the foreign bill or bankers' acceptance in such trade a degree of recognition it could not otherwise have attained. Although only a moderate amount of this paper was obtained by reserve banks, the fact that it had entered the market as a distinct type of paper for general investment was rendered possible by the new system.

The bankers' acceptance may be drawn either as a foreign or as a domestic bill. No satisfactory data are as yet available concerning the development of the domestic acceptance, and, whatever the volume in existence may be, it is probably small. The foreign bankers' acceptance has had about two years for development, and we may roughly estimate that at the present time the acceptances of all American banks, whether members of the Federal Reserve system or not, are about $250,000,000.—$300,000,000. Every member bank has the right to accept such paper up to 50 per cent of its capital stock, and the Federal Reserve Board has granted to banks the power to accept up to 100 per cent. While the Federal Reserve Act as originally passed gave to the Federal Reserve Board authority to define commercial paper eligible for rediscount at Federal Reserve banks, and the Board in its initial stages desired to discriminate in favor of the two-name paper, it never went so far as to commit itself definitely in that way. Single-name paper has always formed the bulk of that discounted by the Federal Reserve banks, and this has been apparently the result of necessity. The Federal Reserve Act, however, clearly intended to stimulate the "bill of exchange" whether that of the commercial enterprise or of the banker, and it therefore very properly endeavored by favoring rates and by special regulations to encourage the development both of the commercial bill of exchange (designated by it as the "trade acceptance") and of the bankers' accepted "bill of exchange." The quantity of trade acceptances or commercial bills offering in the New York market has been lately described by a practical banking authority very friendly to the acceptance as "negligible."

A novel element in the Federal Reserve Act not found in any of the various banking bills by which it has been influenced is its treatment of the so-called "clearing question." In the past, small banks, the country over, had carried balances with city correspondents,
usually of considerable amount. These city correspondents were frequently members of a local clearing house and here and there country clearing houses had been established, but there was no nation-wide system of clearance. The country banks sent such checks on distant points as their correspondents were frequently members of a usually of considerable amount. These city try clearing houses had been established, but there was no nation-wide stem of clearance.

Creating a central clearance system for the 12 reserve banks at Washington.

The national system was first established, each bank depositing $1,000,000 in gold with the Board, which at once placed it with the Treasury for safe-keeping. A set of books was opened in the offices of the Board and on Wednesday night of each week every Federal Reserve bank telegraphs to Washington the amount of its balance in dealings with other reserve banks. A corresponding entry is made in the books and each bank notified on Thursday of the balance remaining to be credited. Billions of dollars of transfers are made in this way without gold shipment and practically without expense.

The introduction of the district clearance plan was not so easy, but by the middle of 1916 every reserve bank under orders from the Board had established a system of practically uniform character. Under this plan as modified by the Act of 21 June 1917, banks not members of the Reserve System as well as the regular members may deposit with reserve banks checks on other banks for collection. Such checks are not credited at once, but only after the lapse of a period usually two to four days, estimated to be long enough to permit collection. After that period the proceeds are credited and may be drawn upon. Banks which receive such checks for payment must return them without deduction, or actual money, but in the latter case the Reserve bank pays the cost of shipping the coin or currency in settlement. The member bank which deposits the checks for collection is charged a small fee (1½–2 cents) per item and may in turn make a moderate charge to its depositors if he desires immediate payment without waiting for the collection of the check to be completed. The district clearing system now includes some 16,000 banks, State and National, and is slowly increasing in numbers without waiting for the collection of the check to be completed. The district clearing system now includes some 16,000 banks, State and National, and is slowly increasing in numbers.

As seen at an earlier point, the chief trouble currently recognized in the American bank note system prior to the passage of the Federal Reserve Act was inelasticity. By this was meant that there was no way of enlarging the circulation except through the purchase and deposit of bonds, or the importation of actual money. First it was supposed that the supply of gold had so greatly increased in amount as to require almost all of the floating or "free" supply of bonds for their protection, except those held by investors and trustees, so that the limit imposed upon their issue was almost absolute. It was currently proposed to solve this question by extending the kinds of bonds receivable as deposits to protect note issues and the Aldrich-Vreeland Act had taken steps in that direction. As against this plan or proposal it was pointed out that both the practice of other countries and the general theory of banking indicated that the protection properly to be accorded to notes was identical with that to be given to deposits. The abstract theory of banking, moreover, indicates the liquid short-term assets of banks as the safest and best protection for bank liabilities.

This point of view, that the so-called "asset currency" theory — was accepted as the basis of the original draft of the Federal Reserve Act. Provision was accordingly made for the issue of notes based on the general assets of the reserve banks; while it was sought to protect the old note-issuing banks (the owners of the bonds held to secure the notes) by authorizing the gradual retirement and redemption of the bonds they had purchased. These bonds for the most part bore 2 per cent interest, and as government obligations were then selling at a premium, it was ordered that the new refunding bonds should bear 3 per cent.

So-called asset currency has always been the subject of criticism from a certain school of thinkers who have contended that there was a grave danger of such paper, because of its possible unsoundness. In order to guard against any such danger the Act therefore defined "eligible" paper with great care, placing stress upon the requirements of short maturity and relation to genuine commercial transactions. In moderate degree it had been urged by some that the supply of two-name paper available would be too small to serve as a basis for notes it was left to the Federal Reserve Board to determine eligibility of form within the general limits laid down by the Act itself.

The view or theory of currency issue which had been embodied in the original draft of the act was maintained throughout its various changes of form and appears in the final statute. The chief note changes introduced in the course of discussion were as follows:

1. The Federal Reserve notes were made the national bank notes; (2) provision was made for a new type of note to be called a "Federal Reserve Bank note" secured by bonds on the same basis as the old national bank notes; (3) the redemption of the bonds held by the national banks was fixed at $25,000,000 a year and the
Federal Reserve Board was authorized to distribute this amount of old bonds among the reserve banks. At that rate it would have required about 30 years, 2 per cent bonds fell to a low level and the Reserve Board ceased to call upon reserve banks to take them over at par as before. In the original act of 1913, the outstanding notes had to be covered by gold and paper to 140 per cent of their face value. But by the act of 21 June 1917, this figure was cut to 100 per cent. Due to this and other causes the issue of Federal Reserve notes rapidly increased during 1917 and at the close of the year was near a billion and a quarter of dollars.

The things stand to-day, therefore, the Federal Reserve Act provides an elastic currency, based on business paper, and susceptible of increase as business operations increase and require a larger note issue. Reserve banks discount the paper presented to them by member banks and themselves discount it for business men. Such paper may be turned over to the local Federal Reserve agent who will issue an equal amount of notes in exchange. The Federal Reserve bank must, however, carry a gold reserve amounting to 40 per cent of the notes it issues, and of this 20 per cent 5 per cent is deposited with the Treasury as a redemption fund, the other 35 per cent is retained in the Reserve bank's own vaults. The expansive power of the currency thus depends on, and is limited by, the gold holdings in the Reserve banks.

Granting the presence of the necessary gold there is no limit to the volume of notes that may be issued except the limit set by the needs of business and the dictates of sound banking. The question whether to call for notes or to retain the balance of rediscounts in the form of book credit depends on the decision of the member banks. Federal Reserve banks could, however, if they desired issue their notes in exchange for paper bought in the open market with bank endorsements.

The question of foreign banking facilities is dealt with in several ways in the Federal Reserve Act: (1) Federal Reserve banks may establish agencies abroad or name agents and correspondents. They have thus designated the Banks of England, France and Italy and others, but thus far operations have been small owing to the War and its effects. (2) Member national banks possessing capitals of $1,000,000 or more may apply for, and under specified conditions receive, permission to establish foreign branches of their own. In this way, a considerable number of branches have been developed in South America. (3) By the act of 7 Sept. 1916, member banks are allowed to subscribe to the capital of banks formed to engage on their behalf in foreign trade. Several such banks have been incorporated and have begun business.

The most important step taken in the direction of sound foreign trade finance was not, however, one that had to do with the mere establishment of banking machinery but with the introduction of approved banking methods. Foreign practice had long since recognized the banker's acceptance as the staple method of financing movements of credit. This theory was embodied in the Reserve Act which provided that paper resulting from commercial transactions in foreign trade and of proper maturities might be accepted by national banks to 100 per cent of capital and surplus. Federal Reserve banks were empowered to rediscount or buy such acceptances; while by later legislation domestic acceptance paper was given similar privileges up to 50 per cent of capital and surplus. Finally Congress adopted a provision permitting national banks to accept drafts, drawn in countries with an ample amount of remittance to the United States, intended to create a supply of dollar exchange.

An integral element in most of the plans of recent years for banking reform has been the reorganization of relations between the Treasury of the United States and the financial centre of the nation. As is well known, the sub-Treasury system (dating from 1846 in its present form) and, requiring the actual holding of public funds in cash, is obsolete, being employed by no other country. Deposits of public funds in national banks and other institutions special security have been made since the Civil War, but were only a partial remedy for the evils of the sub-Treasury system. The Federal Reserve Act sought to change the older system by constituting the reserve banks "fiscal agents" and making them also depositories, thus permitting the government to do business both at and through the reserve banks just as their banking members may.

When the act was passed the balances of the government were small and there was no haste in carrying into effect this phase of the law. Early in 1916, however, the banks were made depositories of all Treasury balances then on deposit with national banks in the cities where the reserve banks were located, other funds outside these cities being kept as before. During 1916 and the beginning of 1917, the Reserve banks thus assumed new and important proportions. The Secretary of the Treasury had determined to employ each Federal Reserve bank as the head of a district organization designed for the distribution of the bonds whose sale in unprecedented amounts was necessary to the conduct of the war, and in each Federal Reserve district such an organization was quickly developed about the local reserve bank as a centre.

Local bankers and financiers freely gave of their time and assistance to the furtherance of the work, and in each case the Federal Reserve bank proved an efficient basis of organization. The several banks, under instructions issued by the Secretary of the Treasury, received subscriptions to the loan and carried on the immense work of detail resulting therefrom, besides taking charge of the deposits in banks and general banking relationships growing out of the operation.
The Federal Reserve Board itself, besides co-operating closely with the authorities of the Treasury Department in efficiently conducting the loan operations of the Federal Reserve banks, further sought to develop a general policy that would support and aid the banking community at large in taking and distributing the new issue of bonds. For this purpose it established a special rate of 3 per cent per annum for the discount at Federal Reserve banks of the direct 15-day obligations of member banks secured by the temporary certificates of indebtedness which were issued in order to anticipate the proceeds of the sale of the new bonds.

Carrying further this same policy, it later established a 37/8 per cent rate of discount at Federal Reserve banks intended for the 90-day paper of ordinary bank borrowers, thereby enabling the member banks of the system to extend accommodation to bond buyers in the assurance that they could, and at a rate not exceeding 0 per cent, accommodate from the Federal Reserve banks by discounting these notes. In order to aid the customers of banks not members of the Federal Reserve system, it further authorized the member banks to act as agents for non-member institutions in discounting the notes of bond buyers who desired to obtain assistance from their own banks without being obliged to transfer their business to member banks. Savings banks and trust companies were assured that the Board would in every way co-operate with them in avoiding shock or disturbance to existing conditions, and that the Federal Reserve system stood ready to extend to them reasonable accommodation in the event of necessity resulting from withdrawals made by depositors in order to purchase or invest in government bonds.

On the night of 2 May the Secretary of the Treasury issued to the press a statement giving such details of the first Liberty loan as had been agreed upon up to that time. At the same time he advised the Federal Reserve banks that he had decided to use them as the central clearing house for handling the issue. On 10 May the full prospectus was telegraphed the banks to be made public on Monday, 14 May. The subscriptions were to close on 15 June, so that the Federal Reserve banks had but one month in which to perform an organizing for the sale of the proportion of $2,000,000,000 of bonds allotted to the respective districts, and for the handling of details of the subscriptions. The working out in 20 days of a prospectus covering so large an issue, without a precedent in the country that they could, and in a single day to $84,000,000 of bonds oversubscribed approximately a billion in a month's time, was a remarkable achievement, but the second loan operation, carried through in October, resulted in the sale of nearly four billions of bonds, the amount offered being three billions, and the total subscriptions nearly five billions.

Not only was there no disturbance to interest rates during either loan operation beyond the necessarily gradual increase which follows upon the withdrawal of such great quantities of funds from the market, but the process was found to be entirely without disturbance. In former times under the old sub-Treasury system, the withdrawal of subscribed funds in various parts of the country, or even the operations incident to the transmission of these funds from one part to another, created unavoidable and serious difficulties due to shortage or plethora of money at various points, while exchange rates and conditions were seriously disturbed. All this has been avoided through the operation of the central gold settlement fund, conducted under the supervision of the Federal Reserve Board at Washington. By the use of this fund, the thousands of millions of dollars involved in current government operations have been received in the form of local bank credits, and the proceeds have been transferred to the point where government payments had to be made. As these payments have been effected, local banks at those places have increased their deposits and the proceeds have again been gradually shifted to different parts of the country where production and manufacture were in progress and where the demand for material and labor had eventually to be liquidated.

The Federal Reserve system has thus succeeded in its first and most immediate objects — the establishment of a co-operative or centralized system of united bank reserves with rediscount arrangements designed to meet the needs of hard-pressed banks and for the furnishing of an elastic currency. It has further supplied the demand for an efficient and nation-wide system of check collection. The establishment of a genuine discount market is necessarily a much slower process and time will be required for its complete success. The advent of the European War and the entry of the United States into it as a participant have naturally tended to retard the normal development of the system and in some ways to divert it into unexpected channels. The growth and experience it is obtaining in the financing of the war will, however, serve it in good stead when the time comes for a more normal development of its powers. Meantime, it has proved itself the country's banking mainstay and support in the necessary operations incident to the financing of the struggle.

H. PARKER WILLIS,
Secretary Federal Reserve Board, Washington.

13. SAVINGS BANKS. Savings banks are of two kinds, stock and mutual.

Stock banks.—The stock savings bank is to all intents and purposes quite like a bank of discount, having capital stock, and is, therefore, owned and controlled by the stockholders, to whom the profits belong after paying the agreed rate of interest to the depositors. Such banks are to be found largely in the West and South, there being no such institutions in the Eastern States. They are essentially banks of discount with the word "savings" in their title. They transact chiefly a commercial business and carry comparatively few savings accounts. According to the report of the Comptroller of the Currency, there were 1,529 of these institutions reporting as of 23 June 1915, with capital stock of $92,982,798, loans amounting to $850,304,207, deposits of $1,047,039,650.93, of which $754,443,330 were savings deposits. The depositors numbered 2,977,968, of which 2,380,496 were savings depositors.

Mutual banks.—The mutual savings bank, with which this article has mainly to do, is of
BANKS AND BANKING — SAVINGS BANKS (13)

The savings bank movement in this country naturally followed the movement in England and Scotland. It is admitted that during the early part of 1816, almost simultaneously, the movement began in New York, Boston and Philadelphia. Sometime during that year a letter reached Thomas Eddy of New York from a London magistrate named Patrick Colquhoun in which he outlined the English plan of savings banks. The idea also came to the attention of James Savage of Boston and Condy Raguet of Philadelphia. The result of this simultaneous information was the establishment of the Philadelphia Saving Fund Society, which opened for business 2 Dec. 1816, being the first bank of its kind to receive deposits in this country; the Provident Institution for Savings in the Town of Boston, which incorporated 13 Dec. 1816, being the first to receive legislative sanction; and the Bank for Savings in New York, being, it is highly probable, the first to be conceived but the last to open for business owing to the antipathy of the New York legislature toward banks in general. It was chartered 26 March 1819 and opened for business 3 July 1819. The historical sequence is, therefore, not the first to conceive, Philadelphia the first to receive money on deposit, and Boston the first to become a legal entity.

An entirely different type. It is, as the above term indicates, a mutual institution, without stock and therefore without stockholders, being owned by the depositors, and controlled by a body of trustees who in law represent them, but are not elected or appointed by them. The depositors are, in a sense, partners, in that the profits belong to them and the losses, if any, are legally assessable upon them, the latter process being, however, a rare occurrence.

We can best obtain a clear idea of the savings bank by distinguishing it from a bank of discount. The latter is a stock corporation, organized to receive funds on deposit, which it may treat as its own upon the implied agreement to return the same upon demand. It lends on promissory notes, buys commercial paper, bonds and other securities, issues bank notes and operates quite largely through the checking system, by which the bulk of its funds are dispersed. All the profits belong to the stockholders, upon whom losses fall, should the bank cease to be an economic unit.

The savings bank caters to the smaller saver. It receives funds on deposit as trustee for the depositor, to invest for his account. It does not, as a rule, make any discounts; buys no commercial paper; issues no bank notes, and honors checks only when accompanied by the passbook of the depositor. It is permitted to ask notice of withdrawal as a protective measure in times of stress, while the bank of discount must pay on demand or suspend. The contract of the savings bank with the depositor is in essence this: That it will accept the funds offered for deposit, invest them according to law in certain prescribed securities, repay the same upon notice (which is, as a rule, waived, although in some instances is enforced in very large banks as a daily procedure), apportion the earnings among the depositors after paying expenses and establishing a surplus or guaranty fund for their protection against losses. Out of the foregoing comparisons we may evolve the following as a fair definition of a mutual savings bank: *A savings bank is a mutual institution conducted for the benefit of the depositors, without profit to the stockholders or trustees, for the purpose of receiving on deposit, for safe-keeping and investment, such sums as shall be offered by the depositors, repaying the principal on demand or upon legal notice, and distributing the earnings among the depositors as interest-dividends, after paying expenses and setting the remainder aside as a surplus fund for the protection of all.*

The savings bank has well been likened to a reservoir into which pour the little streams for the purpose of combining them into a larger stream for mutual investment purposes. The savings bank makes capitalists by the welding power it possesses, making the small sums effective by working them together.

Origin of Savings Banks.—The origin of savings banks is in doubt, there being various claimants for the honor of first conceiving the savings bank idea. Daniel Defoe, of *Robinson Crusoe* (1719), is said to have been the first to conceive the savings bank, in a plan whereby the government was to receive the deposits of the people. A French writer has asserted that the idea dates back to one Hugues Delestre in 1610. Such institutions were also formed in Brunswick in 1765; Hamburg in 1778; Bern, Switzerland, in 1787; Basel in 1792; Geneva in. 1794. But so far as is known, the Savings bank as we know it to-day was the outgrowth of none of these. The movement in England had its inception in the schemes of the Rev. Joseph Smith and Priscilla Wakefield. The former in 1796 conducted a plan whereby it was agreed to receive sums for safe keeping, repaying the same at Christmas-time with a bounty subscribed by his rich parishioners. The deposits could be withdrawn at any time. Mrs. Wakefield's plan (1799) was a sick and aid society rather than a bank. The members paid a certain sum per month, according to age, and received a pension after 60 years of age. Sick and funeral benefits were also paid. There was the *Sunday Bank* (1808) at Hereford, which was also in the nature of a charity and open Sunday mornings only. Jeremy Bentham established his *Frugality Bank* in 1797.

It is obvious that none of these plans had in them the true savings bank idea. They were all essentially charities, which the savings bank is not. The first man to conceive the proper idea and work it out to a practical conclusion was the Rev. Henry Duncan, a Scottish clergyman, who in 1810, at Ruthwell, Scotland, established the first savings bank that operated along business-like lines and depended upon the earning power of the money received on deposit to carry on the bank. It was his conclusion that from the earnings of the bank the depositors should receive their interest and the bank should pay its expenses, the correct savings bank plan. The result of Duncan's practical plan was the Edinburgh Savings Bank, organized in 1814, which is still a prosperous institution. Following Duncan's plan, savings banks soon sprang up all over Europe.

The savings bank movement in this country naturally followed the movement in England and Scotland. It is admitted that during the early part of 1816, almost simultaneously, the movement began in New York, Boston and Philadelphia. Sometime during that year a letter reached Thomas Eddy of New York from a London magistrate named Patrick Colquhoun in which he outlined the English plan of savings banks. The idea also came to the attention of James Savage of Boston and Condy Raguet of Philadelphia. The result of this simultaneous information was the establishment of the Philadelphia Saving Fund Society, which opened for business 2 Dec. 1816, being the first bank of its kind to receive deposits in this country; the Provident Institution for Savings in the Town of Boston, which incorporated 13 Dec. 1816, being the first to receive legislative sanction; and the Bank for Savings in New York, being, it is highly probable, the first to be conceived but the last to open for business owing to the antipathy of the New York legislature toward banks in general. It was chartered 26 March 1819 and opened for business 3 July 1819. The historical sequence is, therefore, not the first to conceive, Philadelphia the first to receive money on deposit, and Boston the first to become a legal entity.
Organization.—The organization of a mutual savings bank consists of a body of trustees, named in the original articles of incorporation, the same being in formal charge of the bank, the executive being in official charge of the bank, the executive being in office for terms of years, the board of directors being a self-perpetuating body, vacancies being filled by their own votes, and the qualifications are moral rather than financial. Unlike a bank of discount, where stock ownership carries voting power, money power carries no weight with savings bank elections, the trustees being elected for life, the vacancies caused by his death being filled by vote of the survivors.

As a rule these trustees serve without compensation, even the attendance at board meetings being without remuneration, except in a few States where the fee is limited to about three dollars. They are permitted to receive fees as appraisers of real estate in making mortgage loans, and as examining members of the board and for other special services, but these fees are in lieu of service and not in payment of their trusteeship.

The duty of the trustee consists in attendance at board meetings, service on committees, such as real estate valuation committees, examining committees, and finance committees, the latter having charge of the investments of the bank. In the early days of the savings bank the trustees also acted as tellers, clerks, etc. The relation of the trustee to the depositor is that of a "cestui que trust"—one acting for the benefit of another. The relation of the corporation to the depositor, however, is one of contract.

Accounts.—On the opening of an account, the depositor receives a passbook which not only is evidence of his deposit, but the terms under which it is received, and constitutes the contract between him and the bank. This contract, briefly stated, is, that the bank will invest the funds lawfully, manage wisely, repay the same on demand or on a stated notice and use due care in making payments. The contract of the depositor is that he will take good care of the book and promptly inform the bank of any change of address, or any event causing loss, and if he fails in his compliance with this contract.

Savings bank accounts are of three kinds: (1) single-name accounts, payable to the individual named in the book and at death to his legal representative; (2) the joint account, payable to either of the parties during life, and at death to the survivor; (3) the trust account, payable to either of the parties during life and at death to the party named as beneficiary.

Bookkeeping.—The bookkeeping of a savings bank is simple. A single transaction will indicate its character. Upon making a deposit the depositor signs his name and gives information concerning his age, occupation, etc., for the purpose of identifying him in future payments. The book is then issued to him and a deposit ticket made out, the name indexed, and the signature card filed numerically for reference in making payments. Books are always numbered and for every book there is a corresponding card or ledger. The accounts are kept in groups of one or two thousand or by ledgers for proving purposes. The deposit tickets of the day are sorted according to groups, and entered on a distribution sheet by number and name, with the amount carried to a perforated column at the side. The postings are made directly from the tickets to the card or ledger space. When all postings have been made the proving clerk checks the distribution sheet, from which he has been detached, leaving only the number and name as a guide. Turning to the number he verifies the name and amount, and posts the amount posted for that day. The total amount must agree with the detached stub, thus showing that the right amount has been posted to the right account. Drafts are put through the same process, but in paying, the signature is compared with the one on file and as a rule the tests are asked, the purpose of this process being to show in a court of law, if necessary, that due care has been used to identify the depositor. The savings bank is absolute, in a measure, from the general rule of forgery. If the bank can show that the depositor has written a signature, comparing favorably with the original and answering the test questions properly, it is protected against wrongful payment. It is obviously impossible for a savings bank to know personally all its depositors, who, being infrequent patrons, are liable to change handwriting, and the test questions act as a measure of protection both to the bank and the depositor.

The big events of the savings bank year are: First, the trial balance, which is a total of all the accounts, which must agree with the general books and in well-organized banks are kept absolutely in agreement by these periodic tests, made as a rule quarterly or semi-annually. In a bank where the transactions run into the millions this is no light task. Second, the interest computations, which involves the labor of ascertaining the periods for which the various deposits are entitled to interest, computing and posting the same to the various accounts within a period of a few weeks.

Interest.—Savings banks as a rule pay interest from quarterly periods, or from the first of the month following the deposit, allowing a certain number of days' grace; thus, money deposited on or before 10 July and remaining in the bank until 1 January, will draw six months' interest; between 10 July and 3 October—three months' interest. Some banks pay from the first of each calendar month if the money is on deposit at the close of the interest period.

Investments.—Savings banks are large investors in mortgage loans and municipal and railroad bonds. The law as a rule prescribes the character of bonds which may be purchased,
but in all States, government, State, city, town, village and school district bonds are legal investments. Railroad securities are legal if they conform with the requirements, which for instance in New York are, that the bonds shall be a first mortgage on the property and that the corporation shall have paid at least 4 per cent dividend on all classes of stock for 10 years preceding the investment. The State laws differ as to the detailed requirements, a result which would be impossible within the limitations of this article. As a rule the bond and mortgage loan is limited to 60 per cent of the appraised value of the property and must be a first mortgage. The proportion of mortgage loans to the total assets is generally stipulated in the law, as for instance in New York, not over 65 per cent of the deposits may be loaned on such security.

Postal Savings Banks.—The postal savings bank is in operation in all large countries excepting Germany. The system in this country dates from 25 June 1910. The fundamental idea of the postal savings bank is the receipt by the post-offices, for the encouragement of the banks, of deposits, the payment of which is guaranteed by the government. For detailed description see POSTAL SAVINGS BANKS, article 14.

School Savings Banks.—The school savings bank in this country is the result of the work of the late John H. Thiry, a Belgian, who in his work as trustee of the public schools of Long Island City became impressed with the improvidence of the American children and desired in some way to combat the tendency to spend. As a result the first school savings bank was opened in connection with the post-offices and the banks, the payment of which is guaranteed by the government. For detailed description see POSTAL SAVINGS BANKS, article 14.

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The Woman's Christian Temperance Union, Young Men's Christian Association and kindred organizations have loaned their support also, the first-mentioned organization being particularly active in spreading the idea. Mrs. S. L. Oberholtzer (q.v.), of Philadelphia, has given much time in promoting the school savings bank and has published periodic statistical matter in connection therewith. The school savings bank is conducted along one of two lines: (1) Deposits are made through the post-offices, for the encouragement of thrift among the masses of the people by providing widely distributed and convenient depositories wherein small sums may be placed at a comparatively low rate of interest, with the faith and credit of the government pledged to the repayment of principal and interest on demand.

History.—“The proposition to use post-offices as depositories for savings was first made in England as long ago as 1807. Mr. Whitbread, a member of Parliament, introduced during that year in the House of Commons a bill for the benefit of the working classes, the guiding principle of which was that of self-help. Mr. Whitbread considered it wiser to assist people to advance themselves than to extend help by the giving of alms. His meritorious scheme, however, was received with almost universal disfavor. The press of the
time ridiculed his ideas and treated them as altogether impracticable and visionary. There were then very few savings banks, only eleven being in existence throughout the civilized world.

In December, 1838, the practice of transmitting money by means of postal money orders throughout the United Kingdom was authorized. By that time the advocates of postal savings banks had become quite numerous, and they found in the successful workings of the money-order system one of their most telling arguments.

It is interesting to note that the plan of postal savings banks which finally was adopted was proposed by one engaged in commercial banking—Charles W. Sikes, a bookkeeper of the joint-stock bank of Huddersfield, Yorkshire. He presented his composition on the subject to that eminent statesman, W. E. Gladstone, then Chancellor of the Exchequer. He cited many pertinent facts tending to show the need of postal banks, among them being that, as private savings banks had greatly increased in number and deposits, they did not come within the reach of the common or most numerous classes of the people. This, he stated, could be done only by the post-offices, which were accessible to every workman. Mr. Sikes was encouraged, and seconded in his efforts by Mr. Rowland Hill, who had been appointed general secretary of the post-office for life in recognition of his valuable services as a postal reformer. Mr. Gladstone also eloquently supported the bill, which became a law in May, 1851, and on 1 September of the same year, the British Post-Office Savings Bank came into being.

It is well known that Mr. Gladstone was before the English public prominently as a constructive statesman for many years. His opinion of the importance and value of postal savings banks is best given in his own words, uttered in the House of Commons in the year 1888 amid universal applause. He said:

The post-office savings bank is the most important institution which has been created in the last 50 years for the welfare of the people and the State. I consider the act of 1850 which called the institution into existence as the most useful and fruitful of my long career."

Charles Sikes, actively concerned in the adoption by Great Britain of the postal savings bank, was not unrewarded. He was knighted in 1881 upon the recommendation of Mr. Gladstone, then Premier. He was appointed to an important office under the government, and public subscriptions even were made and a valuable gift tendered him in appreciation of his good work. (United States Senate Report No. 125, 61st Congress, 2d Session).

The Movement for Postal Savings Banks in the United States. Following the lead of England almost every considerable nation, with the exception of Germany, which has a splendid system of municipal savings banks, established postal savings depositories. The movement for the establishment of postal savings banks in the United States extended over a period of nearly 40 years. The first bills were first brought forward officially in this country by Postmaster-General Creswell in 1871, and met with the immediate approval of the press and the people. Eight succeeding Postmasters-General recommended the establishment of such banks and 80 bills were introduced in Congress between 1873 and 1910 to effect that purpose. The bill which eventually became the law was introduced on 26 January, 1910, by Senator Thomas H. Carter, of Montana, and was referred to the Committee on Post-Offices and Post Roads, of which Senator Carter was a member. It was reported back by the committee on the following day. The bill with various amendments passed the Senate on 5 March. It was referred to the House of Representatives on 7 March, where it was extensively amended, and was finally passed on 9 June. The Senate concurred in the House amendments on 22 June, and the bill was signed by the President on 25 June.

Principal Features of the Postal Savings Law and Regulations. The organic Postal Savings Act of 25 June 1910 created a board of trustees for the control, supervision and administration of the postal savings depository offices designated and established under the provisions of the act, and of the funds received on deposit, consisting of the Postmaster-General, the Secretary of the Treasury, and the Attorney-General, acting as ex officio. The board was empowered to make all necessary and proper regulations for the receipt, transmission, custody, deposit, investment and repayment of the funds received on deposit consisting of the Postmaster-General, the Secretary of the Treasury, and of the conduct of the central administrative office at Washington. The board of trustees is charged with the management and investment of postal savings funds after they leave the custody of postmasters. The Treasurer of the United States is treasurer of the board of trustees.

Any person 10 years of age or over may open a postal savings account in his or her own name by depositing one or more dollars in any post-office authorized to accept deposits. No person may at the same time have more than one account either at the same office or at different offices. The account of a married woman is free from any control or interference by her husband. Post-office employés are forbidden to disclose to any person except the depositor the amount of any deposits.

A person may deposit any number of dollars, and at any time, until the balance to his credit amounts to $1,000, exclusive of accumulated interest.

Accounts may be opened by the intending depositor in person, or through a representative. A person residing at a post-office not authorized to accept postal savings deposits may open an account at a depository office by mail, through his local postmaster.

After an account has been opened deposits may be made either in person, through a representative, or by mail. Deposits are acknowledged by certificates, issued in fixed denominations which are made out in the name of the depositor and serve as receipts. These certificates are not negotiable or transferable.
A depositor may at any time withdraw all or any part of his deposits, upon demand, from the post-office where the deposits were made. Withdrawals may be made in person, through a representative, or by mail. Postal savings certificates bear simple interest at the rate of 2 1/2 per cent per annum. Interest begins on the first day of the month following the month in which the certificate is issued and becomes due and payable at the expiration of each full year from the date interest begins as long as the principal remains on deposit. No interest is paid for a fraction of a year.

Amounts less than $1 may be saved by purchasing postal savings cards and stamps at 10 cents each. A savings card with nine stamps affixed will be accepted as a deposit of $1 either in opening an account or in adding to an existing account, or it may be redeemed in cash.

A depositor may exchange the whole or a part of his deposits for registered or coupon United States postal savings bonds, bearing 2 1/2 per cent interest, issued in denominations of $20, $100 and $500. When bonds are issued in exchange for postal savings deposits the balance to the credit of the depositor is reduced accordingly, and he may make further deposits until his account reaches $1,000.

Postal savings bank funds in most countries are invested in the public debt. In establishing postal savings depositories in the United States a radical departure was made in this respect. The organic law, as amended by the Act of 18 May 1916, provides that the funds received at postal savings depository offices in each city, town, village or other locality shall be deposited, in the order of precedence hereinafter specified, in solvent banks located therein, whether organized under National or State laws, and subject to National or State supervision and examination, willing to receive such deposits under the terms of the act and the regulations made by authority thereof, and the sums deposited shall bear interest at the rate of 2 1/2 per cent. The law requires that 5 per cent of the postal savings funds shall be withdrawn by the board of trustees and kept with the treasurer in lawful money as a reserve. The word "bank" as used in the law includes savings banks and trust companies doing a banking business.

Statistics for United States System.—The postal savings banks were opened in the United States on 3 Jan. 1911, at 48 second-class post-offices, one in each State of the Union. Following is a statement showing the growth of the system and a summary of its transactions at the end of each six months' period:

<table>
<thead>
<tr>
<th>Period Ending</th>
<th>Number of depositors, including branches and stations</th>
<th>Balance to the credit of depositors</th>
<th>Number of depositors</th>
<th>Average principal per depositor</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 1911</td>
<td>100</td>
<td>$677,145</td>
<td>11,918</td>
<td>$56.82</td>
</tr>
<tr>
<td>December 1911</td>
<td>5,123</td>
<td>10,614,676</td>
<td>2,927,809</td>
<td>65.24</td>
</tr>
<tr>
<td>June 1912</td>
<td>10,170</td>
<td>20,237,084</td>
<td>243,801</td>
<td>83.01</td>
</tr>
<tr>
<td>December 1912</td>
<td>12,223</td>
<td>28,057,059</td>
<td>302,157</td>
<td>92.86</td>
</tr>
<tr>
<td>December 1913</td>
<td>12,600</td>
<td>31,887,509</td>
<td>312,107</td>
<td>100.00</td>
</tr>
<tr>
<td>June 1914</td>
<td>10,346</td>
<td>43,446,271</td>
<td>388,366</td>
<td>113.67</td>
</tr>
<tr>
<td>December 1914</td>
<td>10,346</td>
<td>59,145,289</td>
<td>496,008</td>
<td>119.24</td>
</tr>
<tr>
<td>June 1915</td>
<td>9,546</td>
<td>65,684,708</td>
<td>525,414</td>
<td>125.02</td>
</tr>
<tr>
<td>December 1915</td>
<td>9,531</td>
<td>74,349,414</td>
<td>591,404</td>
<td>132.67</td>
</tr>
<tr>
<td>June 1916</td>
<td>8,421</td>
<td>80,019,685</td>
<td>602,937</td>
<td>142.67</td>
</tr>
<tr>
<td>December 1916</td>
<td>8,421</td>
<td>91,119,191</td>
<td>661,911</td>
<td>169.45</td>
</tr>
<tr>
<td>June 1917</td>
<td>7,405</td>
<td>131,954,906</td>
<td>704,728</td>
<td>195.37</td>
</tr>
</tbody>
</table>

Statistics for Foreign Countries.—Following is a statement giving the principal numerical facts in connection with postal savings bank systems of countries other than the United States, as shown by Statistical Abstract of the United States for 1916, based on the official reports of the respective countries.
15. BANK ORGANIZATION AND MANAGEMENT. There are three classes of banks in the United States—National, State and private. The National banks were organized to be strictly commercial banks, but some of them acquired large lines of savings deposits, even though the law did not authorize them to do so. The act of December 1913, however, confirmed their action. By the same act the banks may obtain permission to conduct a trust department. The State banks include four kinds of banks—commercial, savings, trust companies, and the three functions combined in one institution. Private banks, in some of the States where they are allowed to operate, conduct their business apart from legal restriction and protection.

By the average person the National banks are considered the safest and most important. The State banks, as a class, are by many not considered so safe nor so important. The private banks are frequently considered as questionable. Such conclusions, however, are not in accordance with the facts. Whether a bank be a National, a State or private bank is not the vital point; but the character and quality of its management is vital.

National Banks.—The national banking system was organized under the Act of Congress of 25 Feb. 1863, since which time there have been many amendments to the original act.

A National bank (legally known as a national banking association) may be organized by five or more persons. Application must be made to the Comptroller of the Currency for permission and charter, and the application must state specifically concerning these five points: (1) The name of the association. (2) The place where it is to conduct the banking business, giving names of State, county and city (or town or village). (3) The amount of the capital and the number of shares. (4) The names and residences of the stockholders, and the number of shares for which each has subscribed. (5) That application is being made to enable the bank to operate under the National Banking Law with its privileges and advantages.

The National Banking Law was originally enacted to make a market for the bonds of the United States government, and though apparently selfish its provisions accomplished a great benefit for the business public by placing the bank notes on a safe basis and by driving from the market the "wild cat" notes. The Act of 30 June 1864 first imposed taxes on circulating notes of State and private banks; and the laws were changed at various times until 3 March 1865, when the tax was made 10 per cent—and it is still the same.

The law could not properly prohibit the issue of circulating notes by State and private banks, because note-issue is an absolute function of a bank, but it could make the issue prohibitive by high taxation—and it did that.

Bank notes are now issued only by National banks, and as security for these the banks must deposit United States government bonds with the Secretary of the Treasury at Washington, D. C., and a cash deposit of 5 per cent of the outstanding notes to provide for their redemption. The Federal Reserve notes are issued by the Federal Reserve banks.

National banks are frequently organized by men who make a business of forming such organizations. For this service they charge the stock purchasers, or the organization, a commission or percentage. This is equivalent to paying a premium on the stock. The organization can, however, be perfected without the aid of a professional organizer, but can seldom be accomplished without involving some legal or organization expenses.

The capital required depends on the size of

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**Country** | Date of report | Number of deposits | Deposits | Average deposit account
---|---|---|---|---
Austria | Dec. 31, 1913 | 2,300,407 | $40,297,296 | $17.52
Belgium | Dec. 31, 1912 | 3,013,296 | 204,147,391 | 77.75
Bulgaria | Dec. 31, 1911 | 3,171,464 | 168,780,319 | 54.06
Czechoslovakia | Dec. 31, 1914 | 6,555,922 | 348,858,018 | 53.21
Estonia | Dec. 31, 1914 | 4,238 | 1,564,086 | 369.96
Finland | Dec. 31, 1913 | 873,780 | 22,852,522 | 26.15
France | June 30, 1915 | 6,295,797 | 359,315,380 | 57.07
Germany | June 30, 1916 | 8,204,531 | 128,500,917 | 8.93
Holland | Dec. 31, 1914 | 1,671,498 | 74,203,170 | 44.39
Hungary | Dec. 31, 1914 | 122,429 | 3,802,027 | 31.28
Italy | Dec. 31, 1914 | 10,338 | 323,511 | 31.29
Japan | July 1, 1910 | 215,600 | 11,616,820 | 53.12
Korea | July 1, 1910 | 30,201,538 | 1,565,099,080 | 142.19
Lithuania | Dec. 31, 1913 | 60,353 | 1,709,448 | 28.58
Latvia | Dec. 31, 1913 | 578,271 | 12,002,007 | 20.79
Moldavia | Dec. 31, 1914 | 13,514,814 | 927,329,857 | 68.61
New Zealand | Mar. 31, 1916 | 1,660,424 | 49,707,248 | 29.94
Netherlands | Dec. 31, 1915 | 309,065 | 107,872,010 | 311.82
Norway | Dec. 31, 1915 | 172,456 | 40,004,541 | 235.92
Poland | May 31, 1914-1915 | 250,164 | 28,823,428 | 110.79
Rumania | Dec. 31, 1915 | 97,465 | 16,944,165 | 66.06
Russian Empire | Dec. 31, 1915 | 269,486 | 14,480,853 | 53.74
Slovakia | Dec. 31, 1915 | 54,343 | 1,601,795 | 29.43
Spanish Colonies, n. e. | Dec. 31, 1915 | 54,343 | 1,601,795 | 29.43
Taiwan | Dec. 31, 1915 | 54,343 | 1,601,795 | 29.43
United States | Dec. 31, 1915 | 10,091,000 | 1,565,099,000 | 142.19

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1. Exclusive of check department.
2. Covers government savings banks.
3. State, including postal savings banks.
4. Includes 4,017,659 accounts, averaging 51 cents each, which have been dormant for five years or more.
the place where the bank is to operate, and ranges from $25,000 to $200,000 or more. If the total amount of the capital stock is $5,000,000 or less, the capital must be $25,000; if between 3,000,000 and 6,000, then $50,000 capital will be required; if more than 6,000 and less than 50,000, the capital must be $100,000 and in every place with a population above 50,000 the bank's capital is to be $200,000 or more.

The capital is divided into equal shares, which must be paid in before the bank is authorized to open for business, and this must be in cash or its immediate equivalent, not by promissory notes. The balance may be paid in monthly installments during the next five months; but it is advisable to have all paid in before opening for business. No surplus is required by law to be paid in by the subscribers, but it has become the custom for new banks to start with a paid-in surplus and by doing so the new bank receives the confidence of the public more quickly. Ten or 25 per cent of the capital should be sufficient, and at least 100 per cent is paid in on some occasions.

Each stockholder of a National bank is liable to an assessment of 100 per cent of the par value of his stock for the liabilities of the bank. The law reads: "The shareholder of each and every national banking association shall be held individually responsible, equally and ratably, and not one for another, for the contracts, debts, and engagements of such association, to the extent of the amount of their stock therein, at the par value thereof, in addition to the amount invested in such shares." The shares of certain State banks entering the National system are exempt from this liability.

State banks can be converted into National banks, and many banks now in the National system were originally organized under State laws. To enter the National system the State bank must comply with practically the same requirements that are imposed on a new organization. There are, however, certain advantages offered to the State banks, but not so many now as in the early days of the operation of the law. These are the advantages: if the bank has branches it may retain them; the stockholders of each bank must perform the 100 per cent liability on their stock if the capital of the bank is not less than $5,000,000, actually paid in, and if the bank at the time of conversion has a surplus of 20 per cent of the capital, but the 20 per cent surplus must be maintained.

State Banks—These are organized under the laws of the States where they are to operate, and as the laws of each State differ in some respects it would be impossible in this article to give specific statements regarding the organization requirements of the various States. Forms for application to organize such banks, copies of the laws governing the banks can be obtained from the Banking Department of any State, or from the Secretary of State, in such States where there is not a banking department.

In many States the laws have been modeled after the National Bank Law, and in some States the laws have been more advantageous to the bankers than the national law, and thus give the banks a greater scope in lines of business that rightfully belong to them. If a bank is restricted in the lines of business in which it can operate it is limited in its earning power as well as in its utility to the community.

As the National banks were organized originally, to serve the Federal government and mercantile interests, so the State banks in many States have laws that were formed with the purpose of allowing the banks to serve the general public, and because of these laws they are better public utility institutions than the National banks. If a bank is not a public utility institution in its practice, it becomes narrow in its views and unaccommodating to its customers, and so limits its usefulness.

Private Banks are usually organized by one man, but sometimes by several men as a firm. In many States laws have been passed prohibiting any one doing the business of banking without the Federal or State authority. Such laws were enacted because of men who opened banking offices with the apparent purpose to defraud the public. Their success in their evident purpose led the authorities to try to protect the innocent public against such men. These laws, however, are a restriction against private business and prevent honest men from going into the banking business privately, as they can do in any other business. In this respect the laws are unjust. Some of the very best banking institutions in the country are private banks, and some of them have for many years been conducting their business in a manner above reproach and criticism. See Private Banks, article 11.

The Management of Banks is divided into two main departments—supervisory and active. The supervisory is that of the governments, which consists mainly of periodic examinations and requests for statements of condition with more or less explanation of the items included in the statements.

Each National bank, according to the law, is required to be examined at least twice in each calendar year, but this law is not fully complied with by the examiners. The Comptroller of the Currency and his assistants are responsible for these examinations. In some cases it is known that more than 12 months have elapsed between the examinations of certain banks.

In some States the laws require two examinations a year, but the makers of the laws, in many States, do not provide sufficient funds for the department having oversight of the work to make the examinations. Both the National and State laws are therefore not complied with in regard to the governmental supervision. But let it be said to the credit of those in charge of the various departments, that even with their handicaps they have, in quite a few cases, prevented dangerous and questionable practices from arising and continuing in banks that otherwise would almost certainly have resulted in heavy losses to or complete failures of the banks.

The active management of a bank is lodged in its board of directors. The National Banking Law requires five or more directors for each bank. The position of director is not simply an honor, or a reward for entering into business as a man; neither is it for the sole purpose of giving the bank prestige by the use of the director's name. The directors are in-
attended to be the real and actual managers of the banks. But here also is failure to comply with legal requirements. Probably not one bank in 10 is really managed by the directors. Experience with failed banks has proved that if the directors had done their legal duty the banks would not have failed.

The directors delegate certain duties to the president, vice-president, cashier, assistant cashier, treasurer and assistant treasurer, or other officers, and then in too many cases pay no more attention to the details. The men so appointed must be trusted but the trust reposed in them should not lead the directors to allow them to perform their duties without the active supervision of the board or special committees of members of the board.

The president is the head of the bank, representing the directors to the other officers, employees and customers of the bank, and on the other hand is their representative to the board. The vice-president is the assistant of the president, if he has any active duties in the bank, and usually has a certain part of the executive work under his supervision.

The cashier or treasurer has special oversight of the cash resources of the bank and of its books, as well as its staff of employees. The assistant cashiers and assistant treasurers are to assist in the care of the details of the daily work.

In addition to the different kinds of banking institutions mentioned above, as being in the United States, there are two other kinds, the Federal Reserve banks (see Federal Reserve System, article 12) and the Farm Land banks. These have not been dealt with because they are government institutions and the public has practically no voice in the organization and management of such banks. There are 12 Federal Reserve banks and their purpose is to serve the government and the National banks, and the State banks that join the Federal Reserve system. All member banks must be stockholders and depositors in these banks—they have no choice in the matter. These Federal Reserve banks are to furnish aid in the way of loans of currency to member banks when they need it. There are to be 12 Farm Land banks. Their purpose is to loan money secured by mortgages on farm lands, and the banks are to issue bonds secured by the mortgages. The interest rate on the bonds is not to exceed 5 per cent. In addition to these banks there are to be National Farm Loan Associations formed by men who will borrow from the banks. These associations are stock companies and each applicant for a loan must subscribe for stock equal to 5 per cent of the amount of the loan. The par value of the stock is to be five dollars a share.

The Federal Reserve banks are managed by the Federal Reserve Board and the local officers of each bank. The Farm Loan banks are to be managed by the Farm Loan Board and by the registrars and other officers at the local banks.

The value and utility of these banks have not been demonstrated, and some bankers question both the value and utility of both of these government institutions, while other bankers consider them of great value.

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Charles W. Reinh,
Former Bank and Clearing House Examiner.

16. BANK SUPERVISION. About 1860 it became evident that some means must be adopted for repressing the mixed banking system then in vogue and to provide a uniform and safe system in its stead. Federal enactment soon provided for a uniform system, and the provisions subjecting National banks to examination by representatives of the Comptroller of the Currency increased the safety of the system. In many States the State banks are examined by officials of the State Supervisor of Banking. National banks are examined every six months. The examiner comes unannounced and the bank is examined under his control. He is obliged to examine the books, verify the cash and examine the investments and securities. The difficulty of passing judgment on the quality of all loans is the loophole through which many imprudent, or worse, operations are carried on despite the vigilance of the examiners. Private banks are now, in many States, subjected to special State supervision.

Benefits of Banking Institutions.—These institutions afford a permanently safe place where the individual may deposit his money. And this is much more of a privilege than may appear on the surface. For not only is the secure place of deposit supplied, which otherwise would be wanting, but the bank practically insures the safety of the funds committed to it: if in any way loss is sustained by robbery or fire or by some other cause, the bank is bound to make good the loss, and this regardless of the fact that the depositor may not be a profitable customer, as many dealers are not. In fact, the number of depositors who simply use a bank as a convenience, whose deposits are not large and whose multiplicity of small checks are a trouble, as they are the despair of the individual bookkeeper, is legion. Nevertheless the bank takes such accounts, holds the money subject to innumerable little drafts which are made good by new deposits equally numerous and small; and thus the active little account is maintained from year to year, often only a source of trouble and expense to the bank, which actually receives no adequate return for its services as a servant and agent. It is to be noted, too, that in this country the services rendered the individual by the banks differ greatly from those afforded by like corporations in some other countries, notably in France. To cite one instance: In that country every note when due must be paid to the bank officer in hard cash; a check on that or some other bank, duly certified, would not be received. In fact, the bank's messenger, if he finds the note and demands the payments of the exact amount in cash, or protest and legal proceedings follow.

Relation of Banks to the Community.—But leaving this phase of the subject, a glance
will show how vital is the relation of a bank to the community doing business with it. In a word, it may be said to receive all the money that comes to that community and to disburse it by its order. Not only does the bank supply the desired amount, but when he cannot command the money required to transact his business, the bank may supply the desired amount. Thus it is, that estates are cared for, income in the shape of interest is paid, vast sums are committed to its keeping, and in its keeping is the wealth of the community. The bank enables the business of the community to be transacted; and this principle extended stands for the business of the world. It is easy to see that a misfortune to such an institution means a calamity to a community, and a series of them means panic, with its consequences of impoverishment and distress, and sometimes ruin to countless thousands. How disaster in this direction has been wrought in the past; those familiar with the history of banking in the earlier days, when banks were not subject to the restrictions of the present legislation, as in case may be, requiring official of a bank's condition from time to time as the examination and the publishing of a statement to the depositors against abuse of privilege or banking laws, thus safeguarding the bank. Means a calamity to a community, and a test of the most efficient bank official. Take, for an illustration, the work of supervising the loans made on real estate.

**Expert Examinations.**—It has been held, and is indeed held by many knowing no other method, that to ascertain the value of properties submitted as collateral for loans recourse must be had to some qualified expert, generally some one engaged in buying and selling real estate. The judgment of such an authority has been, and is, accepted as conclusive on the security offered, and determinative as to whether the report shall be favorable or adverse to the loan. But here the question arises, Who shall guarantee the expert?—for experience has too often shown that his judgment may fail, or it may be discovered that the expert was consciously or unconsciously interested in advising the loan; the applicant may have been a friend of his, or—and such cases have been known—it may be his own device for getting a loan by applying through the concealed interest of another party. But suppose a more excellent way is to be found by which the bank can be rendered reasonably certain as to the value of the property, that a clear title can be given, that the interest is kept up, whether they are advancing or retrograding in value, whether the interest is kept up—or is it not clear that a banker who has such expert advice is not only freed from duties that would otherwise needlessly weigh upon him, but that his services are to just this extent made more valuable in that with less time expended in searching for details and technicalities he has only say this—that where the services of these or kindred institutions are warranted by the business of the bank—and it must be small institutions where the volume of business does
not warrant them—not facilities carrying
guarantee of perfect safety should be utilized
by the prudent banker.

Systematic Examinations Essential. But
be supervision ever so thorough, it cannot serve
its proper purpose without a system of right ex-
amination—rather of examinations. Unces-
sing watchfulness can only be maintained through
proper investigations, not only to detect fraud
but errors of judgment. The usual examina-
tions of books are of two kinds, those of
the directors, and those of the official examiners
of the National or State government as the case
may be. Of these two methods, that of the
directors, when rightly conducted, is most im-
portant, and for the obvious reason that the
directors are better informed as to the value
of paper and local securities than the official
bank examiner, as a rule, can be. That the
examinations made by directors are too often
selective; and as a consequence, go without saying.
Of course, in the examinations by the directors,
the revision of loans is most important, enabling
the board as it does, when conducted in a
business spirit, to detect improper advances on
an insufficient collateral or inadequate endorse-
ments, and is hence the examination should
most thorough, so that the presence of a weak
paper, which often becomes such after the loan
has been made, may be discovered and rem-
ed. Obviously in such an examination every
piece of paper must be gone over as to time
of maturity and collateral, which latter should
invariably be produced. Collaterals should all
be carefully examined with reference to their
proper assignments to the bank, so that there
may be no question about its ability to exercise
a legal ownership, if necessary. The ticklers,
the discount book, and all books pertaining to
this most important branch of bank, should be
carefully investigated, and the precise facts
ascertained. The liabilities of the bank, its
deposits and cash on hand, the character of the
depositors and borrowers, the condition of the
individual and general ledgers, the bad debts of
the bank, including expenses, as may be past due,
over-drafts when permitted—all these and
more should be investigated by the board, and
this without bias to any officer or employee of
the bank; all of them who discharge their
duties faithfully will be glad of an examination
which will result in enhancing the appreciation
and increasing the confidence of the board as
to the value of their services.

To insure the correctness of balances on the
individual ledgers it would be well to render
a monthly statement to depositors having active
accounts, and to inclose a statement of this
reconciliation blank, stating that the balance is
correct, should accompany the same, to be
signed by the depositor, and an envelope ad-
dressed to the cashier. If there are errors, the
depositor may note them, to the end that they
may receive official attention immediately; these
reconciliations to be filed by the auditor and
checked back by the examining committee.

Surplus Nominal and Real. In some in-
stances it would be advisable for the directors,
when making an examination, to employ a
trustworthy expert accountant to aid them in
the work. He might be able to make a more complete analysis of the
condition of the bank than can the directors.

Here we venture, in the interests of justice to
all, to express the conviction that while banks
may continue to fail, shortly after they have
secured a certificate of a National or State bank examiner—as they
have failed in the past—no such failure should
take place following a like verdict of a board
of directors of a bank, though there have been
such cases. The official examiner of the Na-
tional or State government on his own sur-
vey is presumed to know the standing of many of
the promisors or endorsers of notes. It may be
impossible for him to detect worthless paper,
though it is supposed to represent thousands
upon thousands in value. But no such plea can
be accepted for the directors of a bank, if not all,
of whom should have knowledge of the
value of the paper upon which they lend
their depositors' money. And what are the
directors but trustees of the moneys of others,
committed to them in perfect confidence, and
to whom no language is too severe to be ap-
plied, who fail to direct? Here it seems proper
to emphasize a practice which is becoming far
too common in the management of banking
institutions, namely, the practice of carrying
on the general ledger a large surplus fund, or
undivided profits, although it is impossible for hi to detect worthless paper.

The practice of declaring surplus, which will result in enhancing the appreciation
and increasing the confidence of the board as
in the large cities, branch banks exist, the
same manner and at the same moment, that
transaction without the knowledge of the com-
mitee, who take due account of it. Where,
as in the large cities, branch banks exist, the
affairs of each branch are also examined in the
same manner and at the same moment, that
there may be no collusion by shifting of bal-
ances, borrowing money or securities to make
good a deficiency.

How Some Banks Examine Themselves.—The following from a circular letter, con-
vening a committee of examination, will give
some idea of the character of the work per-
formed:

On presentation of this order you will at
once take charge of the bank, and will not allow
BANKS AND BANKING—BANK SUPERVISION (15)

A theft which had wide newspaper publicity, both because of the very large sum stolen and the prominence of the bank in the city of New York, was where a receiving teller was found to be the thief, although the bank had no absolute confidence in his integrity. He used part of the receipts of one day to cover the shortage of the day preceding.

In one bank two individual bookkeepers were in conspiracy with a dealer. They allowed the depositors to draw out more money than they had deposited, covering up the defalcations by false entries.

The officer in charge of the exchange department in one case entered drafts issued by him for a less amount than the face. To illustrate: A $5,000 draft was entered by him as $1,000, and, as he had charge of the "reconciliation," the difference was transferred from one account to another. If a ledger is manipulated, or a certificate of deposit register falsified, it is difficult to discover the fraud.

It is a wise proceeding to compel all employees to take a vacation without notice each year, so that others may become acquainted with their duties. In this way, sometimes, defalcations have been discovered.

In past experience there has been found no more satisfactory preventive against fraud than the changing of employees, without previous notice, for a short time, from one department to another, at least once a year. A constant inquiry should be made as to the conduct and habits of all persons employed by the bank. Such inquiry may not make a weak man strong, but good resolutions may be strengthened by the knowledge that the penalty of wrong-doing will be surely and promptly inflicted.

It is only a truism to say that good bank management and thorough examination are wholly impossible in the absence of a definite system, which enters into every phase of industry. We find it everywhere. The manufacturer who does not know in detail his stock on hand at any time is in as dangerous a position as an engineer without a steam gauge. His steam may be low—the machinery of his business will suddenly stop. The pressure perhaps is high—all his capital tied up in stocks means an explosion—and the receiver gets the pieces.

Necessity of Method.—To a right and safe banking system method is a necessary protection. Unsystematic banking is not only a paradox, it is a contradiction in terms. System economizes time, excites invention, expands energy, concentrates power and accelerates results. Without system, determination weakens, purpose crumbles, failure is sure. System, applied to banking, should be scrutinized and a complete record made of the same. Report on all differences called for on general ledger, and whether they are all known to the officers.

The fact that the bank’s investigating committee enter into possession and assume entire control of the bank’s affairs, which they retain without interference or interruption until they have thoroughly satisfied themselves that the books of the bank are correct and its affairs precisely as represented, affords assurance against fraud and clerical errors. It would seem wise that all banks should cause such examinations to be held; where this is not expedient the same methods should be pursued by the directors. If any illustration were desired showing the necessity for rigid supervision and thorough examination it may be found in the astonishing story which has appeared in the public journals. The fact is disclosed that a woman not engaged in business and not known to possess tangible assets was closed that a woman not engaged in business and not known to possess tangible assets was closed that a woman not engaged in business and not known to possess tangible assets was closed.

It is a good plan, when an investigation is being made by National or State bank examiners or courts, to have the clerks to co-operate with such officials for the purpose of verifying the investigation.
be of the most searching character. A good bank will court investigation. Whether it is true or not, as a recent writer has said, that "bank examiners are not called upon to play the objectionable part of meddlesome guardians," it is surely true that they should discharge their duties with thoroughness and with a realizing sense of their duty to the public. So far as practicable they must see to it that allusion at the time of examination, between teller and discount clerk or other officers, is made impossible, and that neither can or should be made to do double duty in the hands of the dishonest, as has been done. It may not be assured that either National or State or directors' examinations will form an infallible guarantee against dishonest practices. But what may justly be expected of these examinations, together with such as the bank officials may themselves institute, is that they will reduce losses through error or fraud to a minimum. No known system affords any guarantee of faultless management; but the best system rigidly applied will produce the best results possible; and for this the public have a right to look.

Kinds of Bank Examination.—Official bank examination includes that furnished by the Comptroller of the Currency, the Federal Reserve Board in the case of national banks and the supervising officers of State banks in the case of State banks; there is also examination in many cities by a clearing-house examiner, for banks members of the clearing-house association. Besides, special examinations are provided for, as already stated, by committees of examinations being made, in some cases by accountants selected from the bank's staff and in others special experts. A few banks have thought it wise to have examinations made on behalf of the stockholders generally, in addition to the examinations made by the directors.

Importance of Examination.—What can be of greater importance than the thorough, systematic, exhaustive and regular examination of our great financial institutions—our National and State banks, trust companies and other institutions? The proceeds of single-name paper, given in the open market. They are to be distinguished from the ordinary promissory notes given to settle debts or to obtain money on a deferred payment, in that the transaction is impersonal, and an intermediary is employed to effect the sale. Legally there is no distinction, both being the same obligation in law.

17. COMMERCIAL PAPER. The element of credit in the business world arises from two fundamental causes: (a) The fact that the merchant and the manufacturer can profitably use more capital than he possesses and can make money by borrowing money; and (b) if the time of payment is postponed, the buyer can turn goods into money before the agreed time of payment arrives. Therefore, business men must either borrow money to buy goods or postpone the date of payment for goods. Out of the first process arises commercial paper, and out of the second the "book account," now the principal form of credit in this country.

The usual methods of borrowing are: (1) Private loans from relatives and friends; (2) loans made directly to the borrower by the home bank, either in the form of loans on his promissory note, or indirectly in the form of bills receivable discounted; (3) loans in the form of commercial paper, which is a floating debt—borrowings in the open market.

The term commercial paper is, therefore, used to designate those instruments of indebtedness—promissory notes—which are issued by business men for the purpose of obtaining funds in the open market or which are given in settlement of business obligations and sold in the open market. They are to be distinguished from the ordinary promissory notes given to settle debts or to obtain money on a deferred payment, in that the transaction is impersonal, and an intermediary is employed to effect the sale. Legally there is no distinction, both being the same obligation in law.

There are two forms of commercial paper: (1) Single-name paper; (2) double or two-name paper, commonly called "receivables." Single-name paper is the sole obligation of the issuer, put out in large denominations (usually $2,500 and $5,000) and sold through the medium of a commercial paper broker to banks and bankers. The proceeds of single-name paper are, or are presumed to be, used for the purpose of paying bills promptly in order to obtain the cash discounts, which are quite generally given for quick settlements.

The two-name paper or the receivable is the note given by the buyer to the seller and by the latter sold in the open market for cash. The payee thus anticipates its due date.

The advantage of single-name paper to the banker lies in the fact that it comes in large and uniform denominations, of is of short maturity and the law does not allow it to renew, for he purchases the paper strictly on an impartial and impersonal basis.
The very favorable experience that banks the country over have had with commercial paper and its intrinsic soundness have made these instruments a favored investment in banking circles. Inasmuch as a bank must keep its funds invested in the best money, it is therefore quite clear that it is in its interest to freely purchase such paper. Moreover, it is a fact that single-name papers are highly creditable.

### SelHg and Buying

Both single and two-name paper is sold through the medium of the commercial paper broker, who acts as the go-between between the borrower and the banker. The broker maintains a well-organized credit department, which investigates each concern for whom the broker sells, obtains full information as to its affairs and classifies and arranges same for submission to the lender.

The information submitted consists of a condensed statement showing the various assets which constitute the liabilities in uniform arrangement, as follows:

- **Assets**
  - Cash
  - Merchandise
  - Accounts receivable
  - Bills receivable

These four items constitute the **quick assets**. They follow the fixed assets, such as real estate, furniture and fixtures, patents, investments, good will and other assets.

### Single and Two-Name Paper

**Single-name paper** is an original product of the Civil War and the Greenback disturbances. Before the war merchants made infrequent trips to the trading centres and stock up for months ahead, giving notes for their bills with long maturity. Owing to the uncertainty of the amount that would be received for the bill at maturity, due to a depreciation of currency, the custom soon arose of allowing the buyer a cash concession for prompt payment. But this necessitated borrowing facilities. The home banks being unable to loan in such large amounts, the merchant conceived the idea of making out a statement of his affairs, and submitting to bankers in the large cities, with his notes in large and uniform amounts, and pay able at a time when he would be in funds. From the funds so secured he was able to take advantage of these concessions and therefore buy at a reduced price. The plan worked so well that intermediaries spring up as a natural sequence, to find buyers for such paper and borrowers for banks having funds to invest.

The sole advantage of two-name paper lies in the fact that it carries the strength of an additional name by endorsement, and is prima facie evidence of a business transaction. This form of paper is not a factor in American business methods, it being the common custom to buy and sell on open book credit, settling the obligations in cash as above stated. In a few lines, such as lumber, musical instruments, agricultural machinery, etc., notes are given in settlement; but this form of paper is greatly in the minority. The cash discount system is so widely adopted and so largely used that it may be said to be the prevailing custom in this country and is the reason for the prevalence of single-name paper.

**Selling and Buying**—Both single and two-name paper is sold through the medium of the commercial paper broker, who acts as the go-between between the borrower and the banker. The broker maintains a well-organized credit department, which investigates each concern for whom the broker sells, obtains full information as to its affairs and classifies and arranges same for submission to the lender.

The information submitted consists of a condensed statement showing the various assets which constitute the liabilities in uniform arrangement, as follows:

- **Assets**
  - Cash
  - Merchandise
  - Accounts receivable
  - Bills receivable

These four items constitute the **quick assets**. Then follows the fixed assets, such as real estate, furniture and fixtures, patents, investments, good will and other assets. The quick assets are:

- **Accounts payable and bills payable**, the latter term including both the single and double-
name paper; then follows the other liabilities of the concern, such as mortgages, stock issues and other obligations.

The purpose of the above arrangement is to enable the banker to readily ascertain the ratio between the quick assets and the quick liabilities, the purpose being to determine the relative safety of the credit risk. It is well settled in all credit circles that a firm should have quick assets available at least 50 per cent before the other assets would need to be drawn upon to settle the firm's obligations. In some lines, such as meats, groceries, etc., where the shrinkage is light and a quick sale possible, a narrower margin is permissible—as low as one and one-half to one; but in a seasonal or specialty line, such as millinery or ladies' wear, subject to fashion and change of seasons, a large margin is generally desired.

Having the information classified, the broker submits the same to his clients, who, if in the market and satisfied with the rates, will purchase the paper on option; that is to say, with the right to return within a certain time, if upon further investigation it is not desired. The investigation is made through bankers, who have either purchased the paper before and are acquainted with its value, or the home banks, which are fully conversant with the borrower's affairs from close observation. Such references, together with mercantile firms with which the borrower has had business dealings, are furnished on the credit statement. This process is called "checking" the paper.

In purchasing commercial paper the banker is usually concerned about the following points:

First, the statement should be recent, not over six months past. Second, it should be an audited statement made by a firm of public accountants, whose sole object is to present a correct statement of fact. Third, the ratio of quick assets to quick liabilities, as a general rule, be at least two to one. Fourth, the character of the business. Most bankers prefer staple articles to businesses which cater to fashion or seasonal demands. Fifth, to scatter the risks territorially as well as to the various lines of merchandising. Being satisfied on each of these points, he is in a position to purchase with intelligence.

It is a rule of banking that a firm should not issue both single and two-name paper, and one of the surest tests is the presence or absence of odd cents in the item "bills payable." If the item is in an even amount it is good evidence that only single-name paper is issued. If there are odd cents it indicates that the firm's bills receivable have been sold, thus parting with one of its quickest and best assets, and is a practice that is frowned upon by bankers who know the science of commercial paper.

Under the Federal Reserve Act, commercial paper has been given a new dignity and standing in the financial world. The Federal Reserve banks are permitted to rediscount paper that conforms to certain qualifications, the essence of these conditions being that the paper submitted must arise from a business transaction and be of short maturity. This process enables a bank to cash in its holdings on a few hours' notice, a very marked advantage in periods of unrest. The Federal Reserve banks may in turn use such paper as the basis of note issues, for as long as the Federal Reserve bank has $50 in gold for every $100 in paper, it may put out $100 in bank notes, thus making commercial paper the foundation of our circulating currency.

**Instruments of Credit**—The instruments of credit in this country are as follows:

1. **Negotiable bills of exchange**, which are unconditional promises in writing, made by one person to another, signed by the person giving them, requiring the person to whom the order is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer.

2. **Negotiable promissory notes**, which are unconditional promises in writing, made by one person to another, signed by the maker, engaging to pay on demand or at a fixed or determinable future time, a sum certain in money to order or to bearer.

3. **Bank checks**, which are bills of exchange, drawn on a bank and payable on demand.

4. **Drafts**, which are bills of exchange, and are subject to the same rules of law as bills of exchange.

An able writer has characterized drafts as follows: "A draft is an order in writing for money, drawn upon the custodian of funds belonging to the drawer, or subject to his order. It does not presuppose any other commercial transaction. A bill of exchange is a similar instrument based usually on a sale or purchase of goods." In this country the word "draft" is commonly applied to all instruments of this sort that are payable within the United States, and the term "bill of exchange" to those payable in foreign countries.

**Acceptances**—The term "acceptance" is defined by the Federal Reserve Board as "a draft or bill of exchange drawn to order, having a definite maturity and payable in dollars, in the United States, the obligation to pay which has been assumed by the party on whom it is drawn; such agreement to be to the effect that the acceptor will pay at maturity according to the tenor of such draft or bill of exchange without question or deduction."

A bill of exchange is defined by the English Bills of Exchange Act as "an unconditional order in writing addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time, a sum certain in money to or to order of a specified person or to bearer." An "acceptance" is, therefore, where A commands B to pay to C, or to his order or to bearer, a sum of money absolutely on demand or at a certain future time. A is the drawer, B the drawee and C the payee. If A agrees to comply with the order, he writes the words "accepted" across the face of the instrument and signs his name, together with the date of the acceptance, the date that it is payable and the place where it is to be paid. Upon so signing, B becomes the acceptor, and the document is an "acceptance." The acceptance gives essentially the promissory note of the acceptor.

The time bill of exchange, or acceptance, has a fundamental purpose which neither the promissory note nor the commercial draft pos-
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sesses. That purpose is to facilitate the mutual offsetting of debts between individuals, as well as nations. Acceptances, or time bills of exchange, pass from hand to hand the same as money. They serve the same purpose as the transfer of gold itself in the cancellation of debts. Abroad they have long been considered as the easiest and cheapest form of credit instruments.

Economists regard acceptances as a sort of special currency. Such really has been their use. The two centuries in the Old World, where acceptances have been employed between business houses in the settlement of accounts. They circulate among banks which buy and resell them according to their needs until they are negotiated to the central or government bank of the country.

Briefly stated, the use of the acceptance is as follows: The seller of the goods draws a bill of exchange on the buyer, the buyer accepts the instrument and returns it to the seller; he negotiates it to a bank or sells it in the open market, thereby receiving payment for his goods soon after they are delivered. The buyer has the time between his acceptance and the date of payment to turn the goods into money to meet the obligation when it is due, and the seller has his funds as soon as the goods are accepted.

Acceptances are a new form of credit instrument in American banking and business circles. Prior to the inauguration of the Federal Reserve system they were quite unknown, but the Federal Reserve Act has made specific provision for such instruments, and the Federal Reserve Board has issued detailed regulations concerning the issuance and the purchase of such paper. They are fast coming into popular favor, being a form of instrument which is readily discounted at the Federal Reserve banks. In January 1918 acceptances constituted 25.9 per cent of the total earning assets of the Federal Reserve Banks.

The parties to such instruments are:

**Drawer.**— The party who signs or executes the bill of exchange, check or draft.

**Drawer.**— The party to whom the bill of exchange or draft is addressed, and who is ordered to pay it.

**Acceptor.**— The drawer after he has signed or promised to pay the bill of exchange or draft. The promise should be in writing and is usually written across the face of the bill or draft.

**Payee.**— The party to whom the bill, note, check, draft or other instrument is made payable.

**Endorser.**— The payee, bearer or other party who writes his name on the back of the instrument for the purpose of transferring it.

The terms used in connection with commercial paper are:

**Endorsement.**— A technical act of the law merchant, whereby a party writes his name upon a duly executed, negotiable instrument, with or without terms of contract or liability, according to the law merchant.

**Endorse.**— The party to whom the endorser transfers the instrument.

**Holder.**— Any one who holds or possesses the legal title of the instrument. He may or not be the true (equitable) owner.

**Dishonor.**— By refusing to promise to pay (accept) or to pay the bill or note it is said to be dishonored.

**Protest.**— The evidence of dishonor, usually made by a notary public, in the shape of a certificate setting forth presentment, refusal and its reason.


William H. Kniffin, Jr.,
Vice-President Bank of Rockville Centre;
Formerly Secretary Savings Bank Section American Bankers Association.

18. Bank and Trust Company Advertising. Endeavoring, by forcible, well-planned advertising, to secure new depositors and customers for a banking institution, or to increase the dealings of present customers with it, is a comparatively recent development of the business, both in the United States and abroad.

Formerly, about the only advertising considered proper for a bank and trust company was the publication of its financial statement and a ‘card’ with the names of the management, together with the barest statement of the services rendered by the institution. But of late years, partly on account of the great advances made in general advertising and partly because of increased competition in the banking business, many institutions have gone into the matter of advertising more fundamentally, either putting that branch of their activities into the hands of agencies specializing in that kind of work, or employing a publicity or advertising manager to devote his entire time to the advertising of the institution.

Naturally, it is only the larger banks that can afford such an arrangement. Smaller institutions must either turn the work over to one of their officers or employees or make use of the services of some agency supplying a ready-made or specially prepared advertising service for financial institutions.

Banks and trust companies which are most successful in their advertising usually make an annual appropriation in advance to cover all advertising expense, and this item of the budget is subdivided to meet the cost of these various divisions:

**Management.**— Salary of advertising manager, if one is employed.

**Space.**— Newspapers, street cars, billboards, moving picture theatre, etc.

**Copy.**— To pay for the services of an advertising writer or for the work of advertising agencies in the preparation of the subject matter of the advertising.

**Mechanical.**— Under this head are included the printing, engraving, lithographing, art work, etc., required in producing the bank’s advertising matter.

It is difficult to lay down any hard-and-fast rule concerning how much a bank or trust company can legitimately spend. The trustees of mutual savings institutions feel that they have no right to spend any
of their depositors’ money for this purpose. So they do practically no advertising at all. But other banks are spending a good deal of money in advertising. The sum differs according to the competition, the size of the bank and other local conditions. Investigation has brought out the fact that the average advertising expenditure probably is about in the proportion of $1 for every $200 of deposits, that is, a bank with $2,000,000 deposits will spend $10,000 a year in advertising.

The facts concerning a banking or fiduciary institution and the services it renders the public that may properly be advertised include capital and surplus, governmental supervision, personnel of directorate and management, physical protection, age and experience, interest on deposits, business or investment counsel, care of property, trusteehips, executions of wills, letters of credit, travelers’ checks, collections, courteous service, the necessity and rewards of thrift, the use of safe deposit boxes, co-operation with the government in war financing, etc.

The tried and approved media of bank advertising include daily and weekly newspapers, financial journals and magazines, bank directories, street cars, billboards, moving picture theatre advertising, personal letters, facsimile letters, booklets, house organs, etc. (i.e., those issued by the bank for its own needs; but here it has been only a transfer of credit from the bank to the depositor in circulating form. If checks were certified, issued in convenient denominations and so engraved and printed as not to be easily counterfeited or raised, they would be substantially the same as a bank note, for a certified check becomes an obligation of the certifying bank. But a bank note ought to be somewhat better secured than a check, and for this reason: a check is accepted or not as the person receiving elects; but a bank note, though not a legal tender, must be taken in the ordinary course of trade by merchants and other business men, who cannot discriminate between different kinds of money in circulation. Therefore, the notes should be given some extra security, as a first lien on assets or by a guaranty fund.

Experience in the banking history of the United States and other countries has shown that by employing either of these expedients bank notes can be made safe beyond question. The best provision for current safety, and the best check against inflation, is the test of daily redemption, in the standard metal, applied through the clearings.

If banks in the issue of their notes are left unrestricted beyond the simple safeguards above mentioned, the amount of circulating medium in the shape of bank notes will be determined by the wants of trade—that is, by the requirements of those who receive the credits of the banks. In the larger cities deposit credits to the bank nor to the government, for only the person desiring to use the credit can correctly gauge either its degree or kind.

The early banks in the United States were of diverse kinds, but there were two general systems of note issues, one where the notes were based on bonds, the other where the notes were emitted on the general credit of the issuing banks. The latter—as in Indiana, Iowa, Missouri, Kentucky, Louisiana, Virginia, and especially in New England—were good, the notes not only being of great service but proving sound. In other States where bonds and stocks were pledged as security, the notes proved unsatisfactory. Generally, in those days, the notes exceeded the deposits in volume. Where, as in New England, under the Suffolk system of redemption, which was a plan whereby the notes were redeemed at Boston through the Suffolk Bank, the note issued and the note redeemed had a close correspondence in value to the demands of trade. It was found, also, in practice that redemption was an effectual check against
over-issue, and that the banks did not keep the volume of notes up to anywhere near the permissible limit. The experience in New England, as in other sections of the country, established the fact that only simple provisions were necessary to ensure the safety of the notes. Inflation of bank credit— that is, the granting of more credit than prudence sanctions — is possible where the coin reserves are inadequate or the bank management reckless, but inflation of bank notes, under a proper system of redemption, is not easy. Banks cannot keep their notes in circulation any longer than they are needed. Every issuing bank receiving the notes of another bank will want to have that note redeemed to make place in the circulation for one of its own notes on which it will make a profit; moreover, it will want to have the notes of other banks redeemed to replenish its own reserves upon which its credit structure is based. Private holders of these notes will deposit them as received in the course of trade.

Bank notes save the abrasion incident to circulation of coin, and they are more economical than gold certificates, for while the latter are issued only against a like equivalent of the coin of the United States. Prior to the adoption of the Federal Reserve system (q.v.) notes of National banks were issued against checks of depositors, and a reserve set aside against them in the vaults of the issuing bank, it then becomes of value.

The Canadian and Scottish banking systems afford familiar examples of the issue of bank credit notes. From the imposition of the 10 per cent tax on State bank notes in 1865 bank credit notes have been issued in the United States. Prior to the adoption of the Federal Reserve system (q.v.) notes of National banks were issued against a deposit of a like amount of United States bonds. The Federal Reserve Act provides for the issue of notes to member banks against specified commercial papers, the Federal Reserve banks emitting the notes to hold a reserve of 40 per cent against them. These notes, however, are not true bank notes, issued against a deposit of the banks themselves, but obligations of the government, issued only through special institutions under government control.

The experience of the banks has also shown that the guaranty of bank deposits rests upon mutual responsibility. It is objected to on the ground that it tends to place new and perhaps recklessly managed banks on a par, as regards safety, with old-established and carefully managed banks. To this objection the reply is made that there ought to be no degrees of safety in banking, but that all deposits in banks should be made safe, beyond question, and that in point of service the old bank will tend to have the advantage anyway through the friendships and connections created by its long existence.

Experience with the laws now in force would seem to indicate that the results depend upon the character and administration of these laws. Some of them have recognized that where joint responsibility is assumed, greater stringency in the regulation of banks is essential to prevent sound banks well-managed with safety against a much smaller reserve.

Credit bank notes also have one immense advantage over notes issued against United States bonds, for while the latter represent an investment of an equivalent amount of capital, and are therefore a source of expense even when lying idle in the bank's till, a true bank note while in the possession of the issuing bank represents no more than the cost of the paper and the engraving. When it is paid out, in exchange for the obligation of others, or against checks of depositors, and a reserve set aside against it in the vaults of the issuing bank, it then becomes of value.

The guaranty of bank deposits. (20) **GUARANTY OF BANK DEPOSITS (20) — TRUST COMPANY.**

20. GUARANTY OF BANK DEPOSITS. This has been effected by legislation in some States (Oklahoma, Kansas, Nebraska, Mississippi, South Dakota and Washington), and individual banks in some cases have entered into policies of insurance to protect their deposits. The Attorney-General of the United States has ruled that this is a legal use of the funds of a National bank. The United States Supreme Court, on 3 Jan. 1911, in cases coming before it from Kansas, Oklahoma and Nebraska, decided that the bank deposit guaranty laws of those States were not in conflict with any provisions of the Constitution of the United States, and the court further laid down the principle that the legislature may not only regulate banking but may prohibit it except under such conditions as it may prescribe.

In principle, the guaranty or insurance of bank deposits rests upon mutual responsibility. It is objected to on the ground that it tends to place new and perhaps recklessly managed banks on a par, as regards safety, with old-established and carefully managed banks. To this objection the reply is made that there ought to be no degrees of safety in banking, but that all deposits in banks should be made safe, beyond question, and that in point of service the old bank will tend to have the advantage anyway through the friendships and connections created by its long existence.

Experience with the laws now in force would seem to indicate that the results depend upon the character and administration of these laws. Some of them have recognized that where joint responsibility is assumed, greater stringency in the regulation of banks is essential to prevent sound banks well-managed from being called on to pay the losses of those imprudently managed. In Texas, after six years' trial, the Commissioner of Insurance and Banking found that each share of stock of the par value of $100 had paid only three and one-half cents annually for deposit insurance, and he states that amongst depositors the guarantee fund banks the closing of one of these institutions creates no more panic than the closing of a grocery store. Some of the other States have had less satisfactory experiences, and the fact that after long agitation but few States have adopted the law, and that it has not yet been applied to the National banks, warrants the conclusion that the experiences thus far have not justified the general extension of the plan.

A safety fund, originally designed to protect the holders of the State banks of New York, was later made applicable to deposits of banks, and the system broke down, chiefly because the fund provided was not large enough to protect both the holders and depositors. Through clearing-house examinations of member banks, a qualified form of deposit guaranty has been instituted, although direct responsibility is not assumed. The ability, by careful oversight, to detect banking weakness at its inception, renders a bad bank failure almost impossible. A desire to preserve local banking reputation has sometimes led bankers to unite in the protection of failed banks—the case of the Walsh bank failures in Chicago being the most familiar example.

21. TRUST COMPANY. Definition.— A corporation authorized by law to act as trustee, or to accept and execute trusts of various descriptions; a corporation empowered to act in a fiduciary capacity. This is the primary meaning of the term "trust company," and is expressed in the name given to such a company in Australia,— a "trustee company."
In current usage, the term is applied to any corporation organized under the trust company laws of the several States, whether such corporation actually undertakes any trust business or not. While these laws invariably grant certain powers to accept and execute trusts, including the power of exercising fiduciary powers for the benefit of third persons, they also grant other powers of considerable variety in the different States, of which more or less limited banking powers are always a part. Except with the oldest companies, the volume of banking business usually exceeds that of trust business; and it results that to the average person the trust company presents itself as a peculiar kind of bank. In fact many of the smaller and newer trust companies do practically no trust business, and their actual functions are those of ordinary banks of deposit and discount, or of savings banks, or of a combination of the two. On the basis of the business actually transacted, therefore, the trust company may be defined as a financial corporation authorized to exercise both banking and trust functions.

Functions. 1. Trust Functions.—The function which gives the trust company its name is that of accepting and executing trusts in the exercise of this function the trust company performs the same acts and assumes the same responsibilities as an individual acting in like capacity. Trusts are received from natural persons or individuals, from corporations, both public and private, and through appointment or approval of courts of law. It is convenient to consider the trust functions under these heads:

(a) Trusts performed for individuals under private agreement. Most of these trusts involve acting as trustee or agent, but they are of great variety as to purpose and as to duties required. The most common is that of acting as trustee or agent for the management of property, real or personal. In this capacity the trust company takes entire charge of the property, collects income, collects principal of property (and in rare instances of the person) of minors, curator or committee for persons of unsound mind, etc. As a rule trust companies are legal depositories for court funds and for persons acting in fiduciary capacities.

Trust companies are also a large amount of "insolvency business," acting as assignees, receivers and trustees in bankruptcy.

(b) Trusts performed for corporations, private and public. The trust company is practically indispensable to the large corporations of to-day, as well as to many of the smaller ones. It acts as agent, as trustee of deeds of trust securing bond issues, as transfer agent for stock, as registrar for stock or bonds, as custodian or manager of sinking funds, as fiscal or financial agent for various purposes, for States, municipalities, railroad and industrial and other corporations. It pays bonds, coupons, interest. It may take charge of the disbursement of dividends and interest, attending to the publication and mailing of notices, etc. For syndicate managers, voting trusts, etc., it issues and collects calls for installment payments and computes and distributes to the proper parties the proceeds of such operations in the proceeds. It acts as depository of cash and securities under varying conditions; as depository and trustee for underwriting syndicates; as agent to receive subscriptions for securities and to deliver same when issued. Its services are often used in corporate financing and reorganization. It may of course perform for corporations trusts of the kind already described as undertaken for individuals under private agreement.

2. Banking Functions.—Trust companies have always transacted a large amount of savings banking business, and years ago became formidable rivals of the savings banks in this field. In more recent years they have invaded the field of commercial banking. While the laws of many States formerly limited their functions in the field of commercial banking, in particular forbidding them to discount commercial paper, and although they are still so restricted in some States, the tendency in recent years has been to remove these restrictions and in many States at present they have all the banking powers of ordinary National or State banks, except the right of note-issuing.

3. Safe Deposit Business.—Trust companies very generally maintain safe deposit departments, in which they rent private boxes for the safe-keeping of securities, valuable papers, jewelry, etc., and space for the storage of more bulky valuables.

4. Other Trusts. The three classes of functions above described are those most commonly exercised, in varying proportions, by the average trust company. Some companies maintain bond or investment departments, for the purchase and sale of high-grade securities. Trust companies in some States formerly transacted fidelity or title insurance business, and a few companies still transact such business; but the tendency, both in legislation and in business practice, is to leave this field to companies organized for this special purpose. In a number of States trust companies transact a real estate agency business. Other functions are sometimes found, the extent of powers
BANKS AND BANKING—TRUST COMPANY (21)

It should be noted that not all trust companies undertake all of the functions above enumerated. The functions actually performed by corporations bearing the word "trust" in their titles vary widely. There are some trust companies which devote themselves exclusively to the business of trust, and are in fact commercial banks, or savings banks, or both commercial and savings banks. Others transact trust and savings business, but have no trust business, and are in fact commercial banks, or savings banks, or both commercial and savings banks. Others transact trust and savings business, but have no commercial banking business. In several of the Southern States there are "trust companies," whose business consists solely of dealing in real estate or insurance or of some combination of the two. There are also some such companies whose business is that of dealers in real estate mortgages or mortgage bonds.

Organizational, Regulation and Management—Trust companies are creatures of State legislation, and are organized under the laws of the State in which they are to be located. Formerly they were chartered in many States only by special act of the legislature and in some States under the general incorporation laws. Most of the States have since enacted general trust company laws, which provide specially for the incorporation, powers, government and regulation of such companies. The general trust company laws in most States contain a number of provisions intended to safeguard the business. The capital stock required is usually much larger than that specified for banks in the same locality, and it is generally required that trust companies apply a portion of earnings each year to the building up of a surplus until it reaches a certain proportion (usually 20 per cent) of the capital. In many States stockholders are subject to double liability. Restrictions of various kinds are placed on the making of loans and investments and the investments of the trust department are specially restricted. Adequate reserves are required. In many States a number of separate funds are created so that trust funds must be kept absolutely separate from those of the company and of other departments, and also that securities belonging to specific estates be so marked and recorded as to clearly designate the owner, so that in case of failure of the company the trust funds would not be affected. Many States forbid the transaction of any trust business until the company has made with State authorities a deposit of cash or securities in certain specified amounts as special security for the faithful performance of its fiduciary obligations. Practically all of the States require trust companies to make regular reports to State officials, varying in different States from once to five times each year; and to submit to examination by State officials, usually once or twice each year.

The internal organization of trust companies is often similar to that of ordinary banks, except that the variety of duties undertaken necessitates the maintenance of separate departments (required by law in many States) for the transaction of trust, savings, general banking, safe deposit and other lines of business. The management of the trust company is generally conducted by a board of directors; and is administered by a group of officers whose number and duties are determined by the needs of the business.

In addition to the character of its business in the trust department, the typical trust company differs from an ordinary commercial bank in the character of the deposits which it attracts and in the resulting methods in which it invests the funds received in such deposits. The typical commercial bank handles demand deposit accounts of active business concerns whose funds are in constant use and whose balances fluctuate radically from day to day or week to week. Such a bank must therefore invest its funds in short-time loans so maturing that it will always have ample funds available with which to meet the demands of its depositors, and will be able to reduce the amount of its outstanding loans on short notice. On the other hand, the typical trust company does not handle deposits of active business concerns. Its deposits are composed of inactive funds, of gradually accumulating savings or of funds set aside for a considerable period for special purposes, the balances of which, as a whole, do not fluctuate greatly, and normally tend to steady increase. These are "time deposits" rather than "demand deposits." The trust company, therefore, need not confine its investments to short-time loans, but may place its funds in long-time loans and in certain approved classes of securities,—in bonds and in real estate mortgages. Trust funds, as already stated, are kept entirely separate from other funds of the company. Their investment is hedged about with many safeguards required by law, by the by-laws of the company and sometimes by the provisions of the trust.

Historical and Statistical.—The first company in the United States granted the power to do a trust business was The Farmers' Fire Insurance and Loan Company (now The Farmers' Loan and Trust Company) of New York city, to which extensive trust powers were granted in 1822. Similar powers were granted to The New York Life Insurance and Trust Company in 1830. Two companies in Philadelphia, The Pennsylvania Company for Insurance on Lives and Granting Annuities, and The Girard Life Insurance, Annuity and Trust Company (now The Girard Trust Company),—were granted trust powers in 1830. All four are still in existence.

As is indicated by the names of these early companies, the trust business was at first closely associated with the insurance business, and was not regarded as of sufficient importance to require separate organizations. A few other companies of the same kind flourished for a time during the next 20 years, but went out of business for various reasons. The first company in the country organized to transact exclusively a trust business was The United States Trust Company of New York city, incorporated in 1853. The number of companies authorized to exercise trust functions slowly down to the time of the Civil War, immediately following which a number of such companies were organized. By 1875 perhaps 50 trust companies were doing business, located in New York, Pennsylvania, New Jersey, Maryland, Illinois, Iowa, Georgia, all the New England States except Maine, and possibly a few other States.
Prior to 1875 no statistics regarding trust companies are available, but in that year the Comptroller of the Currency began the publication of such statistics in his annual reports. As the trust companies are State institutions and not under the jurisdiction of the comptroller he had no authority to compel the rendering of reports by them, and as a consequence his figures represent only such companies as were willing to report to him. Nevertheless they reveal the relative growth of trust companies from year to year, and in recent years represent the great majority of such companies. For the year 1875 he reports 35 trust companies, with total resources of $122,890,175. During the eighties there was a considerable increase in number of companies, and the trust company as an institution began to attract some attention, particularly from the banks, which saw danger of competition. In 1890 the comptroller's reports showed 149 companies with total resources of $503,801,356. The real development of the trust company began along in the nineties, though the period of most rapid growth did not begin until the first decade of the 20th century. In 1900 the comptroller reported 290 companies with total resources of $1,330,160,343, an increase in resources in 10 years of 106 per cent. At the end of the next decade, in 1910, the comptroller's report showed 1,091 companies with total resources of $4,216,850,062, an increase during the decade in number of companies of 801, or 217 per cent, and in resources of $2,886,689,719, or 217 per cent. The 1915 report shows a further great increase, to 1,664 companies with total resources of $5,873,120,341. The table at top of page shows leading figures of the comptroller's reports from 1875 to 1915 inclusive.

Beginning in 1903, The United States Mortgage and Trust Company of New York has published each year a compilation of trust company statistics which include a great majority of the trust companies of the country. For the year 1915 its figures cover reports from 1,777 companies, besides which it lists over 250 companies from which reports were not received. This indicates that the total number of trust companies in the United States on 30 June 1915 was in excess of 2,000. The accompanying tables show the total figures for the 1,777 reporting companies, and the distribution by States.
The Federal Reserve Act.—The Federal Reserve Act, as construed by the Federal Reserve Board, involves two ways: it makes trust companies eligible to membership in the Federal Reserve banks, and it permits National bank members of the Federal Reserve system,—if in conformity with local State laws,—to undertake certain trust functions. Up to the present time few trust companies have joined the Federal Reserve system, largely because that system is designed wholly for commercial banks. Authority to National bank members to exercise trust functions applies only to those members which are located in States whose laws permit them to exercise such functions. Some of the States grant that permission, while others have distinctly refused to do so. If the exercise of trust functions by member banks of the Federal Reserve system becomes general, the fact will doubtless have a marked effect upon the growth of trust companies as separate institutions.

22. BANKERS' ASSOCIATIONS IN THE UNITED STATES. American Bankers' Association.—Prior to 1875 there was no national organization of American bankers. In that year the American Bankers' Association was organized at a convention held in Saratoga on 20, 21 and 22 July. By 1916 the Association had become the largest organization of bankers in the world, with headquarters at 5 Nassau street, New York. Its membership of 16,000 includes half the total number of banks in the country, and comprises National, State and private banks, trust companies and clearing houses. Annual dues range from $10 to $75 for banks and trust companies according to capital and surplus invested.

The governing body of the Association is the annual convention, which meets annually. Administrative details are in charge of a general secretary and an executive council composed of members appointed from State bankers' associations on the basis of State representation. In 1894 the Association began the protection of members against crime and fraud, and developed a department which works with the W. J. Burns International Detective Agency in the pursuit of offenders against banks. Through its general counsel and a Federal legislative committee, the Association has initiated and promulgated laws relating to uniform bills of lading, negotiable instruments, credit practice, currency reform, taxation, the safeguarding of bank depositors and the improving of banking practice.

The interests of special classes of member banks are in charge of secretaries of a Savings Bank Section, a Trust Company Section, a National Bank Section and a Clearing House Section. Through these sections the Association has made efforts to standardize banking practice and check collection; has conducted a national thrift campaign; given publicity to the functions of trust companies; collected statistics of bank losses; prepared standard forms of fidelity and bank burglary bonds; devised a numerical system to facilitate check collection, and perfected the A. B. A. travelers' check.

Affiliated with the American Bankers' Association is the American Institute of Banking, an educational section which, since 1890, has given instruction to bank employees. Courses of study in banking law and practice and in elementary economics of banks and the currency commission, which publishes a monthly magazine called the Banker-Former. Points of contact with State bankers' associations are maintained through a section known as the Organization of State Secretaries, and through joint efforts in agricultural extension, the revision of banking legislation, the apprehension of bank criminals, and through co-operation between committees.

State Bankers' Associations.—There are 49 State bankers' association, including the District of Columbia. The first to organize was Texas, in 1885; while Illinois, with a membership of 1,755, is the largest. These State organizations have more than 21,000 members, and most of them maintain paid secretaries to further the interests of members through correspondence, protective features, bond and burglary insurance, group meetings, State conventions, legislation and the publication of monthly bulletins. Many associations also have paid attorneys, and most of them are active in agricultural and good roads' development.

The Investment Bankers' Association.—The Investment Bankers' Association of America was organized in New York in 1912 in order to promote the general welfare and influence of investment banks, or bankers, likewise banking institutions operating bond departments, and to secure uniformity of action, both in legislation and methods of handling securities. Any national or state bank, trust company or private banker, banking firm or corporation, in good standing, having a paid-in capital of $50,000 or more, which makes a practice of buying bonds or investment stocks, and publicly offers the same, as dealers therein, is eligible to membership, but those who are exclusively brokers are not admitted.

The Association has headquarters at 111 West Monroe street, Chicago. A Bulletin of information is published frequently and the proceedings of the annual convention are...
The associated activities of nearly 500 members are carried on through a board of governors which meets quarterly, through a secretary, a legal counsel and committees. The Association is prominent in legislation relating to the issuance, standardization and safeguarding of securities and the improvement of the methods of taxation.

Farm Mortgage Bankers' Association.—In May 1914 the Farm Mortgage Bankers' Association of America was organized. It has a membership of more than 130 farm mortgage firms operating in 25 agricultural States, representing outstanding farm mortgages of more than $600,000,000. The offices of its secretary-treasurer are at 112 West Adams street, Chicago, where a quarterly Bulletin is published. Its convention is held annually. Through a board of governors, committees and the secretary-treasurer, the organization is directing special efforts toward the standardization of mortgage forms and uniformity of practice among farm mortgage dealers.

Other Bankers' Associations.—New York State, Massachusetts and Connecticut have savings bank associations, while New York, New Jersey and Massachusetts have State-wide trust company associations. In Oklahoma and Kansas the State banks have separate organizations. Bank examiners are organized into what is known as the National Association of the Supervisors of State Banks; there is an Association of Reserve City Bankers; bank credit men are organized into a Robert Morris Club; and there are numerous local associations of related banking interests, as well as clubs of city bankers. The Bankers' Club of America has headquarters in the Equitable building in New York city and limits its resident membership to 1,500.

Marian R. Glenn.

BANNATYNE CLUB, instituted by Sir Walter Scott in 1823. Its object was to print and publish in a uniform manner rare works of history, topography, poetry, etc.

BANNEKER, Benjamin, American negro mathematician: b. Maryland, 9 Nov. 1731; d. 1806. At the age of 50 he began the study of mathematics for astronomical purposes. He published annually after 1792 an almanac devised by himself, and aided in determining the boundaries of the District of Columbia.

BANNERET, an abbreviation of knight banneret; a member of an ancient order of knighthood which had the privilege of leading their retainers to battle under their own flag. A banneret was entitled to display a banner instead of a pennon. They ranked as the next after baronets. The order is now extinct, the last banneret (John Smith) created having been at the battle of Edgehill, in 1642, for gallowantry in rescuing the standard of Charles I.

BANNOCH, a cake once much eaten in Scotland. It was made of oatmeal, barley-meal or peasemeal baked on an iron plate or griddle over the fire. From a supposed resemblance the turbot is sometimes called in Scotland the bannock-fluke.

BANNOCK. See BANAK.

BANNOCKBURN, Scotland, village about two and one-half miles southeast of Stirling, on Bannock Rivulet. Here on 24 June 1314 Robert Bruce, with 40,000 Scotch, inflicted a great defeat on Edward II at the head of 60,000 English troops. The victory was in large measure due to the clever device of Bruce who had camouflaged the ground in front of the army to be undermined in all directions. The English cavalry stumbled onto the hidden pits, were rendered helpless and the army was thrown into confusion. The English are said by historians to have lost 10,000 to 4,000 of the Scotch. By this victory Bruce made his throne secure and also assured the independence of Scotland. See SCOTLAND—HISTORY.

BANNS, the announcement of intended marriage, requiring the hearers to make known any cause why the parties should not be united in matrimony. By the publication of these bans is meant the legal proclamation or notification in the parish, church or chapelry, of the names and descriptions of the persons who intend to be there married; the object being to secure public knowledge of intended marriages, and that all who have objections to the marriage may be enabled to state them in time. If the bridegroom live in a different parish from the bride, the bans must be proclaimed also in that parish, and a certificate of such proclamation must be produced before the celebration of the marriage. According to the old English canon law, the publication of bans might be made on holidays; but a change was made to Sundays by Lord Hardwicke's Marriage Act in 1753, and although that act was afterward superseded by the 4 Geo. IV chap. 76, the regulation as to Sundays has been since continued. Seven days' notice at least must be given to the clergyman before publication of bans. Bans were customary in various places before they were prescribed by the Church in the Fourth Council of Lateran. The Council of Trent ordered pastors to publish them at the principal mass in the parish church, or churches, of the parties, on three successive Sundays or festivals. This publication should be made within two months preceding the marriage. For grave reasons the bishop can dispense from this obligation. By the English Prayer Book the announcement is required to be made in the words of the rubric on each of the three Sundays preceding the ceremony. If objections are offered by anyone present, the clergyman cannot proceed further. Except in the Roman Catholic Church the custom of thus publishing the bans of marriage is practically obsolete in the United States.

BANQUETS. It was the famous Mr. Boswell who first defined man as a cooking animal, and yet, appropriate as the definition still is, neither mythology nor tradition offer any clue to aid the student in connecting man and the animal. It was that the human animal first learned to cook. Of course, it is highly improbable that this secret was known to prehistoric man. Instead of knowing how to cook he undoubtedly ate his food raw, washing it down with pure