

# FEDERAL RESERVE BULLETIN

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# FEDERAL RESERVE BULLETIN

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## REVIEW OF THE MONTH.

Congress is at the present time endeavoring by legislative enactments to improve the credit facilities available for the use of farmers. Chief among these are the so-called Capper bill and the Anderson-Lenroot bill, both of which have now passed the Senate. These legislative projects are the outcome of the distress suffered by farmers in consequence of the price declines of 1920 and 1921 and of the gaps in our credit organization brought to light within the past three years.

It has become clear that the farmer's needs for productive credit are not adequately provided for by existing machinery. A decade ago, when the Federal reserve act was being discussed, the general belief prevailed that six months was the maximum period for which the farmer needed credit, except for the purchase of land. At present, partly as the result of the functioning of the Federal Reserve System, credit for short-term current operations not exceeding six months is, generally speaking, available to the farmer, while the Federal Farm Loan System and other existing agencies take care of the farmer's needs in purchasing land and permanent improvements. Developments of the last two or three years have brought out the fact, however, that additional facilities are required to finance the farmer's current long-term operations lasting from six months to three years.

It is universally recognized that the farmers suffered severe economic reverses in 1920 and 1921, but it is not so generally understood that the economic causes of the farmer's distress were world-wide in scope and that enlarged credit facilities are only one of many requisites for the improvement of the farmer's economic condition and security.

The relation between farm prices of 31 leading agricultural commodities and the general level of wholesale prices can be expressed in an index number. This number, computed by Prof. G. F. Warren's method, averaged 80 in 1922, compared with 75 in 1921 and 86 in 1920. This index number signifies that a given amount of the farmer's product which in 1909-1914 would have exchanged for \$1 worth of other commodities at wholesale would now bring the farmer only 80 cents' worth of these commodities, while a year ago it would have purchased only 75 cents' worth. It should be noted, moreover, that this calculation is unduly favorable to the farmer, because it compares the farm value of his product with the wholesale price of commodities, while as a matter of fact he purchases at retail prices and must in many cases pay additional heavy transportation charges. It would be illuminating to have an index compiled that would show the relationship of the farmer's dollar, realized by the sale of his products, to the price of commodities which he must buy, weighted in accordance with the relative importance of these commodities in the farmer's budget. Imperfect as the available index numbers are, however, they indicate roughly the extent of the decline during 1920 and 1921 of the farmer's buying power, and the extent of its recovery in 1922 through price readjustment between various classes of commodities. During the past year the farmer regained some of the ground he lost during the years of liquidation, and this improvement is attributable in part to the advance in prices and in part to the larger volume of crops in 1922 compared with the preceding year. The following table shows the produc-

**Economic condition of the farmer.**

tion and prices of leading farm staples in 1920, 1921, and 1922:

TOTAL PRODUCTION AND DECEMBER PRICE OF SELECTED COMMODITIES.

	Production.		
	1922	1921	1920
Corn.....bushels..	2,890,712,000	3,068,569,000	3,208,584,000
Cotton.....bales..	9,964,000	7,933,641	13,439,603
Winter wheat...bushels..	586,204,000	600,316,000	610,597,000
Spring wheat....do....	270,007,000	214,589,000	222,430,000
Wool.....pounds..	219,095,000	224,564,000	235,005,000
Hogs.....100 pounds..	1 23,696,000	1 22,080,870	1 22,433,301
Cattle.....do....	1 10,419,000	1 8,676,063	1 9,969,911

	Price.		
	1922	1921	1920
Corn.....bushel..	\$0.657	\$0.423	\$0.670
Cotton.....pound..	.238	.162	.139
Winter wheat...bushel..	1.048	.951	1.486
Spring wheat....do....	.824	.856	1.304
Wool.....pound..	.846	.5273	.5455
Hogs.....100 pounds..	8.269	7.025	9.6625
Cattle.....do....	10.581	8.2188	12.0638

<sup>1</sup> Yearly receipts at principal markets in United States.

Among the factors affecting the prosperity of the American farmer, domestic demand for his product ranks first. It is true that of the leading staples, particularly cotton and wheat, a large proportion is exported and that relatively small changes in the supply of staple commodities exert a disproportionately powerful influence on their prices, yet it should be recognized that the degree of activity of domestic industry and the consequent amount of employment and earnings of labor are the most important influence in the market for agricultural products, certainly in the United States. In 1922 exports of agricultural commodities were larger than the year before, but the increase affected chiefly the cheaper cereals—corn, oats, and rye—while exports of wheat were decidedly reduced. Prices of practically all agricultural commodities, however, were higher in 1922 than in 1921, as seen in the table above, and in this recovery better industrial conditions, reflected in increased consumption by industrial workers, were an important factor.

Whatever the relative importance of the different factors contributing to the improve-

ment of agricultural conditions may be, it is clear that during the past year the farmer emerged from the depth of an unusually severe depression, and that the time is now opportune for strengthening his economic condition in so far as this can be accomplished by improving the credit machinery at his command.

Long-term credit requirements of the farmer for the purpose of land purchase and of per-

manent improvements are supplied by private investors, by mortgage companies, by Federal

land banks, by joint stock land banks, by State banks and trust companies, by insurance

companies, and by national banks, which obtained authority to make loans on real estate

under certain restrictions by the Federal reserve act. The system of Federal land banks, though

it supplies a small per cent of the farmer's long-term requirements, has been a great help

in reaching such farmers as could not easily obtain loans through other institutions and

in reducing and equalizing interest charges. Generally speaking, it would seem that the

farmer's need for credit of from 5 to 40 years' duration is fairly well taken care of by exist-

ing machinery. With the further development of the Federal Farm Loan System, which is now

progressing at a rapid rate, even more satisfactory provision for the farmer's long-term

credit needs may be anticipated in the near future. A provision in the Capper bill raising

the maximum of loans by Federal land banks to one individual from \$10,000 to \$25,000 is

intended to increase the service rendered by these institutions.

Short-term credit requirements of a farmer are primarily for current production needs and

for carrying crops pending orderly marketing. Three to six

months' loans are frequently sufficient for these purposes, although in some

instances the farmer requires credit for as long as a year or more. It should be borne in mind

that a much larger proportion of farm activities than of industrial activities is conducted with-

out being financed by banks or credit institutions of any sort. Many farmers are able to

meet the winter and spring outlays out of the proceeds of the sale of the past year's crop and to carry on their business without recourse to borrowing. Another large group of farmers is financed chiefly through open accounts at local stores and through credit from manufacturers for the purchase of supplies and equipment on the installment plan or otherwise. In this way a large part of the credit actually required by farmers is granted them in the first instance by manufacturers and dealers, who in turn apply for credit to the banks. It is true that farmers frequently pay high rates for this accommodation.

One of the important short-term credit needs of the farmer is for the purpose of carrying his

**Loans for carrying crops.** crops after they are harvested, in order not to flood the market and not to break the price of his products. Agriculture is an industry with only one turnover during the year. The entire crop is harvested at one time, but its consumption is spread over the following year or even longer. It may be laid down as a general principle that in so far as the farmer holds his crops for the purpose of orderly marketing, he is entitled to the support of banks. To the extent, however, that the farmer carries his crops beyond the needs of orderly marketing for the purpose of maintaining or raising the price by withholding his products, thereby creating a shortage, his conduct is not in the public interest and credit demand for this purpose need not be the occasion for revising our credit organization. Stated in another way, in so far as the farmer's holding of crops contributes to the even flow of agricultural products to market, it is a legitimate part of orderly marketing, but in so far as it creates a shortage at one season followed by an excessive supply at another, it is not a part of the process of orderly marketing, but rather a disturbing element in the distribution of agricultural products.

An amendment to the Federal reserve act, included in both the Capper and in the Lenroot-Anderson bills, provides that Federal reserve

banks may discount acceptances drawn for agricultural purposes with a maturity up to 6 months, provided the acceptance is secured by a warehouse receipt for readily marketable staples. This amendment will make it easier for farmers to obtain credit for carrying their crops.

A significant point in connection with credit for marketing crops is that a large part of it is not required by farmers themselves, but by dealers whose credit facilities in our commercial banking system are generally conceded to be adequate. It is the dealer who purchases the bulk of the farmer's product, carries it to market, and frequently holds it in storage before selling. To recapitulate, many farmers manage their business without the necessity of utilizing credit; a large part of the short-term credit requirements of the farmer is taken care of by other agencies than banks; marketing credit is essentially commercial credit rather than agricultural credit, and, although some adjustment in our credit machinery in the interests of the farmer may be necessary, particularly with a view to reducing the cost of credit to the farmer, his short-term credit needs can be satisfied with a fair degree of adequacy by existing facilities.

It is in the field of productive or so-called intermediate credit that the farmer is the least

**Intermediate credit.** well served. In building up a herd of cattle, in setting out an orchard, in purchasing work animals and machinery, or in making outlays for long-term improvements, such as drainage or irrigation, the farmer needs loans running from 6 months to 3 years. The machinery for this class of loans has been very inadequately developed. While farm-loan banks are authorized to make loans for such purposes, the law fixes the minimum maturity of these loans at 5 years and requires a first mortgage on the land as security. These restrictions decidedly limit the service that farm-loan banks can render in providing intermediate credit. During the recent credit strain the War Finance Corporation was empowered to help the farmer



in this field and it has accomplished a great deal. Its service is greater than the total volume of its agricultural loans of \$266,000,000 would indicate, because it was able to extend this credit in places where the strain was greatest and where its funds accomplished a maximum of service. But the War Finance Corporation is admittedly a temporary organization and will not continue to operate in normal times. The development of a system of intermediate farm credit on a purely business basis is recognized as one of the important needs of the country and the bills under consideration at the present time provide machinery for the granting of this type of loans.

The Capper bill provides for the organization, with the approval and under the supervision of the Comptroller of the Currency, of "Federal agricultural credit" institutions with a minimum capital of \$250,000, with power to make loans for agricultural purposes for as long as 9 months when secured by warehouse receipts covering nonperishable agricultural products, and for as long as 3 years when secured by chattel mortgages constituting a first lien on live stock or dairy herds. These institutions are authorized to raise funds by rediscounting paper discounted with them and by selling 3-year debentures secured by such paper. The bill authorizes the reserve banks to purchase acceptances of these corporations whenever the Federal Reserve Board deems it in the public interest. The bill also provides for the creation of rediscount corporations with a capital of \$1,000,000 or more, empowered to rediscount paper for the Federal agricultural credit corporations.

The Lenroot-Anderson bill, on the other hand, increases the powers of Federal land banks and provides for the organization within these banks of farm credit departments with an initial capital of \$5,000,000 furnished by the United States Government. These departments are authorized to issue debentures up to ten times their capital and to use their funds in rediscounting for banks and other agencies paper drawn for agricultural production and marketing purposes. The bill also

authorizes the farm-loan banks to rediscount paper with the Federal reserve banks.

Both bills provide for amendments of the Federal reserve act permitting under certain restrictions the discount by Federal reserve banks of agricultural paper with maturity not exceeding 9 months. The Capper bill also extends the life of the War Finance Corporation to the end of February, 1924.

Credit requirements of farmers are closely related to the movement of agricultural prices.

On the one hand, higher prices call for larger loans in order to produce and market the same quantity of crops, while, on the other hand, price declines, such as occurred in 1920, make it impossible for many farmers to liquidate their loans by the sale of their crops and result in frozen credits and in a consequent increase of the total volume of outstanding loans. Price stability is therefore greatly to be desired in the interests of the farmer, among other reasons, because it would make it easier to determine and provide for his financial requirements. And yet it is a well-known fact that prices of farm products are subject to more violent fluctuations than prices of most other classes of commodities, and that these ups and downs cause acute distress to farmers. There are several reasons for this phenomenon, one of which is that farms produce largely raw materials, and experience shows that prices of raw materials fluctuate more widely than those of manufactured articles. The reason is that manufacturers of staple finished products can reduce or discontinue production and cut off purchases of raw materials when business is slow, while their customers, the wholesaler, the retailer, and the consumer, can not restrict their purchases of necessities of life so promptly or so drastically. It should also be mentioned that credit stringency, which may cause the farmer to sell his products sooner than he wishes, may also cause shortage of funds to his purchasers, and may thus be reflected in a fall of prices caused both by an increased supply and a diminished demand in the market for agricultural products.

Fluctuations of farm prices.

The volume of the farmer's production is much less subject to control than the volume of manufactures. Farm production is inelastic. In most cases the farmer raises crops on his entire tillable land; his labor supply consists chiefly of his family, and he is not in a position materially to reduce his outlay for labor. The farmer is not in a position to tell in advance whether the decline in price will be sufficient to deprive him of the proceeds of the additional labor expended in raising a larger crop. And yet the total value of a large crop is often less than the total value of a short crop, as prices generally decline more than in proportion to the increase in the supply. But the farmer's greatest single handicap is lack of cooperation and the resulting scarcity of market information and bargaining strength. Seven million farmers acting individually can not create a market, but are almost entirely at the mercy of economic forces beyond their control. It is in cooperation resulting in better planned production and more systematic marketing based on wider information that lies the chief remedy for the economic insecurity of the farmer.

What is the relation of the Federal Reserve

System to the economic and credit needs of the farmer? The Federal Reserve System.

The establishment of the Federal Reserve System has saved the farmer from the effects of periodic money stringency which in past years of credit strain have often resulted in financial panic, drastic liquidation of loans, and depression. Through the issuance of Federal reserve notes secured by eligible paper the reserve system has put at the service of the farmer, as well as of others, a currency that is available at any time in amounts limited practically only by the volume of legitimate requirements. Furthermore, the reserves of other reserve banks are at the disposal of any region which is in need of currency. In a year like 1920, for instance, when on top of a large amount of frozen loans there came a heavy demand for currency for moving record crops, the reserve banks in agricultural districts at one time were borrow-

ing as much as \$267,000,000 from those in industrial districts.

But the Federal reserve act contains also special provisions for the farmer's benefit. It makes an exception in favor of the farmer in that it permits the rediscount of agricultural paper with a maturity extending for as long as 6 months, while the limit for all other classes of paper is 90 days. The law provides that the proportion that agricultural paper may form of the entire assets of a reserve bank shall be fixed by the Federal Reserve Board; and the board fixed this ratio at 99 per cent and has never reduced it. In spite of these provisions, discounts of paper classified as agricultural or live-stock paper have always constituted a relatively small proportion of the total discounts of the Federal reserve banks. But such loans do not even remotely measure the service of the system to the farmer. The farmer may borrow money from his bank on Government securities and these loans may be rediscounted with the reserve banks, or he may borrow on his own note, and his bank may obtain accommodation from the reserve bank on other notes, or borrow from that bank on its own collateral note secured by United States obligations or other eligible collateral. The connection between the borrowing farmer and the reserve bank may be even more remote. The farmer may, and in a great many cases does, borrow from a nonmember bank, which in order to accommodate him in turn borrows from its city correspondent and the latter, in order to take care of its correspondent, obtains an advance from the reserve bank. This advance, which is by far the most important form of indirect accommodation to farmers, is in the service of agriculture, but the funds can not be traced from the reserve bank to the farmer.

In considering the relation of longer-term agricultural credit to the reserve banks the essentially commercial nature of the Federal Reserve System should be kept in mind. It should not be forgotten, simply because it is elementary, that the Federal reserve banks are the holders of the ultimate re-

erves of the country, that their deposits are not merely demand deposits but reserve deposits, which must be available to the member banks at any time in order to protect the latter's deposits obtained from the public. For these reasons the discounts of reserve banks must always be of relatively short maturity, though the Federal Reserve Board believes that the extension of the limit of maturity for agricultural paper from 6 to 9 months, under proper safeguards and provided the paper is sound in every respect, would have no unfavorable effect on the liquidity of reserve bank assets. As a matter of fact, the great bulk of the discounts of the reserve banks is of much shorter maturity than the permissible maximum, the average maturity of paper discounted in October, 1922, for the system being only about 10 days, and ranging from less than 4 days at the New York bank to over 58 days at the Minneapolis bank.

Recognizing that cooperation for marketing crops is the best step that farmers can take in the direction of improving their credit standing and their general economic condition, the Federal Reserve Board in its rulings has gone as far as existing law permits in encouraging loans to cooperative marketing organizations. The board has ruled that, whenever the associations are so organized that they acquire title in the crops and do not simply sell the crops on commission, and whenever they are conducted as mutual nonprofit-making enterprises, bills drawn by growers and accepted by marketing associations at the time such growers deliver their crops to the associations are eligible for discount by reserve banks as agricultural paper with a maximum maturity of 6 months, provided the proceeds of the discount are used for agricultural purposes.

The board has ruled that "a banker's acceptance drawn by a grower or by a cooperative marketing association composed exclusively of growers of nonperishable, readily marketable staple agricultural products, to finance the orderly marketing of such prod-

ucts grown by such grower or growers and secured at the time of acceptance by a warehouse, terminal, or other similar receipt, issued by a party independent of the borrower and conveying security title to such products, may be purchased if it has a maturity at the time of purchase not in excess of 6 months, exclusive of days of grace; provided, that the acceptor remains secured throughout the life of the acceptance, and that the acceptance conforms in other respects to the relevant requirements of" existing regulations.

This ruling authorizes the Federal reserve banks to purchase in open market bankers' acceptances drawn by growers or marketing associations having a maturity up to 6 months, and by this means the market for acceptances so drawn has been greatly widened, as the ability of bill brokers to sell such acceptances to the reserve banks enhances the liquidity and attractiveness of the bills. Along this line the Lenroot-Anderson bill contains a provision authorizing the farm-loan banks to make direct loans for from 6 months to 3 years to cooperative associations engaged in producing or marketing agricultural products or live stock, provided the loans are secured by warehouse receipts, by shipping documents, or by mortgages on live stock. The Capper bill broadens the definition of agricultural paper, eligible as such for discount with reserve banks, so as to include certain paper of cooperative marketing associations. Under existing law such paper is considered commercial rather than agricultural in character and eligible for discount only if its maturity does not exceed 90 days. The result of the proposed change will be to render such paper eligible if secured by warehouse receipts with a maturity up to 9 months.

The Federal Reserve Board has indorsed certain amendments to the Federal reserve act proposed by both bills under consideration, designed further to increase the usefulness of the system to farmers. It is not opposed to the extension of maximum maturity of certain agricultural paper from 6 to 9 months, and it has indorsed the plan to permit banks with

smaller capital than that now required to join the system, provided they will build up the deficiency during 3 years following their admission. The last amendment if enacted will make it easier for country banks to become members of the Federal Reserve System and will thus bring the system closer to the farmer and his credit needs. In order to induce smaller banks to join the reserve system the bills amend the method of distributing reserve bank earnings so that, after payment of the 6 per cent dividend to members and of an equal amount to the Government, member banks will be entitled to receive another 3 per cent on their capital, the balance to go to the Government.

This survey of the rural credit situation indicates that existing credit machinery is capable of taking care of the farmer's short-term credit needs fairly well and that improvement in this field must be looked for in the direction of greater standardization of the farmer's business and products as well as in the direction of well-managed cooperative action by the farmers themselves. A real need exists, however, for bringing the farmer in closer contact with the flow of investment funds, necessary chiefly for his so-called intermediate or productive credit purposes. It is in this field that improvement of the farmer's economic condition may be anticipated from legislative action. \*

On January 12 President Harding sent to the Senate the name of Mr.

**Personnel.** Milo D. Campbell, of Michigan, to be a member of the Federal Reserve Board, and the appointment was confirmed by the Senate on January 25. At the time of his nomination Mr. Campbell was president of the National Milk Producers' Federation and vice chairman of the National Council of Farmers' Cooperative Associations. He owns two dairy farms at Coldwater, Mich. Mr. Campbell was born in 1851. He has held a number of offices in the State of Michigan and has been a director of banks in Coldwater and in Detroit. He was at one time a member of the State legislature, and has been

secretary to the governor, mayor of Coldwater, insurance commissioner, tax commissioner, and member of the State prison board.

On January 6 Mr. W. P. G. Harding, formerly governor of the Federal Reserve Board, was appointed governor of the Federal Reserve Bank of Boston, and assumed the duties of the position on January 15.

#### TREASURY FINANCE.

On January 9 Secretary Mellon offered for subscription a new issue of 4½ per cent Treasury notes dated January 15, 1923, and maturing on December 15, 1927. The amount offered was \$300,000,000, or thereabouts, with the right reserved by the Treasury to allot additional notes to the extent that payment was to be tendered in unregistered war savings certificates of the 1918 series or in 4½ per cent Victory notes. At the time of the offering there were still outstanding nearly \$400,000,000 of war savings certificates, which had matured on January 1 of the present year, and about \$200,000,000 Victory notes, called for redemption on December 15 of last year, and the new offering was intended, with the balances on hand, to provide for the redemption of these securities and also to cover the Treasury's current cash requirements for the period until March 15, the date of the first tax installment. As there are no large payments of interest on the public debt falling due in either January or February, and no additional maturities of principal of the public debt until March 15, the Treasury expects that in the ordinary course of events the proceeds of the new offering will be sufficient to meet its current needs to that date.

Reports received from the Federal reserve banks show that the offering was oversubscribed to the extent of \$281,550,800, so that the Treasury was able to make allotments in full only upon applications for smaller amounts and had to make reduced allotments upon applications for larger amounts. All exchange subscriptions were allotted in full, while allot-

ments on other subscriptions were made on a graduated scale as follows: All subscriptions up to amounts not exceeding \$100,000 for any one subscriber were allotted in full; subscriptions over \$100,000 but not exceeding \$500,000 were allotted 50 per cent, but not less than \$100,000 on any one subscription; subscriptions over \$500,000 but not exceeding \$1,000,000 were allotted 40 per cent, but not less than \$250,000 on any one subscription; subscriptions over \$1,000,000 were allotted 25 per cent, but not less than \$400,000 on any one subscription. Of the total allotments about \$250,000,000 represent subscriptions in amounts of \$100,000 or less, on which allotments have been made in full.

Amounts of subscriptions and allotments, distributed by Federal reserve districts, are shown in the following table:

Treasury and Federal reserve districts.	Total subscriptions received.	Total subscriptions allotted.
Treasury.....	\$53,900	\$53,900
Boston.....	38,951,000	32,151,000
New York.....	248,883,600	131,412,000
Philadelphia.....	55,440,200	35,479,500
Cleveland.....	37,994,200	23,319,200
Richmond.....	23,521,100	18,246,100
Atlanta.....	13,682,300	10,046,300
Chicago.....	65,856,200	50,343,300
St. Louis.....	21,845,500	17,893,100
Minneapolis.....	14,855,300	14,580,300
Kansas City.....	8,787,500	6,285,900
Dallas.....	9,425,600	6,214,200
San Francisco.....	42,254,400	20,957,300
Total.....	581,550,800	366,982,100

## BUSINESS CONDITIONS IN THE UNITED STATES.

Production and prices remained relatively constant in December, while trade and credit showed the usual increases in the holiday season, followed by declines in January.

**Production.**—The index of production in basic industries, after rising rapidly since last August, showed a slight recession in December, though production was maintained at a level near the peak of 1920. The output of pig iron and coal continued to increase, but the production of certain other commodities, particularly of cotton textiles and flour, showed declines. In southern districts the building industry continued active, and in all parts of the country much new construction was projected.

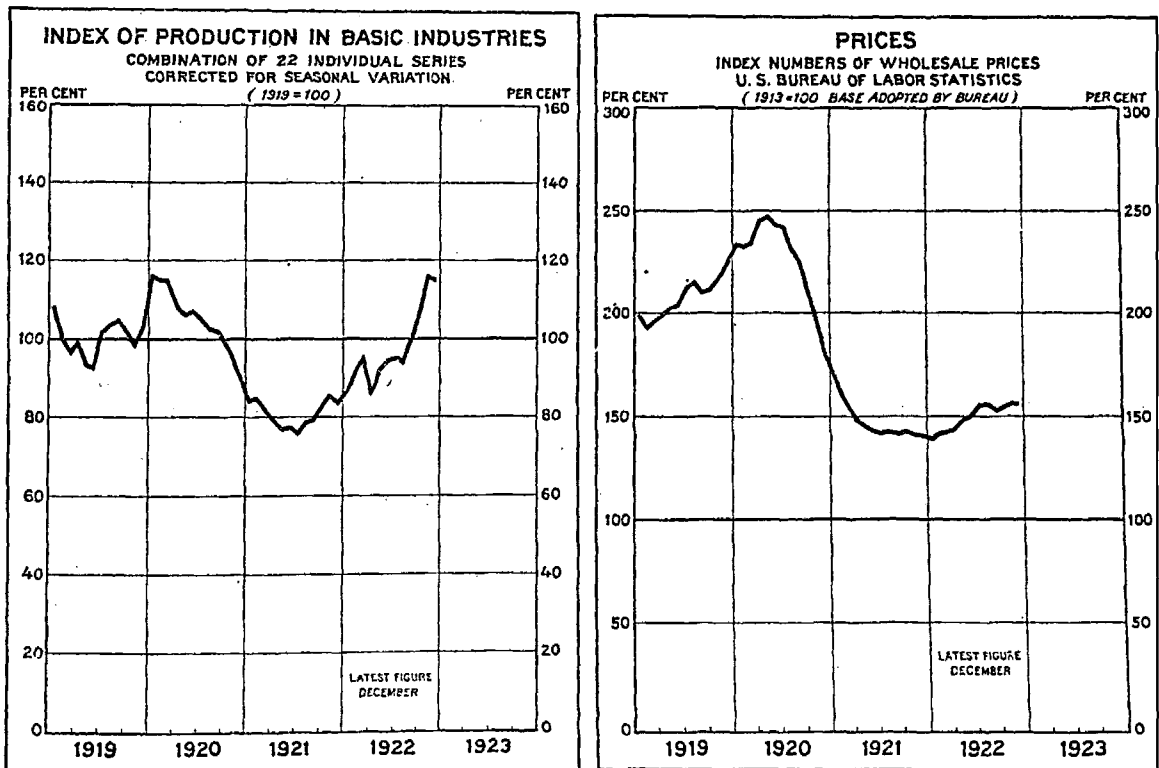
Railroad traffic continued heavier than a year ago, though the seasonal decline in car loadings and the reduction in bad-order cars partially relieved freight congestion.

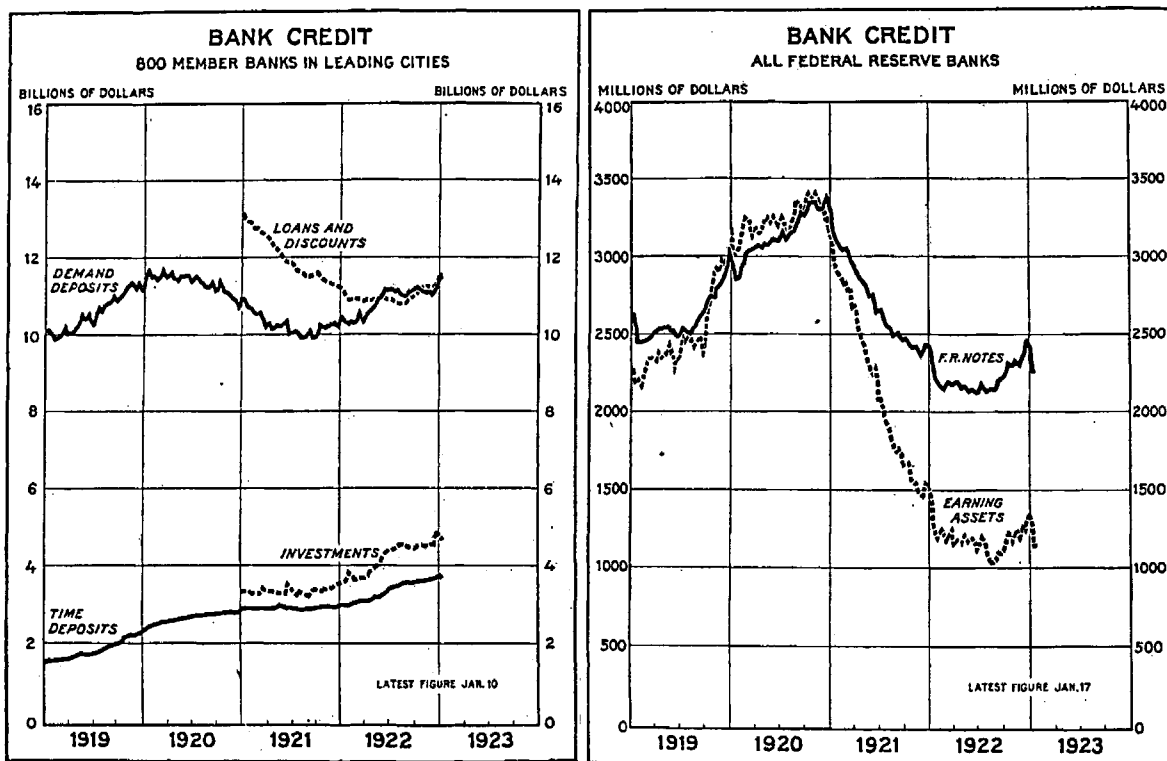
Employment in industrial establishments made a further advance in December, accompanied by wage increases in certain industries. Some shortage of labor in the eastern districts was still reported, but in Pacific States a substantial surplus of unskilled labor was indicated.

**Wholesale prices.**—The general level of wholesale prices remained unchanged in December. Among various groups of commodities the price tendencies of recent months were continued. The prices of farm products, cloth, chemicals, and house furnishings registered further increases, while fuel and metal prices continued to decline.

During January a number of basic commodities advanced in price, and cotton, rubber, and lead rose to the highest points since 1920.

**Trade.**—Wholesale trade in most reporting lines showed a seasonal decline in December, but was considerably larger than a year ago. Farm implement dealers, however, reported larger sales than in November, and more than doubled their December, 1921, business. Retail sales of reporting stores during December reached the largest volume in the last 4 years.





**Bank credit.**—Dividend and interest payments and the disbursement of Government funds in connection with the redemption of Victory notes and war savings certificates, together with the usual decline in the demand for currency after the holiday season, were attended by a large increase in the volume of new security issues and by somewhat easier money conditions. Open-market commercial paper rates in financial centers which were  $4\frac{1}{2}$  to  $4\frac{1}{2}$  per cent in December declined to  $4\frac{1}{4}$  to  $4\frac{1}{4}$  per cent in January.

Member banks in leading cities reported an increase in demand deposits, an important factor in which was the usual seasonal flow of funds from country districts to financial centers. While the volume of loans on stocks and bonds decreased in the first two weeks in January, there was a somewhat larger increase in the investments owned by the banks.

At the Federal reserve banks the principal change between December 20 and January 24 was a reduction of \$235,000,000 in Federal reserve note circulation caused by the seasonal decline in currency requirements. Reserves increased \$65,000,000, while earning assets declined \$171,000,000. These changes are similar to developments during the same period a year ago, although the decline in earning assets was less than last year.

## AGRICULTURE.

General improvement during 1922 in the financial conditions of agricultural producers, due chiefly to larger crops and higher prices than in 1921, was the outstanding factor in agricultural sections of the country. In all districts preparations for the new crop are evident and in some considerable progress is indicated. Several districts, No. 8 (St. Louis), No. 10 (Kansas City), and No. 11 (Dallas), have had much dry weather during the winter months, which has slightly delayed progress in the development of winter wheat, while in others open and mild weather has permitted more fall and winter plowing than usual. In district No. 8 (St. Louis) some corn still remains shocked in the fields, but the general rule is that husking has been completed and the crop housed. There is a heavy demand for corn for feeding purposes, but the movement to market continues in limited volume. The marketing of white potatoes in district No. 9 (Minneapolis) has been retarded by the unsatisfactory price offered to the producers and a shortage of suitable cars. Rice threshing in district No. 8 (St. Louis) was completed early in December, and the final estimate on yield is about 88.7 per cent of normal. Prices have advanced recently and vary from 75 cents to \$1.25 per bushel. District No. 6 (Atlanta) reports that the rice production of Louisiana is 19,980,000 bushels, an increase of 2,700,000 bushels over 1921. The production of sugar in Louisiana in 1922 was 482,752,000 pounds, compared with 648,861,430 pounds in 1921.

## Grain movement.

Receipts of grain at 17 interior centers were greater during December than in November or December, 1921. Receipts of wheat approximated 47,700,000 bushels, an increase of 23,000,000 over December, 1921, and 3,921,000 over November. Corn receipts were 36,901,000 bushels, compared with 24,022,000 in November and 41,731,000 in December, 1921. Receipts of oats were slightly smaller than in November but exceeded the December, 1921, total by 7,621,000 bushels, or approximately 52 per cent. The movement of rye was similar, as the December receipts were less than those during November and considerably greater than receipts for December, 1921. Barley showed increases over both November and the corresponding period one year ago.

## Cotton.

Prior to January 16, 9,652,601 running bales of cotton were ginned, while the final estimate

was 9,964,000 bales. This is the second "short" cotton crop in two successive years, and as a result the total visible supply of cotton on January 19 was 5,125,933 bales, compared with 6,435,617 at the corresponding date in 1922 and 6,590,358 in 1921. The price of middling upland cotton at New Orleans was 27.13 cents on January 16, as compared with 26 cents on December 20 and 25.87 cents on November 15. The gradual increase in the price of cotton has induced plans for increased acreage in 1923 and for renewed and greater attacks on the boll weevil. Stocks on hand at mills and public warehouses on December 31 were 5,996,000 bales, compared with 5,919,000 bales on November 30 and 6,945,000 bales on December 31, 1921. Exports were less during December than for the preceding month or December, 1921.

## Tobacco.

Weather in December in district No. 5 (Richmond) and district No. 8 (St. Louis) was favorable for the marketing of tobacco, and as a result increased movement was noted during the month. Average monthly prices were higher and the quality of tobacco sold was better than in December, 1921. The average monthly price reported from 69 markets in North Carolina was \$28.24 per hundred pounds, compared with \$23.72 during December, 1921. The total sales by farmers in the North Carolina and Virginia markets to January 1 were 341,294,896 pounds. The Government estimate of tobacco in North Carolina was 306,900,000 pounds, and as 241,294,896 pounds were sold to January 1 there remains approximately 65,703,000 pounds to be sold, about 21 per cent of the total crop. The movement in the burley and dark tobacco sections of district No. 8 (St. Louis) is reported to be in "full swing" and prices realized to date have been satisfactory to growers.

Cigar manufacturers in district No. 3 (Philadelphia) report an unusually strong demand for cigars for this season of the year. All manufacturers indicate that demand is considerably better than it was a year ago and factories are operating at about 90 per cent of capacity. Many factories still have some unfilled orders from 1922, while others are placing their surplus production in stocks. Prices for cigars are holding firm and reports indicate that price lists are unchanged. Prices for leaf tobacco, in general, are firm, although some slight reductions are evident in certain grades of domestic wrapper. Strong demand for fillers and binders has caused an increase in the price



on these grades. Increased prices are also indicated for good grades of tobacco from the West Indies.

#### Fruit.

Although the shipments of citrus fruit from Florida for December were slightly smaller than shipments during December, 1921, the total shipments for the season ending December 31, 1922, were greater than the season's total for the corresponding period a year ago. Despite the serious drought that was evident in Florida last spring, the indications are that the commercial movement of fruit this season will exceed that of any other year. Too much rain and too little cool weather have retarded the progress of shipping to a small extent, but shipments prior to January 1 amounted to 15,000 cars, containing approximately 5,400,000 boxes. In district No. 12 (San Francisco) shipments of deciduous fruits during December were 4,290 cars, as compared with 3,584 cars in December, 1921. Shipments of oranges were in excess of shipments for the corresponding period in 1921, but lemon shipments, due to a shortage in the crop, were 119 cars less than in December, 1921. The movement of apples to market was considerably retarded, as only 8,229 cars were shipped, compared to 18,740 cars in November.

#### Live stock.

Estimates of the Department of Agriculture indicate that the number of all live stock on farms and ranges is 191,344,000. An increase over the same period a year ago is indicated for all classes except horses, where a small decline of 203,000 is noted. The total value on January 1, 1923, of all live stock was \$5,111,256,000, as compared with \$4,799,170,000 on the same date one year ago, an increase of \$312,086,000, or 6.5 per cent.

Conditions affecting the live-stock industry varied considerably throughout districts No. 10 (Kansas City) and No. 11 (Dallas). In the western portion of Wyoming storms were frequent and heavy feeding was necessary. The temperatures, which were considerably above normal in some sections of the district, caused rapid melting of snows, which in turn opened the lower ranges throughout Colorado. In New Mexico the lack of precipitation was adverse to both stock and range, causing the ranges to become barren and the stock to become thin and unable to withstand severe weather. However, in spite of the unfavorable influences affecting the industry at the beginning of 1923, the general condition showed

a marked improvement over one year ago, and greater confidence was expressed by growers as well as by feeders, with a favorable outlook for all classes of live stock. The movement of live stock as represented by arrivals to six leading markets in the Kansas City district during the 12 months was 22,737,071 head, the highest figure since 1919. Receipts amounted to 5,839,085 cattle, the largest number since 1919; 972,516 calves, the largest in market history; and 9,023,235 hogs, the greatest number since 1919. Receipts of sheep fell below the total arriving at the markets in 1921. In district No. 11 (Dallas) some of the ranges deteriorated, due to dry weather. With the exception of southeastern Arizona, no rains of any consequence came to any range country since early in December. Feeding has been necessary, but in many sections where feed is not accessible live stock have been weakened. Receipts of live stock in the principal markets showed the usual falling off as compared to November, but generally exceeded the volume received in December, 1921. Sheep receipts, however, were much smaller than in December, 1921.

#### MINING.

##### Coal.

Coal production showed a steady expansion from August to December, but has been slightly curtailed in January. Bituminous mines produced 46,450,000 tons in December, as compared with 45,262,000 tons in November and 30,975,000 tons in December, 1921. The chief limiting factor in the production of soft coal continues to be a shortage of shipping facilities, although many western mines also report "no market" for their output. Prices of many grades of bituminous coal registered a sharp upward movement in the last week of December and first week of January. District No. 3 (Philadelphia) attributes this improvement in demand to large orders from steel companies, public utilities, and railroads. Retail dealers are also buying much bituminous coal, as there is an insufficient supply of anthracite for householders' consumption. Operators and miners from all parts of the country who met in conference at Chicago were unable to reach any agreement concerning wages, but negotiations were continued in the various fields. The United States Coal Commission recommended in a telegram to the Chicago conference that the present wage agreement be continued until April 1, 1924, if no other satisfactory settlement could be reached. The commission stated that this extension would allow time for them to make a full report and for

Congress to take action on the facts presented. On January 24 representatives of operators and miners from the fields of Illinois, Indiana, and northern Ohio signed an agreement along the lines suggested by the coal commission continuing the present wage scale to April 1, 1924, and provided for another conference not later than January 8, 1924.

Anthracite production in December was larger than in the corresponding month of any previous year. Mine output totaled 8,430,000 tons as compared with 8,385,000 tons in November and 6,203,000 tons in December, 1921. Production continued at about this same rate during the first three weeks of January, due to insistent demand from consumers. Despite the large output of anthracite coal during the past four months, the supply is still insufficient to meet householders' demands, with the result that coke and bituminous coal have been widely used as substitutes. There have been few price changes in domestic sizes, but steam sizes show a distinct upward trend. Operating conditions at mines are quite satisfactory, as the supply of labor is reasonably adequate and car movements are more prompt.

The demand for coke for domestic use and the expansion of the iron industry has resulted in a further increase of prices, in spite of the large volume of manufacture. By-product and beehive ovens increased their output 4.7 per cent and 8.3 per cent, respectively, in December, and weekly reports for January showed continued expansion in the Connellsville district.

#### Petroleum.

Increased production, accompanied by increased stocks, again characterized the petroleum industry during December. The average daily output during that month totaled 1,617,000 barrels, to be compared with 1,596,000 barrels in November. Production for the year totaled 551,152,000 barrels, an increase of 17 per cent over the 1921 output. Stocks at the end of the year fell off slightly from the high point reached in December. Consumption of crude oil in the United States exceeds domestic output, but an excess of imports has resulted in the continued accumulation of stocks. Recently an increase in consumption has resulted in a lowering of the estimated number of days' supply on hand. Reports indicate that daily average crude oil production increased further during the early part of January.

In all States of district No. 10 (Kansas City) output was larger during December than dur-

ing the preceding month, but there was a decline in the number of new wells completed from 714 in November to 597 in December. At the close of the year 2,312 rigs and wells were drilling in Oklahoma, Kansas, and Wyoming, as compared with 2,307 on the last day of November and 2,366 at the close of 1921. In district No. 11 (Dallas) the production of crude oil increased in December, reflecting greater drilling activity. The increase was due chiefly to the influence of a few of the Texas fields, as in many parts of Texas and in Louisiana production fell off slightly during December. Completion of new wells in the Dallas district for December totaled 509. For the seventh consecutive month, production of crude petroleum in district No. 12 (San Francisco) was greater than in the preceding month.

Advances in the price of crude oil were announced during January by producers in the Mid-Continent fields and later in the Wyoming and Central States fields. On December 30 quotations on many grades of eastern crude were raised 25 cents a barrel, and on January 23 Mexia crude was advanced 25 cents a barrel, following an increase of 20 cents on December 28.

#### Metals.

Copper production exceeded 100,000,000 pounds in each of the last three months of 1922 and reached the maximum for the year in December. The December output of mines was 103,845,000 pounds, which was 1 per cent more than in November and 43 per cent more than in December, 1921. The copper market continued to be strong during the past month, despite the large production. The price of refined electrolytic copper delivered at New York rose from 14.625 cents on December 19 to 14.75 cents on December 22. The quotation continued at 14.75 cents until January 15, when it was reduced to 14.625 cents as a result of the tense situation in Europe and the curtailment of English purchases. Two years ago there was a stock of over 1,000,000,000 pounds of marketable copper in the United States. This has now been reduced to a very small reserve, and current consumption is still reported to be in excess of production. Mills manufacturing wire, brass, and sheet copper are operating on a large scale, and domestic demand is very heavy.

The price of lead at New York has advanced steadily from 4.70 cents in March, 1922, to 7.60 cents on January 17, 1923. This increase in prices has been due to the fact that the three chief lead-consuming industries—paint, storage batteries, and cables—have all been extremely

active during the last six months. Lead production decreased 5.9 per cent in December, but was 3.2 per cent larger than in December, 1921. Zinc production, on the other hand, increased 6.6 per cent in December and amounted to 42,841 tons. Zinc stocks were reduced by 1,245 tons during December and are less than two weeks' supply at the current rate of consumption. Zinc prices at St. Louis declined from 7.05 cents per pound on December 21 to 6.70 cents per pound on January 17, due to disinclination on the part of galvanizers to contract ahead. Foreign buying, however, continued to be large during January. Shipments of both lead and zinc ores from the mines of district No. 10 (Kansas City) were exceptionally heavy during December, exceeding those of any other month of 1922.

Silver production in December totaled 5,052,000 ounces, which was 4 per cent larger than in November and 30 per cent larger than in December, 1921. Purchases under the Pittman Act to the end of 1922 aggregated about 150,750,000 ounces out of a total of 208,000,000 ounces to be purchased.

#### MANUFACTURES.

##### Food products.

Wheat-flour production during December was 11,041,000 barrels, compared with 13,424,000 barrels in November and 8,856,000 barrels in December, 1921. Although the decrease in December was due in part to the holiday curtailment of operations, the total production for 1922 shows an increase of 4,371,000 barrels over 1921. Production of flour in district No. 10 (Kansas City) was 1,822,342 barrels, which was a decrease of only 9 per cent as compared with November, while the decrease in district No. 7 (Chicago) was 24 per cent, the greatest decrease in any reporting district. Domestic and foreign demand were both slack. Sales to domestic trade were made largely in small lots and for prompt shipment. Sales, in barrels, at ten mills in district No. 7 (Chicago) decreased 17 per cent during December, while dollar sales decreased 13 per cent. Little export demand was reported. In district No. 9 (Minneapolis) the production of flour was almost one-third larger than in December, 1921, but was smaller than in November, 1922.

Forty-seven meat packing companies in district No. 7 (Chicago) report a slight seasonal decline in dollar sales during December, but sales were 17 per cent higher than in December, 1921. Average prices for live stock for slaughter during the first half of January were

slightly higher, with the exception of lambs, than prices in December. Receipts and slaughter of cattle, calves, and sheep declined, compared with November, while hogs increased. Similar conditions were reported from district No. 10 (Kansas City). Packing operations at six leading markets during December and the year 1922 showed marked increases over the operations of the corresponding month and the 12-month period in 1921. The total slaughter of meat animals at six markets was 13,699,123 during 1922, as compared with 12,792,870 during 1921. There were increases of 13 per cent in the slaughter of cattle, of 21 per cent in the slaughter of calves, and of 18 per cent in the slaughter of hogs, while the slaughter of sheep decreased 16 per cent. Reports indicate that the operations of the packing industry are practically back to normal conditions. Domestic and foreign demand are reported to be fairly good. Domestic trade in meats has been stabilized and the consumption of meat is increasing. A greater volume of products for export was reported from district No. 7 (Chicago) than in November, while district No. 10 (Kansas City) indicates that exports are greater than in pre-war years but still less than in 1916 to 1919.

##### Textiles.

Allowing for seasonal variations incident to the holiday and stock-taking periods, the demand for cotton textiles was considered to be satisfactory during December and early January. Consumption of raw cotton by mills during December was 527,945 bales, having declined 9 per cent from the high point attained during November. On the other hand, a few more spindles were active during December. Orders recently placed for yarns in district No. 3 (Philadelphia) largely called for delivery in March and April. A moderately active demand for staple cotton goods, according to reports from the Philadelphia district, accompanied the recent strengthening of quotations. Mills in district No. 5 (Richmond) are enjoying a high degree of prosperity. Yarn manufacturers in district No. 6 (Atlanta) report decreases in output during December as compared with November and with December, 1921, but unfilled orders were double those of a year ago. Cloth manufacturers in the Atlanta district produced and shipped a considerably larger volume of goods than they did in December, 1921, and had 50 per cent more orders on their books. Reports from finishers of cotton fabrics throughout the country

indicate slight decreases in productive activity and in new orders booked as compared with November, with an increase in shipments of finished goods.

Interest in the woolen industry in January was chiefly centered around the openings of fall lines during the latter part of that month. Prices were advanced in varying degrees upon most lines, and the average increase in the quotations on men's wear lines by the largest producer was about 16 per cent over those of a year ago. Fulton serge (10½-11 ounce), which is customarily regarded as an indicator, was priced at \$2.67½ per yard, compared with \$2.42½ at the fall, 1921, opening, with \$2.35 a year ago, \$2.50 last July at the spring opening, and with \$2.80 in October after a series of increases had been made. Advances of women's wear lines ranged from 1.3 per cent to 11.6 per cent above last year's quotations. During December and January there was a fairly good demand for spring fabrics, according to reports from district No. 3 (Philadelphia). Cloth mills in that district are operating at 80 per cent of capacity, and spinners were able to maintain a high rate of production during January because of the quantity of orders booked for delivery within the next four months. The carpet and rug industry continued maximum operations. The raw-wool market experienced seasonal dullness during the latter part of December and early January in districts No. 1 (Boston), No. 3 (Philadelphia), and No. 7 (Chicago), but prices remained firm. The statistical position of raw wool is strong now, as good wools are scarce and consumption is large. Statistics of active machinery indicate increased production during December. Wide looms were 81.1 per cent active, woolen spindles 84.5 per cent, and worsted spindles 89.2 per cent. Consumption of raw wool, on the other hand, was 8 per cent less than in November.

Seasonal conditions, according to district No. 3 (Philadelphia), curtailed orders for broad silks between December 15 and January 15, but later the demand was revived. Deliveries of raw silk to American mills were reduced during December from the November figure, but continued to be relatively large, exceeding those of December, 1921, by nearly 50 per cent. Loom operations continued active during December and early January, according to reports from manufacturers in district No. 3 (Philadelphia) and statistics from mills in Paterson and North Hudson. Activity in these

two centers on January 13 was at the rate of 54 per cent and 62 per cent of capacity, respectively, as compared with 24 and 49 per cent a year ago. Quotations on raw silk advanced sharply early in the year.

Further seasonal recessions during December were reported by clothing wholesalers in district No. 2 (New York) and by tailors to the trade in district No. 7 (Chicago), but 23 clothing firms in district No. 8 (St. Louis) reported a slight increase in sales as compared with November. In all of these districts business was much better than during December, 1921, sales of women's clothing in the New York district showing the large increase of 71 per cent. Clothing manufacturers in district No. 3 (Philadelphia) have found the demand for spring lines of men's wear to be good, and orders have been received in sufficient quantity to permit production approaching capacity. Spring suits are priced from 10 to 20 per cent higher than in 1922. Advance orders for spring in the St. Louis district were generally heavier than last season.

Underwear production declined 25 per cent during December, according to comparative statistics for November and December from 37 mills. Shipments also fell off, but more orders were received, leaving a larger volume of unfilled orders on hand at the end of the month. Production of winter underwear showed a seasonal decline, whereas the output of summer garments increased. Reports from firms in district No. 3 (Philadelphia) show similar tendencies. Orders are now being booked for winter garments and shipments are light; on the other hand, in the case of summer underwear, the buying season has ended and deliveries have begun. All statistics of winter underwear in the Philadelphia district showed substantial increases as compared with December, 1921, whereas in the case of the lightweight products business has been relatively quieter.

Declines occurred in business done by hosiery manufacturers during December, and reports from district No. 3 (Philadelphia) indicate that that industry has not fully shared the general improvement in manufacturing noted during the past few months. Different mills, however, report contrary tendencies. Statistics furnished by mills in the Philadelphia district show declines in production, orders, and shipments, with an increase in cancellations and stocks during December as compared with November. Orders, however, are materially larger than they were a year ago. In the

Atlanta district all items were smaller than in November, but showed substantial improvement as compared with December, 1921; that is, orders, production, and shipments increased, while cancellations and stocks were smaller.

#### Iron and steel.

Demand for iron and steel products continues to be very strong, and factory operations are on as large a scale as the labor supply permits. Pig-iron production amounted to 3,087,000 tons in December, an increase of 8.3 per cent, while steel-ingot output declined 3.8 per cent to a total of 2,780,000 tons. Prices renewed their upward movement in January, after declining for 3 months. Advances were registered both in pig-iron and finished steel prices. Unfilled orders of the United States Steel Corporation decreased 1.4 per cent during December and totaled 6,746,000 tons at the end of the year. Particularly large orders have been placed by farm-implement manufacturers, railroads, and automobile factories since the beginning of 1923, and wire mills have been obliged to allocate their output for the first quarter of the year.

District No. 4 (Cleveland) reports that the general rate of production of steel mills is 85 per cent of capacity and that there is little prospect of increasing operations on account of the shortage of common labor. As a result of the large accumulation of business at western plants, a considerable amount of tonnage has been diverted to eastern mills. In district No. 3 (Philadelphia) mill operations are estimated to average 80 per cent of capacity. Manufacturers are somewhat hindered by a shortage of labor and by delays in railroad shipments of both raw materials and finished products. Manufacturers of iron bars and steel plates are receiving especially large orders from railroads, automobile manufacturers, and mines. Structural steel, forgings, wire rope, and machinery are also in good demand.

#### Automobiles.

Production of automobiles was only slightly curtailed in December and was almost three times as large as a year ago. Passenger-car output totaled 207,501, as compared with 215,225 in November and 70,435 in December, 1921; while the number of trucks produced was 19,640, as compared with 21,291 in November and 8,183 in December, 1921. Shipments from factories in December were also much larger than in the corresponding month of 1921, and driveaways were more numerous than in November. Both production and ship-

ments indicate that the large demand for closed cars has greatly increased winter sales and has substantially modified the seasonal trend in the industry. Demand this fall and winter has been well sustained, with considerable acceleration in January from the various automobile shows. Sales of trucks in urban districts have been particularly large, due to activity in building, manufacturing, and trade. Seven leading manufacturers of automobiles have announced an aggregate production schedule of 1,750,000 cars for 1923. Rubber companies announce that demand from dealers has been much strengthened as a result of the new dating plan by which dealers are furnished with tires during December, January, and February for which payments are not due until the spring.

#### Leather and shoes.

Greater activity characterized the markets for hides and skins in districts No. 3 (Philadelphia) and No. 7 (Chicago) during December and the early part of January. Prices were slightly lower in both markets the first week in January and large sales were transacted in Chicago. Quotations were later raised to the December levels. December prices of green hides and skins were considerably higher than those prevailing a year ago.

Leather sales in district No. 7 (Chicago) were less in December than in November, except in the case of belting and harness leather. Reports from district No. 3 (Philadelphia) indicate that sales of all leathers during January increased as the month progressed. Prices of heavy and upper leathers were on the whole well maintained. Sole leather production in the United States fell from 1,482,074 sides in November to 1,425,512 in December, and was about 19 per cent less than during December, 1921.

Seasonal recessions were noted in the production and shipments of shoes during December by reporting firms in districts No. 1 (Boston), No. 3 (Philadelphia), and No. 7 (Chicago), and production figures for the country as a whole show the same tendency. Orders were larger in the Boston district, but in the other districts they were less than in November. As compared with December, 1921, production and shipments by firms in district No. 1 (Boston) fell off, but in the Chicago and Philadelphia districts all items showed substantial increases. In district No. 3 (Philadelphia) shoe manufacturers received a fair volume of business during January, some firms having booked all the orders they

can fill for the Easter season. Shoe manufacturers in district No. 8 (St. Louis) were operating their plants at from 90 to 100 per cent of capacity early in January, and advance orders were being booked in a larger volume than at the same time a year ago. Wholesale shoe dealers reported that December sales were smaller than those for November in all districts except No. 8 (St. Louis.), but retail sales as reported by 30 firms in district No. 3 (Philadelphia) exceeded November figures by 21 per cent and those of last December by 7 per cent. Stocks were 9 per cent smaller than either a month or a year previous, and the rate of turnover for the half-year exceeded that of the same period in 1921.

#### Paper.

Contrary to the usual seasonal trend, production of newsprint fell off 7 per cent in December to 119,404 tons, the lowest figure for any month since April. Shipments also declined to about the same extent, but remained slightly larger than output, and as a result stocks on hand decreased further. Newsprint production for 1922 totaled 1,447,688 tons, 18 per cent above the aggregate for 1921 and 4 per cent below that for 1920, the best year on record. Declines occurred in the total production and shipments of all grades of paper during November, the latest month for which statistics are available, but activity continued at a relatively high rate. Contrary to the general tendency, the production of book paper and paper board increased during November to the largest totals attained in over two years. Production of wood pulp in November exceeded that of any other month since June, but consumption fell off.

Seasonal slackening in the demand for paper was noted during January by producers in district No. 3 (Philadelphia), but orders are much greater than they were a year ago, and mills are running at close to capacity. Prices in general are firm, and quotations on paper board have advanced 10 per cent since December. The demand for paper boxes in the Philadelphia district was fairly good in January. Wholesalers in district No. 7 (Chicago) report that December sales exceeded those of November. Inventories were larger than at the beginning of the year. Production of boxes in the Chicago district was 60 per cent larger than in December, 1921. The fine paper business in district No. 4 (Cleveland) fell off somewhat after the first of December, but this is considered to be largely seasonal. Stocks of pulp held by both pulp and paper manufacturers in the Cleveland district are reported to be large.

#### Lumber.

Lumber movement during December and early January was featured by an excess of orders booked and shipments over the amount cut. Production, although large for this time of the year, was necessarily curtailed because of winter weather, and shipments which usually exceed the cut at this season were particularly heavy because improved transportation facilities enabled many delayed shipments to be forwarded. Furthermore, dealers are preparing for spring demands by building up stocks and by placing orders for future delivery.

The above developments are reflected in statistics published by the various associations. Production by 583 mills reporting to the National Lumber Manufacturers Association totaled 1,103,194,000 feet in December, a decrease of 11 per cent from the November figure and an increase of 68 per cent above the cut for December, 1921. Shipments from these mills aggregated 1,280,660,000 feet. Mills of the Southern Pine Association in districts No. 6 (Atlanta) and No. 11 (Dallas) reported an increase in orders received during December as compared with November, with a slight decline in shipments and a greater decline in production and stocks. Orders received, shipments, and orders on hand at the end of the month all exceeded production. All items were considerably larger than the corresponding figures for December, 1921. Similar conditions were found among reporting manufacturers in districts No. 9 (Minneapolis) and No. 12 (San Francisco), except that in some cases stocks were smaller than they were a year ago. Reports from retailers in the Minneapolis district show that sales during December were only 40 per cent of November sales but exceeded those of last December. Stocks on hand were smaller than they were either a month or a year previous. Purchases by domestic and foreign buyers in district No. 12 (San Francisco) were unusually heavy during December and a large volume of cargo business was transacted.

#### BUILDING.

Construction was somewhat curtailed in the northern districts during December and January, as a result of severe snow storms. On the other hand, operations have actually increased in many sections of the South. The total value of contracts awarded in seven Federal reserve districts (compiled from statistics gathered by the F. W. Dodge Co. for 27 northeastern States) aggregated \$191,263,069 during December, which was 13 per cent less than in November and 4 per cent greater than in December, 1921.

The value of contracts decreased from November in the Boston, New York, Cleveland, Richmond, and Chicago districts, the reductions varying from 0.7 per cent in district No. 7 (Chicago) to 24 per cent in district No. 2 (New York). Districts No. 3 (Philadelphia) and No. 9 (Minneapolis) each reported an increase of about 10 per cent in December contracts. The gain in contracts let as compared with a year ago was entirely due to large increases in the Chicago, Cleveland, and Philadelphia districts, as new operations in the four other reporting districts were slightly smaller. The value of residential contracts awarded decreased from \$117,514,900 in November to \$111,278,491 in December, although increases were reported from the Cleveland, Philadelphia, and Boston districts. Permit statistics for December, which are published on page 242, show that there was a considerable increase in number and value of new projects in the Atlanta, St. Louis, and Dallas Federal reserve districts, for which contract figures are not available.

The average level of building material prices was unchanged in December. Prices of building materials, however, are now 85 per cent above the average for 1913, whereas the index for all groups published by the Bureau of Labor Statistics has only increased 56 per cent. Shipments of cement showed a marked reduction in December, but were slightly larger than in December, 1921. Production of cement and of various kinds of brick was moderately curtailed, as is customary in the early winter.

#### TRANSPORTATION.

The railroads made substantial progress in the elimination of traffic congestion during December and the first week of January. The average car shortage in the week ending January 8 was 73,285, as compared with 133,786 cars in the last week of November and 179,239 cars in the last week of October. The shortage of box cars has been reduced 66 per cent since the last week of October, while the shortage of coal cars has only been reduced 28 per cent. The comparative slowness in relieving the coal situation is due to the accumulated demand for coal, the difficulty in expediting shipments at certain mines on account of insufficient trackage, and the shortage of locomotives on some coal roads due to the prolongation of labor difficulties.

The American Railway Association reports that car loadings of all important groups of commodities except coal were larger in 1922 than in any previous year, being 16 per cent

greater than in 1921 and 3.5 per cent larger than in 1920. Loadings of coal were curtailed by the miners' strike, but amounted to 93 per cent of the 1921 total and 69 per cent of the total for 1920. In December there was a total of about 3,635,000 cars loaded, which was 11 per cent less than in November, but 20 per cent more than in December, 1921. Loadings decreased in all operating regions and for all commodity groups except coke. The most important reduction was in the loadings of miscellaneous merchandise freight.

The supply of available railroad equipment was increased during December by a further reduction in the number of bad-order cars and by large shipments from locomotive and car factories. The number of freight cars awaiting repairs was reduced from 226,288 on December 1 to 216,011 on January 1. The output of new locomotives in December totaled 210, as compared with 159 in November, while unfilled orders decreased from 1,619 to 1,592.

#### TRADE.

##### Wholesale trade.

Wholesale trade declined somewhat in December, as is customary at the close of the year. The volume of sales, however, was larger than in December, 1921. Farm implements were the only reporting line which showed considerable increases as compared with November and had very much larger sales than in the corresponding month a year ago. These increases in implement sales over December, 1921, amounted to 194 per cent in the Minneapolis district, 159 per cent in the Dallas district, 115 per cent in the Kansas City district, 41 per cent in the Atlanta district, and 28 per cent in the San Francisco district. Dry-goods dealers reported the largest decreases in sales during December, these decreases ranging from 12 per cent in district No. 4 (Cleveland) to 44 per cent in district No. 11 (Dallas). Large declines were also reported in the sales of boots and shoes in the Richmond, Atlanta, and Minneapolis districts, but an increase of 20 per cent over November was reported by nine wholesale shoe firms in the St. Louis district. Sales of grocery firms declined in all Federal reserve districts, the reductions being larger in the West than in the South and East. Hardware sales were also somewhat smaller than in November in most reporting districts, but averaged over 20 per cent larger than in December, 1921. The table on page 246 gives detailed figures of wholesale trade.



**Retail trade.**

Retail trade reached record volume during December as a result of the Christmas buying. Sales in all Federal reserve districts except No. 11 (Dallas), where a slight decline of 1 per cent was noted, increased over December, 1921. Increases, compared with December, 1921, ranged from 4.7 per cent in district No. 1 (Boston) to 16.1 per cent in district No. 7 (Chicago). Considerable activity was shown in the Cleveland, Minneapolis, and San Francisco districts, as well as in the Chicago district. The activity in retail buying was reflected more in some lines than in others. In district No. 6 (Atlanta) mild weather hampered the buying of winter clothing and other articles incident to cold weather. In district No. 5 (Richmond) several stores report that the month's business was the best in their histories and as a result stocks were reduced to a satisfactory level for inventory taking in January. Stocks of department stores decreased during the month in all districts from which reports were obtained but were larger than on the corresponding date in 1921 in districts No. 2 (New York) and No. 5 (Richmond). Outstanding orders of department stores decreased in all districts except Cleveland, Chicago, Minneapolis, and Dallas.

Sales of all reporting lines of chain stores increased in December, and music stores, shoe stores, and 5 and 10 cent stores reported the largest monthly sales during the last four years. Mail-order sales were slightly smaller than in November, but were substantially larger than in the corresponding month of the years 1920 and 1921.

**PRICES.**

Wholesale prices in the United States were very stable during the month of December, the all-commodities index numbers of both the Federal Reserve Board and the Bureau of Labor Statistics remaining unchanged—the former at a level of 164 and the latter at 156.

Agricultural products showed only a slight increase in December, following the extreme rise of the previous month. Bituminous coal, coke, and pig iron prices have been steadily decreasing during the last months of 1922, but anthracite prices have not yet turned downward. The average monthly price of raw cotton remained unchanged from the November average.

Structural steel and billets continued to decline, other steel products remaining steady.

Acetate of lime, after remaining unchanged in price for a year and a half, began to increase in price in August, and has continued to rise monthly. Cotton yarns have shown a steady increase throughout the year, and with the rise in December stood 54 per cent higher than in January, 1922. Worsted yarn prices in December were only 18 per cent higher than at the beginning of the year, but have also shown fairly steady advances throughout the year. Producers' goods as a group declined slightly in December. Consumers' goods increased, due to rises in the prices of staple food products.

The various groups of the Bureau of Labor Statistics index moved as follows: Farm products and cloths and clothing up 2 points; chemicals and drugs and house furnishing goods up 3 points; foods up 1 point; fuel and lighting and metals and metal products down 2 points; while building materials and miscellaneous items remained unchanged.

**COMMERCIAL FAILURES.**

Commercial failures in the United States during December, in accordance with the usual seasonal trend, exceeded the November insolvencies both in number and in total liabilities involved. The number of failures in seven districts and the liabilities in five districts were, however, smaller than the corresponding figures for November. As compared with December, 1921, the number of failures declined 26 per cent, and the liabilities were 41 per cent less. In every district the failures were fewer by from 6 to 49 per cent, except in district No. 12 (San Francisco), where there was an increase of 44 per cent. The liabilities were larger than they were a year previous in only four districts, the largest increase being 98 per cent in district No. 5 (Richmond). In the first three weeks of January the number of failures in the United States totaled 1,424, a reduction of 25 per cent from the large total of 1,898 recorded during the corresponding period of 1922.

The liabilities involved in the 1922 insolvencies were a fraction less than the record-breaking figures reached during 1921, but the number of failures in 1922, 23,676, exceeded the corresponding figure for all former years, topping the previous record of 1915 by 7 per cent. Comparative figures by districts are shown in the table on page 219.



**EMPLOYMENT.**

Employment at industrial establishments continued to increase during December for the eighth consecutive month. The Bureau of Labor Statistics reports that 3,294 establishments located in all parts of the United States employed 1,587,708 workers in December, which was 2.4 per cent more than in November. Plants manufacturing pottery and agricultural implements made particularly large increases in their forces, while the railroad equipment and machine industries continued their recent expansion. The most important decrease in employment occurred in the fertilizer industry and amounted to about 11 per cent. There is still a large demand for many kinds of skilled labor in all parts of the country, but a pronounced surplus of common labor has developed in district No. 12 (San Francisco). Fewer wage adjustments were reported from November 15 to December 15 than in the three preceding months, but practically all adjustments were increases. The industries most affected by these changes were machine shops and glass factories.

Shortages of textile workers, shoe workers, machinists, and building mechanics are reported from many New England cities. Labor difficulties in the granite industry have been settled and quarries resumed operations on January 2. The textile strike is at length completely settled and a number of cotton and woolen mills report overtime operations. The New York State Department of Labor announces that the number of employees in reporting establishments increased 1 per cent in December and was 15 per cent larger than in December, 1921. Gains occurred in the metal trades, the wood manufacturing industries, the shoe factories, the printing establishments, and the silk mills, while women's apparel shops, canneries, candy factories, biscuit factories, and brickyards reduced their forces. Railway equipment factories added the greatest number of workers to their pay rolls, whereas the men's clothing industry recorded the largest percentage gain. The Pennsylvania State Department of Labor reports that there was a slight increase of unemployment in reporting cities of eastern Pennsylvania during the month ending January 15, despite substantial reductions at Scranton and Reading. Railroad equipment plants near Philadelphia are employing night shifts, while many textile mills report a shortage of skilled workers. In district No. 4 (Cleveland)

land) the pottery industry reports a scarcity of workers, and steel mills, garment manufacturers, and automotive factories are increasing the number on their pay rolls.

Cotton mills and coal mines in district No. 5 (Richmond) increased their forces during December. The surplus of clerical workers in Washington is increasing, due to further curtailments of the Government departments. In district No. 6 (Atlanta) manufacturers of cotton goods, steel, lumber, tobacco, and paper have added to the number of their employees. The supply of transient labor in Florida is still in excess of the demand, although some are being employed in harvesting citrus fruits and vegetables.

District No. 7 (Chicago) states that there was a decrease of 3.2 per cent in the number of employees of 183 reporting firms during December, while the average pay per man declined 2.9 per cent. Employment in the automobile and lumber industries is unusually large for this season of the year. Packing plants and railroads in district No. 8 (St. Louis) increased their forces during December, and new construction operations continued to employ large numbers. The surplus of farm labor, on the other hand, became more pronounced in both the St. Louis and Minneapolis districts. In district No. 9 (Minneapolis) there is an abundance of common labor due to the decrease of farm and road work, but lumber camps, flour mills, and steel mills continue to increase their forces. Meat packers in various cities of district No. 10 (Kansas City) are increasing their forces, and wholesale dealers handling groceries, dry goods, furniture, drugs, and millinery are also adding to the number on their pay rolls. The demand for common labor is slack, but is being partially absorbed in ice cutting. Sugar factories in Colorado closed during December, releasing several thousand workers.

Lumber mills, railroad shops, and oil companies in district No. 11 (Dallas) increased the number of their employees during December. Cotton-oil mills reduced their operations. A moderate surplus of building craftsmen has developed and common labor is in excess of requirements. The reduction of agricultural activities has resulted in a large surplus of unskilled labor in district No. 12 (San Francisco). Weather conditions have forced the closing of lumber mills and construction camps in higher altitudes, adding to this surplus. The shipbuilding and steel industries are still very inactive in Oregon and Washington.

### FOREIGN TRADE.

Following the increase in the value of exports during last October and November to the highest point reached since early in 1921, the figures for December show a decline of nearly 10 per cent—from \$380,000,000 in November to \$344,000,000 in December. The latter figure is still in excess of that a year ago and is higher also than for any month in 1922 previous to October. Taken altogether, therefore, the reports for the last 3 months of the year show decided gains in our export trade. For the 12 months ending with December, 1922, exports totaled \$3,832,000,000 as compared with \$4,485,000,000 for 1921, the decrease being due to a fall in average unit values rather than to a decline in quantities. Provisional import figures are now available for October, and are given as approximately \$319,000,000, which is larger than for any previous month since November, 1920. In the last 9 days of September, when the provisions of the new tariff law first became effective, imports are now reported as having amounted to approximately \$69,000,000.

### GOLD AND SILVER MOVEMENTS.

A further addition of \$23,730,000 to the country's monetary gold stock through net imports is shown for the month of December. Total gold imports for the month amounted to \$26,440,000. Of this total nearly 60 per cent came from England and about 20 per cent from France, while Egypt and China together account for another 10 per cent of the total gold imports. About 60 per cent of the total of \$2,710,000 of gold exported was consigned to Canada, while smaller amounts, aggregating over \$1,000,000, were shipped to Mexico, China, and Hongkong.

Net gold imports for the year totaled \$238,295,000, compared with \$667,357,000 for the year 1921. Of the total gold imports for the year, \$275,170,000, about 44 per cent, came from Great Britain, about 22 per cent from Scandinavian countries, and about 10 per cent from France and Netherlands. Gold brought to the United States from Great Britain is largely of South African origin; gold coming from the Scandinavian countries and from France is linked with previous imports of Russian gold into these countries. Only in the case

of the Netherlands was the gold shipped to this country taken from the country's central reserve. Substantial gold imports from the Far East, mainly China, are also noted, while among imports from Latin America those from Colombia and Central America are most important. Of the total gold exports of \$36,875,000, about 60 per cent were directed to Canada, largely during the last quarter of the year. British India, Mexico, and Hongkong combined are credited with about one-third of the total gold exports for the year.

Silver imports for December, \$7,848,000, came mainly from Mexico, Peru, and Canada, while silver exports for the month, \$6,913,000, were consigned to Great Britain, British India, and the China coast. Silver imports for the past year totaled \$70,807,000, compared with \$63,242,000 for the year 1921. Imports from the leading silver-producing countries, viz, Mexico, Canada, and Peru, were all on a larger scale than in 1921, indicating a larger world output of silver for the year. Silver exports for the year totaled \$62,807,000, compared with \$51,575,000 in 1921. These exports are all of foreign silver, as the domestic product was purchased by the Government for monetary use under the provisions of the Pittman Act. There remains to be purchased under this act about 50,000,000 ounces, and Government buying of silver at the fixed \$1 rate is likely to continue during the greater part of the present year.

### FOREIGN EXCHANGE RATES.

Sterling exchange advanced during the first part of January to the peak rate of \$4.68, which had been touched but once (December 13, 1922) since 1919. On January 31 the rate had receded to \$4.64.

French and Belgian francs and Italian lire showed a general downward trend and stood at the end of the month at 5.82, 5.12, and 4.70 cents, respectively. This brings the French franc down to its post-war low figure recorded at the end of 1920. The German mark fell from 0.0139 cent on January 2 to 0.0021 cent on January 31, or from about 7,000 to 50,000 marks per dollar.

Neutral and South American exchanges remained fairly steady, while Shanghai taels and Indian rupees showed slight advances.

## RULINGS OF THE FEDERAL RESERVE BOARD.

### Bankers' acceptance to finance purchase of gold.

The Federal Reserve Board was recently requested to issue a ruling upon the question whether or not a draft drawn under the following circumstances would be eligible for acceptance by a national bank.

A customer of a national bank desires to purchase gold for refining purposes and proposes to finance the purchase of such gold by means of bankers' acceptances drawn on and accepted by a national bank. The gold will be shipped to the bank, which in turn will deliver it to its customer on a trust receipt. The acceptances are to have a maturity of 30 days in order to finance the customer during the period of manufacturing the gold into certain dental supplies. It is understood that the gold will be shipped through an express company and that no negotiable bill of lading will be issued covering the shipment.

Section 13 of the Federal Reserve act provides, in part, that—

Any member bank may accept drafts or bills of exchange drawn upon it having not more than six months' sight to run, \* \* \* which grow out of transactions involving the domestic shipment of goods provided shipping documents conveying or securing title are attached at the time of acceptance.

Thus the law makes it a condition precedent to the eligibility of such a draft for acceptance by a national bank that the draft be accompanied at the time of acceptance by shipping documents conveying or securing title to the goods shipped. If, therefore, in the case under discussion, there is attached to the draft at the time of acceptance merely an express company receipt in the usual form, the draft would not be eligible for acceptance by a national bank, since such a receipt can not be considered a shipping document conveying or securing title as required by law. It is conceivable, however, that some arrangement could be made with the express company whereby it would issue shipping documents conveying or securing title to the gold, which could be attached to the draft at the time of acceptance.

The board has held, however, that a draft drawn by a purchaser of goods is not eligible for acceptance merely because it is secured by a

bill of lading covering the goods purchased, and that in such a case it is also necessary that the proceeds of the draft be used by the drawer—that is, the purchaser—to pay for the goods covered by the bill of lading. In order, therefore, to bring the transaction within the spirit and purpose of section 13 of the Federal reserve act, it must be established also that the draft is drawn and used to finance the purchase and shipment of the gold.

There is also a question as to the proper maturity of such a draft. Where a draft is drawn to finance the shipment of goods, the board has ruled that the maturity of the draft should bear some reasonable relation to the period required for the actual shipment of the goods and that the draft should not be drawn for the purpose of furnishing to the buyer working capital during the process of manufacture of the goods shipped. It appears from the statement of facts in the present case that the underlying purpose of the acceptance credit is to furnish the national bank's customer with capital to enable him to refine or manufacture the gold after its receipt. The board is of the opinion that the use of a banker's acceptance to finance such an operation is an abuse of the domestic acceptance privilege, and that if the maturity of the draft exceeds the period reasonably necessary to complete the shipment of the gold, it should be deemed ineligible for acceptance. It is fundamental that an acceptance is not intended merely to supplement a borrower's normal line of credit, but is intended as an additional means of financing self-liquidating commercial transactions.

In conclusion, the board is of the opinion that the drafts under consideration would not be eligible for acceptance unless (1) shipping documents conveying or securing title are attached at the time of acceptance; (2) it is established that the proceeds of the drafts are to be used to pay for the gold shipped; (3) the maturity of the drafts is not greater than the period reasonably required for the process of shipment and delivery of the goods to the bank's customer; and (4) the drafts comply in other respects with the relevant provisions of the law and the board's regulations.

**New National Bank Charters.**

The Comptroller of the Currency reports the following increases and reductions in the number and capital of national banks during the period from December 30, 1922, to January 26, 1923, inclusive:

	Number of banks.	Amount of capital.
New charters issued.....	21	\$2,930,000
Restored to solvency.....	0	0
Increase of capital approved <sup>1</sup> .....	64	8,735,000
Aggregate of new charters, banks restored to solvency, and banks increasing capital.....	85	11,665,000
Liquidations.....	18	15,510,000
Reducing capital <sup>2</sup> .....	8	875,000
Total liquidations and reductions of capital.....	26	16,385,000
Consolidations of national banks under act of Nov. 7, 1918.....	4	1,325,000
Aggregate increased capital for period.....		11,665,000
Reduction of capital owing to liquidations, etc.....		16,385,000
Net decrease.....		4,720,000

<sup>1</sup> Includes one increase in capital of \$175,000 incident to a consolidation under act of Nov. 7, 1918.  
<sup>2</sup> Includes two reductions in capital aggregating \$100,000 incident to consolidations under act of Nov. 7, 1918.

**Fiduciary Powers Granted to National Banks**

During the month of January the Federal Reserve Board approved applications of the national banks listed below for permission to exercise one or more of the fiduciary powers named in section 11 (k) of the Federal reserve act as amended, as follows:

1. Trustee.
  2. Executor.
  3. Administrator.
  4. Registrar of stocks and bonds.
  5. Guardian of estates.
  6. Assignee.
  7. Receiver.
  8. Committee of estates of lunatics.
  9. In any other fiduciary capacity in which State banks, trust companies, or other corporations which come into competition with national banks are permitted to act under the laws of the State in which the bank is located.
- The numerals opposite the name of each bank indicate the power or powers it is authorized to exercise, as given below:

Place.	District No.	Name of bank.	Powers granted.
Ocean Grove, N. J.....	2	Ocean Grove National Bank.....	1 to 9.
Monticello, N. Y.....	2	National Bank of Monticello.....	1 to 9.
Wilmington, Del.....	3	Union National Bank.....	1 to 9.
Bradford, Pa.....	3	Commercial National Bank.....	1 to 9.
Mauch Chunk, Pa.....	3	Mauch Chunk National Bank.....	1 to 9.
State College, Pa.....	3	First National Bank.....	1 to 9.
Alliance, Ohio.....	4	Alliance-First National Bank.....	1 to 9.
Columbus, Ohio.....	4	Commercial National Bank.....	1 to 3, 5 to 7 and 9.
Toledo, Ohio.....	4	First National Bank.....	1 to 7 and 9.
Ford City, Pa.....	4	First National Bank.....	1 to 9.
Vandergrift, Pa.....	4	Citizens National Bank.....	1 to 9.
Dayton, Ohio.....	4	American National Bank.....	1 to 7 and 9.
Salem, Va.....	5	Farmers National Bank.....	1 to 9.
Washington, D. C.....	5	District National Bank.....	1 to 8.

Place.	District No.	Name of bank.	Powers granted.
Elberton, Ga.....	6	First National Bank.....	1 to 9.
Rockford, Ill.....	7	Forest City National Bank.....	1 to 9.
Indiana Harbor, Ind.....	7	United States National Bank.....	1 to 9.
Highland, Ill.....	8	First National Bank.....	1 to 9.
Chippewa Falls, Wis.....	9	Lumbermens National Bank.....	1 to 9.
Stockton, Calif.....	12	First National Bank.....	1 to 3, 5 to 7.
Tacoma, Wash.....	12	Puget Sound National Bank.....	1 to 9.

**Officers and Directors of Federal Reserve Banks.**

Following is a list of officers and directors of Federal reserve banks, including directors elected for the three-year term ending December 31, 1925:

**FEDERAL RESERVE BANK OF BOSTON.**

Frederic H. Curtiss, chairman and Federal reserve agent. Allen Hollis, deputy chairman. W. P. G. Harding, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
Thomas P. Beal.....	Boston, Mass.....	Dec. 31, 1923
Edward S. Kennard.....	Rumford, Me.....	Dec. 31, 1924
Frederick S. Chamberlain.....	New Britain, Conn.....	Dec. 31, 1925
<b>Class B:</b>		
Philip R. Allen.....	East Walpole, Mass.....	Dec. 31, 1923
Charles G. Washburn.....	Worcester, Mass.....	Dec. 31, 1924
E. R. Morse.....	Proctor, Vt.....	Dec. 31, 1925
<b>Class C:</b>		
Frederic H. Curtiss.....	Boston, Mass.....	Dec. 31, 1923
Allen Hollis.....	Concord, N. H.....	Dec. 31, 1924
Jesse H. Metcalf.....	Providence, R. I.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF NEW YORK.**

Pierre Jay, chairman and Federal reserve agent. Wm. L. Saunders, deputy chairman. Benjamin Strong, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
R. H. Treman.....	Ithaca, N. Y.....	Dec. 31, 1923
Charles Smith.....	Oneonta, N. Y.....	Dec. 31, 1924
Gates W. McGarrah.....	New York, N. Y.....	Dec. 31, 1925
<b>Class B:</b>		
Richard H. Williams.....	Madison, N. J.....	Dec. 31, 1923
Frank L. Stevens.....	North Hoosick, N. Y.....	Dec. 31, 1924
Owen D. Young.....	New York, N. Y.....	Dec. 31, 1925
<b>Class C:</b>		
Wm. L. Saunders.....	New York, N. Y.....	Dec. 31, 1923
C. M. Woolley.....	do.....	Dec. 31, 1924
Pierre Jay.....	do.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF PHILADELPHIA.**

Richard L. Austin, chairman and Federal reserve agent. H. B. Thompson, deputy chairman. Geo. W. Norris, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
Jos. Wayne, Jr.....	Philadelphia, Pa.....	Dec. 31, 1923
Francis Douglas.....	Wilkes-Barre, Pa.....	Dec. 31, 1924
John C. Cosgrove.....	Johnstown, Pa.....	Dec. 31, 1925
<b>Class B:</b>		
Edwin S. Stuart.....	Philadelphia, Pa.....	Dec. 31, 1923
Charles K. Haddon.....	Camden, N. J.....	Dec. 31, 1924
Alba B. Johnson.....	Philadelphia, Pa.....	Dec. 31, 1925
<b>Class C:</b>		
R. L. Austin.....	do.....	Dec. 31, 1923
Chas. C. Harrison.....	do.....	Dec. 31, 1924
H. B. Thompson.....	Wilmington, Del.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF CLEVELAND.**

D. C. Wills, chairman and Federal reserve agent. Lewis Blair Williams, deputy chairman. E. R. Fancher, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
Robert Wardrop.....	Pittsburgh, Pa.....	Dec. 31, 1923
O. N. Sams.....	Hillsboro, Ohio.....	Dec. 31, 1924
Chess Lamberton.....	Franklin, Pa.....	Dec. 31, 1925
<b>Class B:</b>		
Thomas A. Combs.....	Lexington, Ky.....	Dec. 31, 1923
John Stambaugh.....	Youngstown, Ohio.....	Dec. 31, 1924
R. P. Wright.....	Erie, Pa.....	Dec. 31, 1925
<b>Class C:</b>		
D. C. Wills.....	Cleveland, Ohio.....	Dec. 31, 1923
W. W. Knight.....	Toledo, Ohio.....	Dec. 31, 1924
L. B. Williams.....	Cleveland, Ohio.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF RICHMOND.**

Caldwell Hardy, chairman and Federal reserve agent. Frederic A. Delano, deputy chairman. George J. Seay, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
L. E. Johnson.....	Alderson, W. Va.....	Dec. 31, 1923
Charles E. Rieman.....	Baltimore, Md.....	Dec. 31, 1924
John F. Bruton.....	Wilson, N. C.....	Dec. 31, 1925
<b>Class B:</b>		
D. R. Coker.....	Hartsville, S. C.....	Dec. 31, 1923
Edmund Strudwick.....	Richmond, Va.....	Dec. 31, 1924
Edwin C. Graham.....	Washington, D. C.....	Dec. 31, 1925
<b>Class C:</b>		
Caldwell Hardy.....	Richmond, Va.....	Dec. 31, 1923
Frederic A. Delano.....	Washington, D. C.....	Dec. 31, 1924
Robert Lassiter.....	Charlotte, N. C.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF ATLANTA.**

Joseph A. McCord, chairman and Federal reserve agent. W. H. Kettig, deputy chairman. M. B. Wellborn, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
P. R. Kittles.....	Sylvania, Ga.....	Dec. 31, 1923
John K. Ottley.....	Atlanta, Ga.....	Dec. 31, 1924
Oscar Newton.....	Jackson, Miss.....	Dec. 31, 1925
<b>Class B:</b>		
Leon C. Simon.....	New Orleans, La.....	Dec. 31, 1923
J. A. McCrary.....	Decatur, Ga.....	Dec. 31, 1924
W. H. Hartford.....	Nashville, Tenn.....	Dec. 31, 1925
<b>Class C:</b>		
Joseph A. McCord.....	Atlanta, Ga.....	Dec. 31, 1923
Lindsay Hopkins.....	do.....	Dec. 31, 1924
W. H. Kettig.....	Birmingham, Ala.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF CHICAGO.**

William A. Heath, chairman and Federal reserve agent. James Simpson, deputy chairman. James B. McDougal, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
E. L. Johnson.....	Waterloo, Iowa.....	Dec. 31, 1923
George M. Reynolds.....	Chicago, Ill.....	Dec. 31, 1924
Charles H. McNider.....	Mason City, Iowa.....	Dec. 31, 1925
<b>Class B:</b>		
A. H. Vogel.....	Milwaukee, Wis.....	Dec. 31, 1924
S. T. Crapo.....	Detroit, Mich.....	Dec. 31, 1925
<b>Class C:</b>		
James Simpson.....	Chicago, Ill.....	Dec. 31, 1923
Wm. A. Heath.....	do.....	Dec. 31, 1924
F. C. Ball.....	Muncie, Ind.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF ST. LOUIS.**

William McC. Martin, chairman and Federal reserve agent. John W. Boehne, deputy chairman. David C. Biggs, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
John G. Lonsdale.....	St. Louis, Mo.....	Dec. 31, 1923
J. C. Utterback.....	Paducah, Ky.....	Dec. 31, 1924
John C. Martin.....	Salem, Ill.....	Dec. 31, 1925
<b>Class B:</b>		
LeRoy Percy.....	Greenville, Miss.....	Dec. 31, 1923
Rolla Walls.....	St. Louis, Mo.....	Dec. 31, 1924
W. B. Plunkett.....	Little Rock, Ark.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF ST. LOUIS—Continued.**

Director.	Residence.	Term expires.
<b>Class C:</b>		
John W. Boehne.....	Evansville, Ind.....	Dec. 31, 1923
Wm. McC. Martin.....	St. Louis, Mo.....	Dec. 31, 1924
C. P. J. Mooney.....	Memphis, Tenn.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF MINNEAPOLIS.**

John H. Rich, chairman and Federal reserve agent. Homer P. Clark, deputy chairman. R. A. Young, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
J. C. Bassett.....	Aberdeen, S. Dak.....	Dec. 31, 1923
Wesley C. McDowell.....	Marion, N. Dak.....	Dec. 31, 1924
Theodore Wold.....	Minneapolis, Minn.....	Dec. 31, 1925
<b>Class B:</b>		
N. B. Holter.....	Helena, Mont.....	Dec. 31, 1923
F. P. Hixon.....	La Crosse, Wis.....	Dec. 31, 1924
F. R. Bigelow.....	St. Paul, Minn.....	Dec. 31, 1925
<b>Class C:</b>		
John H. Rich.....	Minneapolis, Minn.....	Dec. 31, 1923
Homer P. Clark.....	St. Paul, Minn.....	Dec. 31, 1924
Geo. W. McCormick.....	Menominee, Mich.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF KANSAS CITY.**

Asa E. Ramsay, chairman and Federal reserve agent. Heber Hord, deputy chairman. W. J. Bailey, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
E. E. Mullaney.....	Hill City, Kans.....	Dec. 31, 1923
J. C. Mitchell.....	Denver, Colo.....	Dec. 31, 1924
Frank W. Sponahle.....	Paola, Kans.....	Dec. 31, 1925
<b>Class B:</b>		
Harry W. Gibson.....	Muskogee, Okla.....	Dec. 31, 1923
T. C. Byrne.....	Omaha, Nebr.....	Dec. 31, 1924
M. L. McClure.....	Kansas City, Mo.....	Dec. 31, 1925
<b>Class C:</b>		
Asa E. Ramsay.....	do.....	Dec. 31, 1923
Heber Hord.....	Central City, Nebr.....	Dec. 31, 1924
Fred O. Roof.....	Denver, Colo.....	Dec. 31, 1925

**FEDERAL RESERVE BANK OF DALLAS.**

W. B. Newsome, chairman and Federal reserve agent. B. A. McKinney, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
Howell E. Smith.....	McKinney, Tex.....	Dec. 31, 1923
John T. Scott.....	Houston, Tex.....	Dec. 31, 1924
W. H. Patrick.....	Clarendon, Tex.....	Dec. 31, 1925
<b>Class B:</b>		
J. J. Culbertson.....	Paris, Tex.....	Dec. 31, 1923
Frank Kell.....	Wichita Falls, Tex.....	Dec. 31, 1924
Marion Sansom.....	Fort Worth, Tex.....	Dec. 31, 1925
<b>Class C:</b>		
Clarence E. Linz.....	Dallas, Tex.....	Dec. 31, 1923
W. B. Newsome.....	do.....	Dec. 31, 1924

**FEDERAL RESERVE BANK OF SAN FRANCISCO.**

John Perrin, chairman and Federal reserve agent. Walton N. Moore, deputy chairman. J. U. Calkins, governor.

Director.	Residence.	Term expires.
<b>Class A:</b>		
John W. Baer.....	Pasadena, Calif.....	Dec. 31, 1923
M. A. Buchan.....	Palo Alto, Calif.....	Dec. 31, 1924
C. K. McIntosh.....	San Francisco, Calif.....	Dec. 31, 1925
<b>Class B:</b>		
A. B. C. Dohrmann.....	do.....	Dec. 31, 1923
Wm. T. Sesnon.....	do.....	Dec. 31, 1924
E. H. Cox.....	Madera, Calif.....	Dec. 31, 1925
<b>Class C:</b>		
John Perrin.....	San Francisco, Calif.....	Dec. 31, 1923
Walton N. Moore.....	do.....	Dec. 31, 1924
Wm. Sproule.....	do.....	Dec. 31, 1925

<sup>1</sup> One vacancy.

**State Banks and Trust Companies.**

**Admissions.**

The following list shows the State banks and trust companies which were admitted to membership in the Federal Reserve System during the month ending January 31, 1923, on which date 1,641 State institutions were members of the system:

	Capital.	Surplus.	Total resources.
<i>District No. 2.</i>			
Fort Lee Trust Co., Fort Lee, N. J.	\$100,000	\$20,000	\$130,000
Irving Bank of New York, New York, N. Y.	12,500,000	9,500,000	306,140,206
<i>District No. 3.</i>			
Oxford Bank & Trust Co., Philadelphia, Pa. (succeeding the Oxford Bank of Frankford).....	250,000	100,000	3,826,595
<i>District No. 8.</i>			
North St. Louis Trust Co., St. Louis, Mo.	200,000	40,000	2,795,295
<i>District No. 12.</i>			
Union Trust Co., San Francisco, Calif.	1,200,000	1,975,000	38,903,541

*Converted into national banks.*—Alpine State Bank; Alpine, Tex.; American Savings Bank, Pontiac, Mich.; Oklahoma State Bank, Cordell, Okla.; Cordell State Bank, Cordell, Okla.; First Guaranty State Bank, Quanah, Tex.; Puget Sound Bank & Trust Co., Tacoma, Wash.

*Merged with another member bank.*—Community Bank, Whittier, Calif.; Industrial Bank of New York, New York, N. Y.; Ocean Park Bank, Ocean Park, Santa Monica, Calif.; Commercial Trust & Savings Bank, Memphis, Tenn.; Bank of Fergus County, Lewistown, Mont.

*Rechartered.*—The Oxford Bank of Frankford, Philadelphia, Pa., a member bank, has been rechartered under the name "Oxford Bank & Trust Co." and the new organization admitted to membership.

*Voluntary liquidation.*—Bank of Southern Wisconsin, Janesville, Wis.; Farmers & Merchants Bank, Hartwell, Ga.

*Withdrawal.*—Security State Bank, Ponca City, Okla.

*Change of name.*—The Dallas County State Bank, Dallas Tex., to the Mercantile Bank & Trust Co.; the Trust Company of Georgia, Atlanta, Ga., to Lowry Bank and Trust Company of Georgia; American-Liberty Bank & Trust Co., New Orleans, La., to American Bank & Trust Co.; Ogden Savings Bank, Ogden, Utah, to First and Utah Savings Bank of Ogden; Union & Mercantile Trust Co., Little Rock, Ark., to Union Trust Co.

**Acceptances to 100 Per Cent.**

Since the issuance of the January BULLETIN the following bank has been authorized by the Federal Reserve Board to accept drafts and bills of exchange up to 100 per cent of its capital and surplus:

Irving Bank of New York, New York, N. Y.

**FOREIGN LOANS PLACED IN THE UNITED STATES IN 1922.**

In continuation of similar tables furnished for the two previous years the Guaranty Trust Co. of New York has furnished to the Federal Reserve Board a summary table setting forth amounts of principal foreign government, municipal, and corporate loans placed in the United States during the calendar year 1922. Corresponding figures for 1921 appeared on pages 1050-1051 of the September, 1922, BULLETIN and for 1920 on page 135 of the February, 1921, BULLETIN.

SUMMARY OF PRINCIPAL FOREIGN GOVERNMENT, MUNICIPAL, AND CORPORATION LOANS OFFERED FOR SUBSCRIPTION IN THE UNITED STATES DURING 1922, INCLUDING LOANS OF AMERICAN CORPORATIONS DOING BUSINESS ABROAD.

[In thousands of dollars.]

Country.	Government and municipal.	Corporation.	Total.	Loans of American corporations abroad.	Grand total.
Australia.....	10,758	2,500	13,258	.....	13,258
Dutch East Indies.....	100,000	.....	100,000	.....	100,000
Belgium.....	.....	2,500	2,500	.....	2,500
Czechoslovakia.....	21,500	.....	21,500	.....	21,500
Denmark.....	.....	5,000	5,000	.....	5,000
France.....	31,000	41,975	72,975	10,000	82,975
Netherlands.....	47,400	18,220	65,620	.....	65,620
Norway.....	21,575	.....	21,575	.....	21,575
Yugoslavia.....	15,250	.....	15,250	.....	15,250
Argentina.....	28,095	.....	28,095	.....	28,095
Bolivia.....	24,000	.....	24,000	.....	24,000
Brazil.....	61,380	4,000	65,380	.....	65,380
Chile.....	19,350	.....	19,350	.....	19,350
Colombia.....	5,000	.....	5,000	.....	5,000
Peru.....	2,750	.....	2,750	.....	2,750
Uruguay.....	6,000	.....	6,000	.....	6,000
Cuba.....	(*)	28,500	28,500	23,421	51,921
Dominican Republic.....	6,700	.....	6,700	.....	6,700
Haiti.....	16,000	.....	16,000	.....	16,000
United States possessions <sup>1</sup> .....	50,587	3,985	41,072	.....	41,072
Canada.....	207,220	46,526	245,801	2,800	248,601
Newfoundland.....	6,000	.....	6,000	.....	6,000
<b>Total.....</b>	<b>650,565</b>	<b>153,206</b>	<b>833,771</b>	<b>36,221</b>	<b>869,992</b>

<sup>1</sup> The balance of an offering of \$25,000,000 is understood to have been withdrawn.

<sup>2</sup> State of Bahia \$5,000,000 issue offered in October is understood to have been withdrawn and is not included.

<sup>3</sup> Bank loan of \$3,000,000 in January is not included.

<sup>4</sup> Government and municipal figures include Hawaii.

<sup>5</sup> Compilation of Commercial & Financial Chronicle for 11 months, plus December offerings as advertised.

<sup>6</sup> Foreign currency issues converted into dollars, with two exceptions, on the basis of the original offering price, comprise \$63,308,000 of the government and municipal total and \$22,695,000 of the corporate total.

The following exhibit shows the total foreign financing for each of the last three years:

[In thousands of dollars.]

Year.	Government and municipal.	Corporation.	Total.
1920.....	386,922	189,400	576,322
1921.....	507,070	118,750	625,820
1922.....	650,565	189,427	869,992

It is seen that while the total volume of foreign financing in this country in 1921 was over 50 per cent larger than in 1920, this increase is limited entirely to foreign government and municipal issues. The large decline of foreign corporate issues in 1921 reflected the general industrial depression, affecting primarily Cuban and European issues, and to a smaller extent those of Canadian corporations. The latter show the largest decline during 1922, though this decline was more than fully made up during that year by the large increase in the sale of Canadian Government and municipal securities in the American market.

### COTTON FINANCING.<sup>1</sup>

With the rapid development of the cotton-producing and the cotton-manufacturing industries has grown the problem of financing cotton from the time the seed is planted to the time when the finished product is sold. The number of bales of raw cotton produced has increased from 154,000 in the year 1800 to an average of 13,000,000 bales for the 10 years 1911-1920. Likewise the value of the crop has increased from \$33,000,000 to \$1,000,000,000 for the same periods. The problem of financing this billion-dollar crop is a gigantic task best understood by those most intimately connected with the production and distribution of cotton.

Customary methods of financing cotton are the result of practices that had their inception in the early days of cotton production. As the industry developed the original methods of financing were improved and new institutions grew to aid in the process. Until the beginning of the war, in 1914, the problem of financing cotton was clearly divided into two parts. The task of extending credit for growing and domestic shipment was borne by the banking structure within the United States, while the financing of cotton exports was handled largely through the London discount market. Since 1914 the problem of financing export shipments of cotton has been gradually shifted to the shoulders of American bankers.

<sup>1</sup> This is the first of a series of articles prepared by Mr. W. J. Carson, of the Division of Analysis and Research, describing methods of financing the production and distribution of cotton.

Information upon which this article is based was obtained largely through replies to a number of questionnaires which were sent to planters, merchants, bankers, and others who are interested in the industry in various capacities, and from some publications of the United States Department of Agriculture. To all of them acknowledgment is due. Acknowledgment is also due to the Federal Reserve branch bank at Memphis, Tenn., and its manager, whose cooperation in gathering the data and the final drafting of the study was very valuable.

Cotton financing is largely a banking problem, but it is one that calls into use every form of modern instruments of credit and is dependent upon these instruments for its proper functioning. A study of the problem involves an analysis of the small grower and his credit needs; of the plantation owner and his financial connections with local credit institutions; of the cotton factor as he establishes financial relations with local banks and, in turn, finances the planters; of the merchant or broker as he concentrates his purchases and holds the cotton in storage awaiting demands from the mills; of the mills as they purchase and hold cotton awaiting demand for cotton goods; and of the cooperative marketing associations which, in recent years, have been established to aid the growers in collecting their cotton and distributing it according to the demands of the trade.

After a brief description of the cotton industry as a whole, the financing of the grower in upland long-staple areas will be discussed.

#### I. THE COTTON INDUSTRY.

Cotton grown in the United States may be classified into four groups according to its uses and commercial value—(1) sea-island, (2) American-Egyptian, (3) upland long staple, and (4) upland short staple. In addition, these cottons are classified according to (1) grade, (2) color, (3) length of staple, and (4) character, all of which are important in determining the value of the cotton, as they indicate the spinning qualities. The four types are found in different geographical sections and are of different staple lengths. Sea-island cotton has a very fine fiber, varying from 1½ to 2 inches in length, and is the most valuable of all cottons. American-Egyptian cotton has a staple from 1¾ to 1⅞ inches in length and ranks next to sea island in value. Upland long staple, known as "staple cotton," has a fiber length of 1¾ to 1½ inches and constitutes the greater part of the long-staple cotton grown in the United States. Upland short staple, which represents about 90 per cent of the American cotton production and 60 per cent of the world's crop, has a staple varying from ¾ to 1½ inches in length. There are other methods of classifying cotton which are commonly applied in the trade. These have given rise to five regional trade names, known as uplands, sea island, Gulf, Texas, and American-Egyptian. The accompanying map shows the sections of the country in which each type of cot-

ton is grown and the regional trade name that is commonly applied.

The average acreage, production, and yield per acre of cotton for each of the cotton-producing States for the 10 years 1911-1920 are given in the following table:

AVERAGE COTTON ACREAGE, PRODUCTION, AND YIELD PER ACRE FOR 10 YEARS, 1911-1920.

State.	Acreage harvested. <sup>1</sup>	Cotton produced, exclusive of linters (equivalent 500-pound bales <sup>2</sup> ).		Yield (lint pounds per acre).
		Gross.	Net.	
United States....	34,939,900	13,053,256	12,488,967	178.4
Alabama.....	3,227,500	1,055,436	1,009,224	156.3
Arizona <sup>3</sup> .....	120,000	60,080	57,449	239.3
Arkansas.....	2,554,200	983,041	940,971	184.2
California <sup>3</sup> .....	112,750	64,117	61,175	271.2
Florida.....	187,500	46,669	44,904	119.5
Georgia.....	5,234,800	2,039,040	1,949,401	185.2
Louisiana.....	1,292,109	435,001	415,982	160.9
Mississippi.....	2,991,900	1,055,980	1,010,692	168.8
Missouri.....	129,200	67,793	64,926	251.2
North Carolina.....	1,519,700	828,956	790,874	260.2
Oklahoma.....	2,698,200	949,746	909,213	168.5
South Carolina.....	2,897,900	1,273,239	1,304,946	232.4
Tennessee.....	844,100	338,046	323,599	191.6
Texas.....	11,341,500	3,789,309	3,630,810	160.0
Virginia.....	43,600	23,346	22,285	255.5

<sup>1</sup> Yearly acreage figures taken from Yearbook, Department of Agriculture, 1920.

<sup>2</sup> Yearly production figures taken from Cotton Production and Distribution Bulletins, Bureau of Census.

<sup>3</sup> Average for 4 years, 1917-1920.

average value, 1911-1920, which is shown in the following table for the leading States:

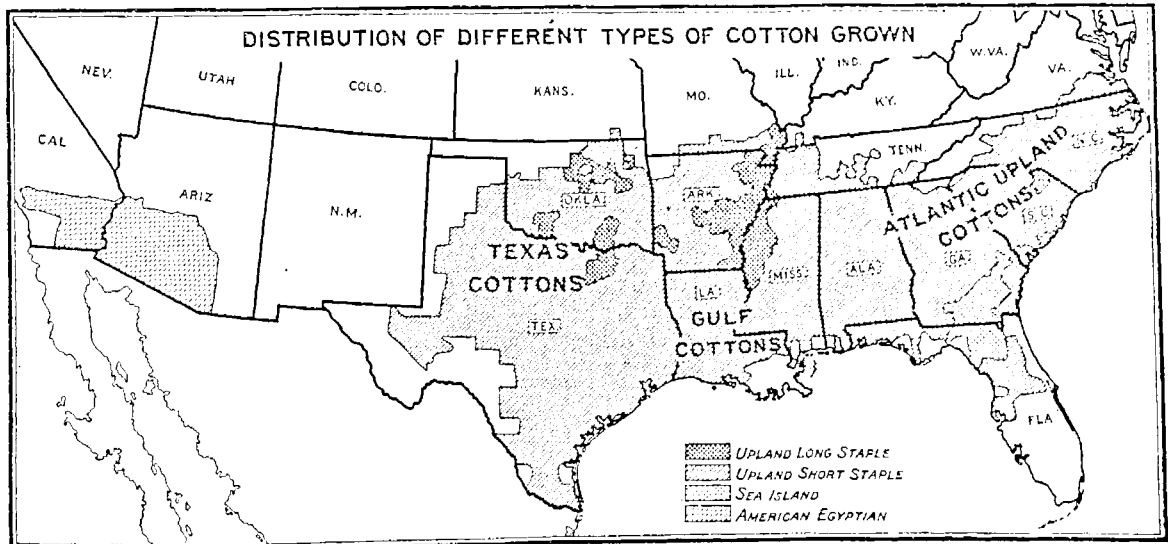
AVERAGE AGGREGATE VALUE OF COTTON CROP, LINT COTTON, AND COTTON SEED FOR 10 YEARS, 1911-1920.<sup>1</sup>

State.	Aggregate value of cotton crop.	Value of lint cotton.	Value of cotton seed.
United States.....	\$1,309,867,000	\$1,103,377,000	\$209,490,000
Alabama.....	91,197,000	78,590,000	15,607,000
Arizona <sup>2</sup> .....	11,325,000	13,205,000	1,120,000
Arkansas.....	101,510,000	85,251,000	16,259,000
California <sup>2</sup> .....	9,522,500	8,265,000	1,257,500
Florida.....	5,399,000	4,595,000	825,000
Georgia.....	211,018,000	175,062,000	35,956,000
Louisiana.....	47,045,000	39,427,000	7,618,000
Mississippi.....	109,540,000	91,921,000	17,619,000
Missouri.....	6,646,000	5,596,000	1,140,000
North Carolina.....	85,385,000	70,784,000	14,601,000
Oklahoma.....	91,074,000	77,143,000	13,931,000
South Carolina.....	147,233,000	122,766,000	24,467,000
Tennessee.....	33,668,000	28,003,000	5,665,000
Texas.....	363,046,000	308,970,000	54,116,000
Virginia.....	2,425,000	2,010,000	415,000
All other States.....	2,111,000	1,791,000	320,000

<sup>1</sup> Yearly valuation figures taken from Cotton Production and Distribution, Bureau of the Census, 1911-1920.

<sup>2</sup> Average for 4 years, 1917-1920.

In the above tables the average figures for the years 1911-1920 were taken, rather than figures for a specific year within that period, because of the fact that the cotton industry was undergoing rapid changes from year to year. Within this period the price reached its lowest point (1914) and its highest point (1920).



The annual value of the cotton crop, both lint cotton and cotton seed, increased from approximately \$500,000,000 in 1900 to almost \$2,500,000,000 in 1919. Since then the yearly value of the cotton crop has been near the

The crop also reached its maximum figure in 1914, totaling more than 16,000,000 bales. Since 1920 two of the smallest crops within the present century have been produced, but the values have been near the 10-year average.



Although cotton is the principal staple crop of the Southern States and therefore of great importance as a cash crop, the disadvantages of relying entirely on one crop have been realized. Diversification and rotation of crops have in recent years been practiced to a large

extent in many sections of the Cotton Belt, and as a result the farm income in those sections has become more secure. The following table shows the main crops that are produced in the cotton States and the relative acreage of each for the separate States:

TOTAL IMPROVED ACREAGE IN 1920, AND ACREAGE IN COTTON, TOBACCO, PEANUTS, CEREALS, AND HAY AND FORAGE, HARVESTED IN 1919 FOR PRINCIPAL COTTON STATES.

State. <sup>1</sup>	Improved acreage, 1920.	Cotton.	Tobacco.	Peanuts.	Cereals.		Hay and Forage.
					Total.	Corn.	
Alabama.....	9,893,407	2,628,154	3,435	334,239	3,456,667	3,334,204	705,279
Arkansas.....	9,210,556	2,553,811	.....	21,692	2,868,533	2,292,119	1,002,333
Georgia.....	13,055,209	4,720,498	25,067	201,786	4,620,900	4,269,455	1,248,814
Louisiana.....	5,626,226	1,343,334	.....	17,670	1,996,690	1,504,970	208,631
Mississippi.....	9,325,677	2,948,387	.....	16,933	2,718,055	2,657,009	483,544
North Carolina.....	8,198,409	1,373,701	459,011	125,766	3,133,891	2,311,462	992,374
Oklahoma.....	18,125,321	2,732,962	.....	13,969	10,053,931	2,472,905	2,073,513
South Carolina.....	6,184,159	2,631,719	103,496	7,460	2,048,194	1,753,813	668,538
Tennessee <sup>2</sup> .....	3,218,432	800,069	29,479	1,898	1,045,171	943,920	341,972
Texas.....	31,227,503	11,522,537	.....	165,407	10,768,930	4,748,655	2,390,457

<sup>1</sup> In addition to the above crops certain others are grown extensively in some States. The chief of these are 234,049 acres of sugar cane in Louisiana; 456,959 acres of rough rice in Louisiana and 143,211 acres in Arkansas; 1,482,663 acres of kafir and milo in Texas and 1,152,430 acres in Oklahoma. Oklahoma and Texas are also the two greatest wheat-producing States in the cotton belt. Wheat nearly doubles corn in acreage harvested in Oklahoma. Oats are grown extensively throughout the cotton States, but Texas and Oklahoma exceed the other States in acreage harvested.

<sup>2</sup> Figures represent only 21 counties in west Tennessee, containing 800,069 acres in cotton out of the total 807,770 acres in cotton for the entire State.

The principal items of expense in producing a cotton crop are labor, rent, fertilizer, seed, stock feed, ginning, and baling. Of these labor is the greatest expense. Hand labor is needed in the growing season (April to July) to chop and hoe the cotton. In the fall, beginning about September 1, hand labor is used entirely to pick the cotton. The expense for cultivating the crop is gradually being reduced in some sections through the adoption of better methods of cultivation and the use of improved implements. But a machine to lessen the greatest of all labor expense, that of picking, has not yet been successful. An itemized list of expenses for two years (1913 and 1920) is given in the following table for a 100-acre farm in northern Texas under a crop-sharing lease, the landlord taking one-fourth of both lint and seed as his rent on the basis of an average yield of 200 pounds per acre.<sup>1</sup>

#### ITEMS OF EXPENSE IN COTTON PRODUCTION.

	1913	1920
<b>Labor:</b>		
Two hands for six months.....	\$240	\$340
Chopping cotton twice.....	150	350
Picking 40 bales.....	510	900
Hauling cotton to ginnery.....	48	96
<b>Total.....</b>	<b>948</b>	<b>2,186</b>

<sup>1</sup> Items taken from Cotton Statistics, Official Report of World Cotton Conference, 1921, prepared by John A. Todd.

#### ITEMS OF EXPENSE IN COTTON PRODUCTION—Contd.

	1913	1920
<b>Tenant's capital:</b>		
Four mules.....	700	650
Harness.....	32	100
Breaking plow.....	55	70
Two cultivators.....	75	150
Two planters.....	60	112
Two wagons.....	180	230
One pair harrows.....	15	27
One stalk cutter.....	26	65
Six hoes.....	4	6
Scales for weighing cotton.....	2	3
Buggy and harness.....	130	135
Horse.....	150	100
Cotton sacks.....	10	20
<b>Total.....</b>	<b>1,439</b>	<b>1,658</b>
Interest thereon at 10 per cent.....	144	167
Depreciation thereon at 12½ per cent.....	180	209
Cotton seed, 75 bushels.....	150	300
Ginning and baling, 40 bales.....	120	320
<b>Stock feed:</b>		
450 bushels of corn.....	225	562
365 bales of hay.....	182	365
Supervision.....	120	180
<b>Total cost (excluding tenant's capital).....</b>	<b>2,069</b>	<b>4,289</b>

Fertilizer is not included in the above list because very little is used in Texas. In the Atlantic States fertilizer is a principal expense, while in the intermediate areas, Mississippi, Tennessee, Arkansas, and Louisiana, it is used to a lesser degree and therefore is not as heavy an expense as in the older States. The cotton States using the most fertilizer in 1922 were Georgia, North Carolina, South Carolina,

and Alabama. The values of the amounts used by these States were \$11,057,000, \$9,666,000, \$8,076,000, and \$6,819,000, respectively.

## II. FINANCING THE GROWER—LONG STAPLE AREAS.

The two important problems in connection with financing the cotton industry from the time the seed is planted until the raw cotton reaches the spinner are, first, that relating to the growing and the sources of credit for planters and tenants; and, second, that involved in financing the marketing of cotton and its movement from the farm to the American and foreign mills. Of these, the first can clearly be separated into two parts—(1) financing the grower in the long-staple or delta areas of Mississippi and Arkansas, and (2) financing the grower in short-staple or upland areas of other sections of the Cotton Belt.

### A. THE LONG-STAPLE COTTON INDUSTRY.

The principal long-staple areas of upland cotton are found in the alluvial soil sections of Mississippi and Arkansas. The territory includes 10 counties in Mississippi and parts of 14 others;<sup>2</sup> 2 counties in Arkansas composed entirely of alluvial land and other counties adjoining these or bordering on the Mississippi River that have alluvial strips.<sup>3</sup> A large percentage of the cotton produced in Chesterfield, Darlington, and Marlboro Counties in South Carolina, some counties in northeastern Texas bordering on the Red River and its tributaries, and some counties in central and southern Oklahoma bordering on the Arkansas, Canadian, and Red Rivers is long-staple upland, but the methods of operating farms and financing the grower are not different from other sections of these States where short-staple upland cotton is grown. Long-staple cotton is also produced in the irrigated regions of Arizona and southern California. This is chiefly American-Egyptian cotton, and the industry there is comparatively new.

The alluvial or delta areas of Mississippi extend along the Mississippi River from just

below Memphis on the north to Vicksburg on the south. The region is a large triangular area between the Yazoo and Mississippi Rivers, comprising about 6,400 square miles. The soil is very fertile, as it has frequently been subject to the overflows of the Mississippi River but is now protected by a system of levees. The climatic conditions and the fertility of the soil make the section particularly adaptable to cotton growing, and an adequate supply of labor is provided from the large population of negroes.

Cotton is the principal crop grown in the delta. The farms are very large and are operated entirely on the plantation system. The plantation owners either live on the plantations and supervise the farm operations themselves or in the nearby towns and operate them through managers who live on the plantations. The latter is more often the method used. The systems of tenure are not altogether different from those found in other plantation areas of the South. But it is in the delta sections, perhaps to a larger extent than elsewhere, that the plantation system is maintained as it was in the early period of cotton cultivation throughout the Cotton Belt. The principal systems of tenure in the delta are three in number—(1) share-cropping system, (2) share-renting system, and (3) cash-renting system.<sup>4</sup> The main points of difference between the systems are determined by contract with the landlord and tenant and they vary with the financial standing of the tenant.

*Share-cropping system.*—Under the share-cropping system, often called the half-and-half system, the landlord furnishes the land, a cabin for housing the tenant, all necessary teams, harness, and feed for the teams, the seed, one-half of the fertilizers used, and the tenant's fuel wood; the tenant supplies the labor for preparing the land, cultivating, and gathering the crop, and works according to the direction of the landlord. Each party under this contract receives half of the crop and in some cases pays for his half of the ginning and baling; in others the tenant pays for the ginning and baling. When other crops are grown besides cotton and corn, they are usually divided equally between the landlord and tenant. The landlord exercises careful supervision over the share croppers, who can only be considered as tenants from the point of

<sup>2</sup> The alluvial soil counties of Mississippi are Bolivar, Coahoma, Humphrey, Issaquena, Leflore, Quitman, Sharkey, Sunflower, Tunica, Washington, and the adjoining parts of Holmes, Tallahatchie, Warren and Yazoo Counties. Ten others contain alluvial strips.

<sup>3</sup> The alluvial counties of Arkansas are Crittenden, Mississippi, and parts of Chicot, Craig, Cross, Desha, Lee, Phillips, Poinsett, and St. Francis. Seventeen others contain alluvial strips.

<sup>4</sup> E. A. Boeger and E. A. Goldenweiser—A Study of the Tenant Systems of Farming in the Yazoo-Mississippi Delta. A professional paper. Bulletin No. 337, of the United States Department of Agriculture, 1916.

operation; from the point of supervision they are laborers, receiving half of the crop and the use of a cabin in return for their services.

In some cases when the tenant plants any crop other than cotton on his land he pays the landlord a stated sum per acre for the use of the land and receives all of the crop raised. The following is a clause from a half-and-half, "One-half," contract of employer with employee:

The said employee . . . shall prepare the land, put in the crop, cultivate and gather the same, in accordance with the directions of said employer; and that said employer agrees to provide . . . cabin . . . for housing said employee . . . , and to furnish the necessary teams, tools, gear, and feed for said teams, at its own expense; and to advance all necessary supplies to said employee . . . , at prices to be agreed upon when delivered.

*Share-renting system.*—Under this system, often called the two-thirds or three-fourths contract system, the tenant furnishes at his own expense the necessary work stock, equipment and feed for the stock, tools, machinery, seeds, and all the labor for preparing the land, cultivating, and gathering the crop; the landlord furnishes the land, cabin, and the tenant's fuel. Fertilizers, if any are used, are paid for by both landlord and tenant, the proportion being determined by the ratio of each party's share of the crop. The landlord also advances all the necessary supplies to the tenant at prices agreed upon when delivered. The tenant pays for the ginning and baling. In return for all his services he receives three-fourths of the crop for his share. In some sections he receives only two-thirds of the crop. The landlord exercises supervision over the tenant's operations, but the care of stock and machinery is not in accordance with the direction of the landlord, as they belong to the tenant.

If any crop other than cotton is grown the tenant pays for the use of the land at a stated price per acre out of his share of the cotton and cotton seed and receives all of the crop produced. The following is a clause from a "Three-fourths" contract with employer and employee:

The said employee . . . shall, at . . . own expense, furnish the necessary teams, tools, gear, and feed for the teams and shall prepare the land, put in the crop, cultivate and gather the same, in accordance with the direction of said employer; and that said employer agrees to provide . . . cabin . . . for housing said employee . . . , and to advance to said employee . . . all necessary supplies at prices agreed upon when delivered.

*Cash-renting system.*—The cash-renting system is found to a smaller degree than either

of the other systems. It is similar to the share-renting system in that the tenant pays a fixed rent per acre in cash or lint cotton instead of a share of the crop. If fertilizers are used they are paid for entirely by the tenant. The amount of supervision exercised by the landlord over cash renters varies with the character and ability of the tenant. If the landlord advances supplies to the cash renters he has a greater interest in the crop than if the tenant is able to supply himself or establish independent credit connections with local merchants.

#### B. ACCOMMODATION TO PLANTERS.

The methods of financing the large planters in the Yazoo-Mississippi Delta differ in some respects from those in use in other sections of the Cotton Belt, especially in the eastern cotton States, where the farms are smaller and diversification of crops has been introduced. It is necessary for most planters to borrow early in the spring in order to prepare the soil, in some cases, to purchase seeds, equipment, and new implements that are necessary, and to arrange to supply their tenants with provisions during the seasons of cultivation.

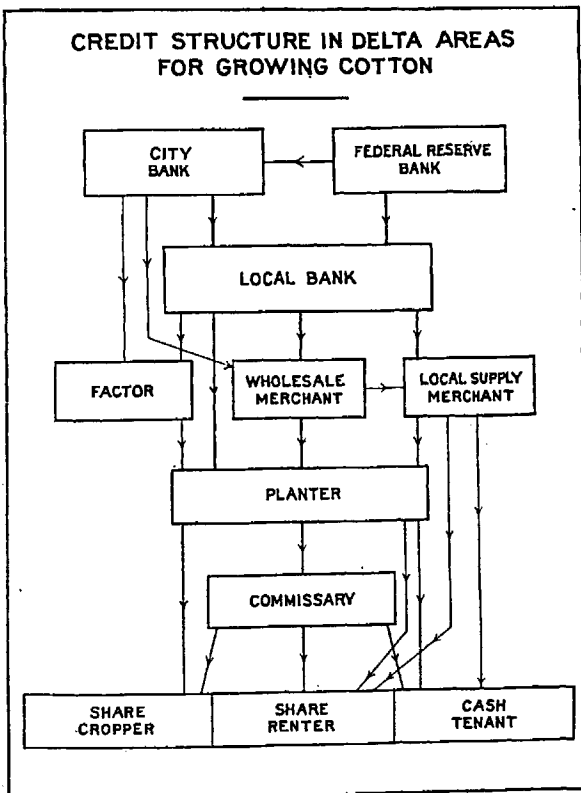
Few planters have built up sufficient liquid assets to carry them through the period of cultivation. This has partly been due to the fact that much land is being constantly cleared of timber, ditches are being dug, and other pioneer work is being done, all of which involves a great deal of expense. Recently the construction of good roads and drainage systems have laid heavy tax burdens on the planters and have also absorbed much of their available liquid resources.

The planter in the delta secures his accommodation for growing his crop from four principal sources—the bank, cotton factor, wholesale merchant, and the local merchant. The tenant receives his credit advances principally from the landlord through the commissary or plantation store. In the alluvial sections of Arkansas the local merchant supplies the tenant with about 50 per cent of his credit needs, and the remainder is supplied by the landlord. The accompanying diagram illustrates the principal sources of credit for the delta cotton growers and the various agencies through which it passes before reaching the final consumers.

*Advances by factors.*—Formerly it was customary for the planters to make credit arrangements in the spring with a cotton factor. The planter agreed to deliver to the factor a certain

number of bales of cotton, and if the number delivered should be less than the number specified the planter was to pay a specified sum per bale as damages. A credit was placed upon the factor's books and the planter drew against this for all purposes. The factor would secure the advances by either a crop lien contract, chattel mortgage, or contract for cotton to be delivered when ginned and baled. In some cases the loan was made on open account, when the factor knew the financial

**CREDIT STRUCTURE IN DELTA AREAS FOR GROWING COTTON**



standing and the integrity of the planter. Loans were always made by factors to planters, with the expectation that cotton would be consigned to the factor for sale. The consignments were to be made by the planter as soon as the cotton was gathered and prepared for market. In recent years factorage business has suffered heavy losses from the decline in prices in 1920-21 and losses to planters from the destruction by the boll weevil. This has led the factors to strengthen their loans with real-estate mortgages given by planters covering their plantations. The following is a specimen of a grower's contract with the factor:

....., 19...  
Whereas ..... of ..... has this day agreed to advance ..... during the season of 19... dollars, in money and supplies, at their discretion (all money to bear .... per cent interest and supplies to be charged at their regular credit prices), for the purpose of enabling ..... to make, gather, and market a crop .....

And whereas ..... are in the commission business and have gone to a large expense in making preparations for the handling and sale of cotton, it is hereby agreed that in consideration of the above-mentioned advances that ..... agree to bind myself to ship said company as many as ..... bales of cotton or pay them commission on any number of bales less than said number than ..... may fail to ship said company at the rate of 1 and 25/100 dollars per bale as agreed liquidated damages.

Witness ..... Hand, day, and date above.  
Witness .....  
Supplies, \$.....  
Cash, \$.....

Spring advances have declined considerably, and it is estimated that planters in Mississippi only receive about 10 per cent of such advances from factors for the 1922 crop. In Arkansas the amount was still smaller, averaging about 5 per cent. There are some planters, however, able to secure their loans satisfactorily who prefer to borrow entirely from the factors.

*Bank loans.*—It is estimated that the planters in Mississippi secure from 50 to 80 per cent of their loans from banks. In Arkansas the estimates range from 40 to 60 per cent, as the local merchants play a greater rôle as a source for loans than in Mississippi. Loans by the banks are made principally on promissory notes secured by crop liens and chattel mortgages. The crop liens cover the growing crops and the chattel mortgages are given to cover live stock, implements, farm machinery, tools, and feed stuffs. Under present conditions real estate mortgages are frequently required. Prior to 1920 it was the custom in Mississippi to loan on a straight promissory note, but the losses that resulted in 1920-21 have made banks more cautious and security is taken in the forms mentioned. The conditions vary for banks in Arkansas. One bank reports that 50 per cent of the loans made to cotton planters are made on unsecured promissory notes, while another reports that only 10 per cent of such loans are thus made, and 90 per cent are made on promissory notes secured by chattel mortgages, realty mortgages, or crop liens.

The basis upon which loans are made by the banks to planters varies in different sections of the delta. One bank reports that loans are made in a flat sum for each acre in cultivation, varying from \$4 to \$10; another states that loans are made entirely on the planter's finan-

cial standing and without any reference to the number of acres under cultivation. In some instances loans are made from month to month to cover actual expenses incurred by the planter in obtaining supplies and in meeting pay rolls. The planter in turn gives his note each month for the amount borrowed. One bank in Arkansas states that loans are made on the basis of \$10 for each acre planted in cotton and corn. Another says that the banks advance up to 50 per cent of the anticipated value of the cotton crop.

Within recent years the presence of the boll weevil has influenced loans by banks to cotton planters. The extent to which this influence has been felt is not uniform for the different banks. But the general effect has been to cause banks to curtail their cotton advances and to make the planters more conservative in the use of credit. One bank reports that additional loans have to be made to assist the farmers to fight the weevil, but they are made only after a conservative use has been made of credit extended earlier in the growing season. In connection with the presence of the weevil the extent to which crop diversification has been introduced is an important aspect in financing the planter. Some banks have refused to extend loans to planters unless they produce feed and feedstuffs. Others have increased advances to planters that have instituted a system of diversification. In Arkansas one banker states that the problem of diversification there has not been solved and has not had any effect on bank advances. The opposite opinion is held by another, who thinks that loans have been made much easier for the farmers who are diversifying their crops.

The dates for maturity vary with the different banks and different planters. The loans are generally made to mature about the time the crop begins to move to market. The earliest notes made in the spring mature as early as October 1 or October 15. Those that are made later in the spring mature as late as November 15. In many cases the early notes are renewed, but renewals always depend upon the rapidity of the crop movement. In normal years it is not necessary to renew paper which matures after December 1. However, within the last two years the conditions have been very abnormal and many renewals have been made. Some loans have been extended for a year. One bank reports that instead of renewing the notes of planters for funds used in growing the crop a new commodity loan is frequently made on a note secured by ware-

house receipts. This liquidates the original loan and gives the bank better security for a new loan.

The practice as to interest payments is not uniform. In Arkansas it is customary for the notes to bear interest from their date; in Mississippi some banks report that interest is deducted in advance but the usual custom is to collect it at maturity.

*Wholesale merchants.*—Advances by wholesale grocery companies, jobbers, and manufacturers to the large planters in the delta are of importance. It is estimated that about 20 per cent of the credit accommodations to planters in Mississippi are from wholesale merchants, while in Arkansas the amount varies from 5 to 10 per cent, averaging under normal conditions about 10 per cent. Wholesale grocery companies making sales largely in the delta estimate that from 50 to 90 per cent of their sales in the delta are made to plantation owners operating plantation stores or commissaries. The other sales in the territory are made to retail merchants operating in the smaller towns.

*Terms of sale.*—The terms of sale by wholesale merchants to planters are not uniform with the several wholesale houses. Heretofore the terms of credit have frequently been spring to fall, but within the past two years the wholesale merchants have been shortening the terms and approaching a cash basis. And, although some cash sales are made by a few houses, the general practice with the merchants is to make sales for 30 days. However, this is subject to variation, as under present conditions it is often necessary for the time to be extended to 60 or 90 days and in a few instances to 120 days. It is the practice for the planters to borrow from the factors and banks to pay the wholesale houses rather than have merchants carry them for a longer period than 30 days. The usual custom with the merchants is to make sales to planters on open account or unsecured promissory notes. It is estimated that normally about 75 per cent of sales are made on open account and 25 per cent on unsecured promissory notes. Since 1920 the wholesale companies have been more cautious in extending credits, and when sales were made for a longer period than 30 days whatever available security the planters could furnish was taken; in many cases this has been real estate mortgages or crop liens. The tendency is for the planters to give the banks or factors the choice security and thereby obtain funds with which the wholesale

merchants can be paid. The wholesale merchants often find it necessary to borrow from the banks in order to advance to the farmers. Such loans are generally made on "open note," but the planters' notes, when available, are sometimes discounted or used as collateral by the merchant.

*The plantation commissary.*—The local store is of small importance as a source of credit for planters and tenants in the delta. The plantations usually operate commissaries to supply the tenants and thus serve the purpose of the local stores or merchants in the Eastern States.

The plantation commissary is a warehouse from which the planter periodically delivers rations to his tenants. Share croppers and share renters are supplied entirely by the landlords through the commissary. Cash renters sometimes receive their supplies from the same source, but they usually have a better financial standing and can secure credit accommodation elsewhere, chiefly from retail merchants in the small towns. It is generally stated in the contracts, when written, that supplies will be advanced to the tenant by the landlord "at prices agreed upon when delivered." If the contracts are verbal, a similar agreement is usually made. The principal articles that are advanced by the commissary are meat, meal, sugar, coffee, tobacco, and clothing. When feedstuffs for the stock have to be furnished the commissaries advance them to the tenant on the same terms as other articles are advanced.

The methods of advancing to tenants are fairly uniform. Each tenant is given a line of credit based upon the number of acres he is to plant. This is divided into monthly installments and the tenant is allowed to draw the stated amount each month. Advances are made on open account to share renters and share croppers. The commissary is always secured against losses through advances of this kind by the landlord's lien. If advances are made to cash renters they are often secured by the renter's promissory note collateralized by a chattel mortgage covering the tenant's growing crop, live stock, and farm machinery.

The credit price charged by the commissaries is somewhat higher than the cash price. When it is customary for the commissaries to make some cash sales, the cash price often ranges from 10 to 20 per cent lower than the time price. In all cases the time price covers the expenses of deferred payment and in only a few instances is there an additional charge as interest made on the entire sum advanced.

The time price charged is about the same as similar prices charged by retail merchants operating in the small towns of the delta.

Advances are made to tenants as long as they are cultivating the crop. Many tenants are of very limited means, and it is often necessary to make advances in the late winter and early spring before work on the new crop actually begins. Advances are made regularly until picking season. At that time the tenant begins to bring his cotton to market and liquidates the advances that were made to him from the proceeds of the sale.

The periods for settling with the tenants vary with different planters. In many cases the settlement is not made until after the crop has been sold, but the general practice is to make settlements as soon as the cotton has been ginned. The basis of settlement is the market price for similar cotton on the day of settlement. The planter settles with the tenant according to the terms of the contract. The amounts of advances made to the tenant by the commissary are totaled and deducted from his share of the crop. The remaining proceeds from the tenant's share in the crop are made either in cash or in credit on the books of the commissary. If the latter process is used, the tenant builds a balance against which he "draws" supplies in the form of food and clothing throughout the winter.

### C. THE PROBLEM OF MARKETING.

The problem of marketing cotton in the delta is solved in a manner somewhat different from that followed in other sections of the Cotton Belt where local buying has become important. As has been stated earlier in this article, the principal sources of funds for growing the crop are the local banks, factors, and wholesale merchants. The local banks and factors are also the principal sources from which funds are obtained for marketing the cotton.

*Consignment to factors.*—Since 1920 the marketing process has been undergoing considerable changes. Formerly it was customary for the planter, as soon as the cotton was ginned and ready for market, to ship it directly to a factor in one of the larger cities of that section, for sale and to strengthen the former's credit. Additional drafts were drawn on the factor for funds, in the form of currency and coin, which were needed to meet expenses arising from picking and ginning and to make settlements. The draft was met by the factor in the same manner as those that were drawn by the planter

to meet spring needs. The cotton upon reaching the factor was sampled, warehoused, insured, and eventually sold. The proceeds of the sale were added to the credit of the planter on the books of the factor. The factor always charged the planter a commission for handling the cotton, and if credit had been extended to the planter in the form of spring advances it was deducted, with interest, from the proceeds of the sale of the cotton.

Although spring advances by the factors, as a whole, have been considerably reduced, large quantities of cotton are still sold by them for planters on commission. The factor in order to provide himself with funds for advancing to planters on cotton consigned to him often borrows heavily from local banks. The loans are usually made on unsecured promissory notes, but frequently warehouse receipts for cotton consigned to him are pledged as collateral. His borrowing usually begins in August and September, as the cotton begins to come in, and continues until December and January when, generally, all of the cotton has been sold.

*Cooperative marketing.*—The principal change in the methods of marketing and of financing the long-staple cotton has been worked out through cooperation among the growers. The cooperative marketing idea has not been confined to the delta regions of Mississippi. It has spread widely throughout the cotton States, and each State has organized a cooperative cotton-marketing association. The question of financing the cotton-marketing associations is reserved for a later article, but as the Staple Cotton Cooperative Association of Mississippi operated successfully in 1921, it is well here to give some facts relating thereto.

The association began business in September, 1921, and handled 158,714 bales of staple cotton, valued at approximately \$20,000,000 for the delta planters in the season of 1921-22. This was about one-third of the total cotton produced in the alluvial soil sections of Mississippi. The association borrowed largely from the War Finance Corporation and from banks in the larger cities through the medium of bankers' acceptances.

In the delta counties of Arkansas local buying is more important than in those of Mississippi. It is estimated that from 50 to 60 per cent of the staple cotton is sold through local and resident buyers, and the problem of financing the marketing there is one of financing the buyer, a topic also to be discussed in a later article.

#### D. SUMMARY.

Methods of financing cotton in the delta have developed simultaneously with the plantation system of cotton farming. After the Civil War the system in other sections of the Cotton Belt was supplanted in part by the small farm, but in the alluvial soil sections of Mississippi the plantation system remained intact. The problem of extending credit for cotton growing involves the question of financing the large planters, who in turn extend credit to the tenants. The planters are usually of strong financial standing and are able to establish credit lines with factors, banks, and wholesale merchants in the larger cities and do not apply for credit to the local store or local supply merchant.

The chief problem that has confronted the factor in extending funds for growing the crop has been to obtain adequate security. While the factor has accepted chattel and realty mortgages as collateral, he has in all instances been secured principally by his contract with the planter, who bound himself to consign cotton to the factor to be sold on commission. Under this arrangement the factor has not always been adequately protected against losses, nor has the planter always been supplied with sufficient funds. The violent decline in cotton prices in 1920 brought great losses to the factors and caused many of them to reduce their advances to planters and induced others to withdraw entirely from the business.

In the delta region the wholesale merchants sell directly to the planters, who in turn supply the needs of tenants through the medium of the plantation commissary. The provision of funds for the planter, to enable him to make payments to the wholesale merchants and to supply his tenants on a credit basis, is generally accomplished through the factor. The recent decline of the factorage business has resulted in the local banks and those in near-by cities being called upon to aid the planter in making cash purchases and to aid the wholesale merchants when sales are made to planters on a time basis.

*The problem of the banks.*—Although there are several media through which credit often passes before reaching the planters and tenants, the entire process of financing falls heaviest on the banks not only in the local cities of the delta but in the larger cities of the immediate territory. The problem which confronts the



banks is threefold. It relates, first, to the question of financing the planter himself during the growing season; second, to financing the factor and wholesale merchant; and, third, to financing the cotton buyer and the cooperative marketing association during the marketing season. The local banks finance the growing process directly through advances to planters, while the banks in the larger cities, especially Memphis, New Orleans, and St. Louis, aid indirectly through advances to factors, who in turn advance to planters in the form of cash and supplies. The city banks also make very heavy advances to buyers. Loans by banks increase as the season progresses, and those in the smaller towns reach their peak in the late summer—in July, August, or the early part of September.

As the crop is marketed the planters' loans are paid and likewise their indebtedness to the factors and wholesale merchants is reduced, so that the latter in turn reduce their indebtedness to the banks. But as the planters begin to reduce their indebtedness the banks are called upon to finance the marketing process. They supply some funds to the factors throughout the marketing season, usually from September to January, and to the buyers and merchants as they concentrate the cotton and hold it for shipment to American consumers or abroad. The country banks make some loans to cotton buyers, but the heaviest financing of the marketing falls on the city banks. Loans which the city banks make to the buyers provide funds which are spent in the smaller towns, and thus the demands upon smaller banks diminish, while the borrowings of the city banks continue to mount until they reach their peak in late autumn and early winter—in November, December, or early January. The cooperative marketing association requires funds to make advances to planters for cotton delivered to it. This is a new factor in the marketing process and has been financed in part with funds advanced by the War Finance Corporation, but in the future the problem of extending funds to the marketing association will in all probability depend upon the banks for its solution.

The burden of financing the growing and marketing of staple cotton is often greater than local banks can easily support, and they borrow considerably from the Federal Reserve bank and banks located in larger cities—Memphis, St. Louis, New Orleans, New York, and Chicago. Factors often establish credit lines in some of these cities when local banks

can not accommodate them fully. Some of the large buyers and merchants also depend upon outside banks for a considerable part of their funds for moving the crop. Many of these banks may in turn rediscount or borrow at the Federal Reserve banks. This provides a long chain of credit amounting in the aggregate in some years, it is estimated, to as much as \$100,000,000.

### THE TREND OF DEPARTMENT-STORE STOCKS.

A measure of the trend of merchandise stocks at retail stores is important to the retailer in comparing his own business with the average business. Furthermore, knowledge of the trend of retail stocks is of value to the wholesaler and manufacturer, as it furnishes them with a basis for measuring the probable course of future orders.

About 500 department stores are now reporting the value of their stocks of goods on hand to the Federal reserve banks at the end of each month. For 160 of these stores, distributed throughout seven Federal reserve districts, figures are available in dollar amounts since January, 1919.<sup>1</sup> Using the average stocks in 1919 as a base, relatives have been computed for the groups of stores in each of these districts and are shown in the accompanying table.

Comparison of the expansion and contraction of department-store stocks during the four-year period shows that there has been, on the whole, a remarkable uniformity of movement for these seven groups of stores. In each district during each of the four years there is noted a regular seasonal trend—a moderate increase in the spring months, a contraction in the summer, a large expansion in the early autumn, and a drastic reduction in December. In addition to this regularity of seasonal movement there is indicated a noticeable correspondence in year-to-year trend for the several districts. The trend of stocks was upward in all reporting districts throughout the year 1919. This upward movement reached a peak in the Richmond, Minneapolis, and San Francisco districts in the spring of 1920, while in the Boston, New York, Atlanta, and Dallas districts the upward movement continued until the fall months. The value of stocks declined abruptly in all reporting districts in the months of November and December, 1920, and in

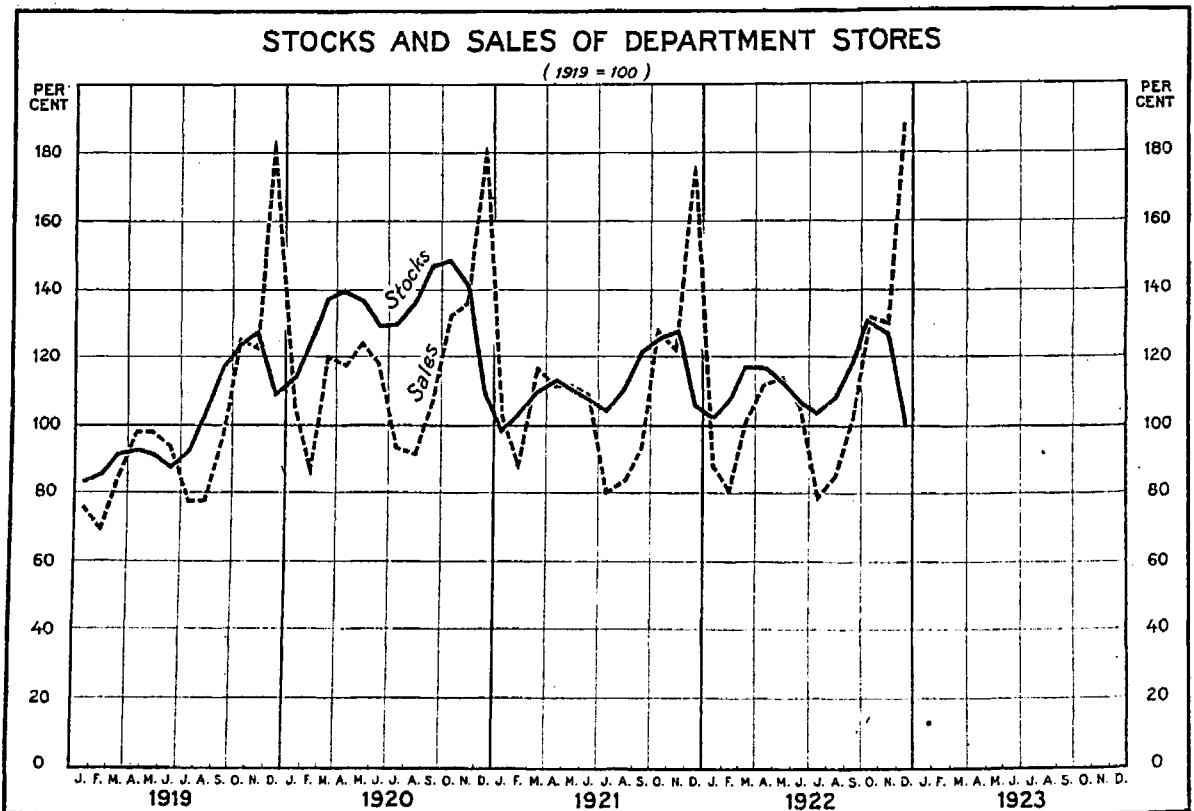
<sup>1</sup> For a small number of these stores it was necessary to estimate stocks for certain months of 1919.



January, 1921. At the end of January, 1921, retail stocks were at the lowest level since 1919 in all districts. The volume of stocks indicates that retailers bought very conservatively throughout 1921 and 1922, as the value of stocks at the fall peak of 1922 was lower than in the fall of 1921 in the Atlanta, Minneapolis, Dallas, and San Francisco districts and smaller than in the fall of 1920 in every reporting district. As a result of the heavy Christmas trade in 1922, stocks were much depleted, and at the end of the year were at the lowest point since 1919 in the Boston, Atlanta, and Minneapolis districts.

trict. The changes in volume of stocks in the San Francisco and Minneapolis districts, on the other hand, have been much less marked than in other districts, and San Francisco stocks were only slightly smaller in 1922 than in the corresponding months of 1921.

The last column of the table shows an index of department-store stocks for the United States which is constructed by combining the relatives for the seven reporting districts by the use of a system of weights. The weights are the number of persons engaged in retail trade in the various districts according to the United States Census of Occupations. In the accom-



The outstanding differences in movement of stocks between sections have been differences of degree rather than of seasonal or cyclical trend. The most noteworthy variations from the average in size of movement occurred in the Dallas, Minneapolis, and San Francisco districts. Department stores in the Dallas district increased their stocks much more in 1920 than the stores in any other section. As a result their stocks reached a very high peak in September, 1920, and in the succeeding months a much more drastic reduction occurred in the Dallas district than in any other dis-

panying chart this index of merchandise stocks for 160 stores is compared with an index of department-store sales. It should be noted that stocks at any date are equal in size to three or four months' sales, so that a 3 per cent increase in monthly sales would not result in more than a 1 per cent decrease in stocks. Consequently, the fluctuations in the volume of stocks would ordinarily be less violent than the fluctuations in the volume of sales.

Examination of the chart reveals certain definite relations between the trend of stocks and the trend of sales. Stocks regularly in-

crease in February and reach a peak during April, while sales begin to increase in March and reach a peak between March and May (the peak being much influenced by the date of Easter). Stocks usually decline in May and June and reach a low point during July, while sales show a similar decrease to a low point in either July or August. Stocks are expanded in the months of August, September, and October, while sales expand in September and October, continue at about the October level during November, and rise to a very sharp peak in December. The large Christmas business in December and the desire to reduce inventories at the close of the year usually results in a marked reduction of stocks during December and January. Sales, in turn, are

reduced to a small volume in the first two months of the year.

This brief summary of seasonal tendencies shows that there are two peaks and two troughs in the volume of both sales and stocks each year. The changes in volume of stocks usually anticipate changes in volume of sales by about one month, but this is more clearly the case at the fall peak and the winter trough than at the spring peak and the summer low point.

Latest data for department-store sales and stocks disclose that sales in December reached the largest monthly total in the last four years, while stocks at the end of December were practically the smallest since July, 1919. The large sales and small stocks indicate an excellent condition of department-store business.

TREND OF DEPARTMENT STORE STOCKS.

(Average monthly stocks, 1919=100.)

	District No. 1—Boston (24 stores).	District No. 2—New York (64 stores).	District No. 5—Richmond (19 stores).	District No. 6—Atlanta (9 stores).	District No. 9—Minneapolis (10 stores).	District No. 11—Dallas (16 stores).	District No. 12—San Francisco (18 stores).	Index for United States (100 stores).
1919.								
January	82.7	80.5	80.5	92.3	79.5	79.5	85.1	82.6
February	84.6	83.9	79.8	94.3	82.5	83.1	85.3	84.7
March	90.0	89.0	98.6	94.8	83.0	86.0	89.7	90.8
April	92.9	90.8	89.7	92.4	104.2	88.0	91.2	92.0
May	91.1	88.4	83.6	88.4	110.2	97.8	88.6	90.7
June	87.4	86.5	83.7	85.1	95.4	92.5	85.4	87.2
July	90.6	90.9	90.4	87.4	106.2	91.7	93.0	91.9
August	98.5	103.0	104.1	99.9	107.4	109.8	105.6	103.3
September	118.9	116.9	123.2	113.5	104.7	123.0	119.3	116.6
October	125.9	124.6	129.6	112.0	114.6	128.1	122.3	123.3
November	129.9	129.9	130.5	123.6	115.5	124.4	124.9	127.1
December	113.1	114.7	106.3	106.3	95.0	95.2	109.0	108.0
1920.								
January	107.9	116.8	111.1	115.4	109.8	109.8	111.7	112.9
February	115.3	128.0	125.3	121.5	122.3	122.3	125.1	124.2
March	126.6	142.6	149.4	130.0	128.2	132.8	137.3	137.2
April	134.0	145.1	143.0	131.9	133.0	136.2	141.4	139.6
May	130.7	137.2	139.6	132.7	130.8	149.3	137.2	136.4
June	123.4	131.0	137.2	125.3	124.8	138.0	128.3	128.9
July	119.0	130.2	130.8	130.6	119.5	155.4	126.8	129.1
August	123.9	138.0	135.0	138.2	126.4	175.1	128.9	136.0
September	136.4	148.7	149.2	155.3	128.4	184.0	133.3	146.8
October	140.9	149.9	149.2	155.6	128.4	182.2	138.7	148.2
November	140.1	143.0	137.4	144.5	123.7	163.6	136.3	141.1
December	113.6	114.7	101.8	108.4	92.5	103.6	108.1	108.9
1921.								
January	98.2	101.4	87.1	104.6	92.5	95.8	100.8	98.4
February	99.8	106.4	95.4	110.4	94.9	102.6	104.3	103.1
March	106.3	114.4	103.4	115.4	100.9	110.1	109.4	109.9
April	109.3	117.5	106.5	117.7	100.1	110.8	114.4	112.7
May	107.1	115.4	104.3	112.6	99.6	117.9	111.9	111.0
June	102.7	109.2	99.7	107.6	95.2	115.2	108.4	106.1
July	100.1	105.1	97.7	107.8	94.4	111.8	109.7	104.0
August	101.4	110.6	104.3	112.5	100.5	129.0	117.8	110.1
September	111.6	122.4	121.4	126.7	105.0	137.3	126.6	121.3
October	118.9	127.6	124.5	132.1	106.7	138.3	127.5	125.5
November	125.1	130.0	124.0	130.6	106.2	139.2	129.4	127.3
December	106.2	109.0	96.8	104.9	92.5	104.3	107.6	104.9
1922.								
January	99.1	105.1	90.8	108.1	92.7	101.8	108.4	102.1
February	103.2	108.5	102.4	112.7	83.3	113.5	113.3	107.2
March	110.3	120.7	111.7	120.2	102.4	126.9	120.7	117.0
April	111.6	121.6	110.6	120.8	101.3	117.7	122.6	116.9
May	110.4	116.5	107.0	115.4	100.9	114.7	119.1	113.3
June	105.7	110.4	103.7	107.9	95.8	105.3	108.9	106.9
July	103.3	104.5	99.8	108.8	90.9	103.4	109.3	105.7
August	103.6	109.1	105.0	114.0	94.4	113.4	113.4	108.0
September	115.4	120.2	119.5	123.7	99.5	119.9	119.3	118.0
October	123.4	124.5	130.3	125.5	102.5	123.2	121.5	130.1
November	128.4	131.4	126.0	128.0	103.9	122.0	125.1	126.3
December	77.1	110.4	103.2	102.4	89.8	96.5	103.0	100.4

## THE FIRST THREE YEARS OF GERMAN REPARATION.

### PART IV.—FULFILLMENT OF THE TREATY.

In this final article of the series,<sup>1</sup> the first part runs parallel to the narrative of the preceding article. In the latter an account was given of the negotiations between Germany and the Allies subsequent to the announcement in May, 1921, of the schedule of payments determined by the Reparation Commission. It is now necessary to relate the measures taken in fulfillment of the agreements reached between the parties, and to outline the efforts made by Germany acting alone to comply therewith. The present article then summarizes and analyzes the total payments made up to the end of August, 1922—their composition, their nature, and their distribution between the Allies.

#### EARLY DELIVERIES.

It will be remembered that under the treaty of Versailles, Germany had been required to pay 20 billions of gold marks before May 1, 1921.<sup>2</sup> The main bulk of Germany's payments up to that time was in the form of coal, along with, of course, large amounts of shipping, and other payments in kind. Even in the matter of coal, however, and under the reduced demands of the Spa agreement, Germany was in default by the end of 1920. In January, 1921, the Reparation Commission called her attention to a shortage of 500,000 tons up to the end of the year. Germany confessed in reply her inability to make up the deficit within the next three months. As a matter of fact, despite the commission's subsequent demands for 2,200,000 tons monthly, Germany continued to be increasingly in default, the deficits, however, being more or less acquiesced in by the commission. For at this time there was a glut of coal in the European market, and the British coal industry was working at much below its full capacity.

Including coal deliveries up to February, 1921, the Germans claimed to have liquidated this obligation to pay 20 billions of gold marks by May 1. The prices at which they valued the goods were, however, much in excess of those allowed by the Reparation Commission, which then demanded payment of 1 billion gold marks by March 21 and 12

billions in all by May 1. Germany protested the impossibility of these demands and the low values placed on their deliveries by the commission, and demanded a mixed valuation commission. The commission, however, replied by ordering the removal of the metal reserve of the Reichsbank to its branches at Cologne and Coblenz (both of which were in the occupied area) as security for Germany's obligations. This, and later the demand to put 1 billion marks at the commission's disposal in the Bank of France before May 1, were not carried out, Germany protesting that the removal of practically all of the reserve (then about 1,092,000,000 marks) from the Reichsbank would precipitate a panic. The London decision relieved Germany from an immediate obligation which she could probably in no case have carried out the payment of the balance of 12 billions owing before May 1. But before the end of that month 1 billion was paid over.<sup>3</sup> One hundred and fifty millions of this was paid at the middle of the month in gold and foreign currency and 840 millions in three-month treasury bills, while 10 millions was held in Berlin at the disposal of the commission. During the next three months Germany was accumulating credits in New York, both to meet the bills falling due and for imports of grains and food, by means of joint guaranties by German banks. Throughout June, July, and August these were gradually being paid off, the whole transaction being completed by a final shipment of 68 millions in gold to New York on August 31.

The accomplishment of this payment brought about an important step toward normality, the Supreme Council having agreed to lift the economic barrier of the Rhineland on September 15, provided Germany paid the amount due by September 1 and removed the boycott on French goods.

In August, 1921, the Inter-Allied Financial Commission met to discuss the appropriation of the 1 billion marks being paid. It was agreed then that it should be divided between Great Britain, for the costs of her army of occupation, and Belgium, in part consideration of her prior claim to reparation. France, in consideration of her receipts in kind, relinquished any claim to a share thereof, being debited with the value of 15 years' production of the Saar coal fields, valued provisionally at from 300 to 400 millions of gold marks. These items more than covered her occupation ex-

<sup>1</sup> The preceding articles appeared in the BULLETINS for November and December, 1922, and January, 1923. This series of articles does not discuss events which have occurred since October, 1922.

<sup>2</sup> See November, 1922, BULLETIN, p. 1292, col. 2.

<sup>3</sup> In accordance with the terms of the London settlement, see December, 1922, BULLETIN, p. 1426, col. 1.

penses. Great Britain's claim was for the difference between costs to date of 1,200,000,000 and receipts of 300,000,000. She was therefore to receive 600,000,000 on account, the balance of the receipts going to Belgium. The scale of charges against Germany for occupation costs was based upon man power. That for France was 16 francs per day; for Great Britain the French scale plus 2 gold marks; and for the United States the French scale plus 3 gold marks per day per man.

The next payment was due on November 15, being the first export levy. This sum, however, amounting to 300 millions, was easily covered by payments in kind prior to that date.

#### PREPARATIONS FOR 1922 PAYMENTS.

About this time, however, it began to be perceived that Germany would have difficulty in meeting the payments due in January and February of 1922. There was much discussion, particularly in German financial circles,<sup>4</sup> as to the possibilities of obtaining a moratorium. Accordingly, on November 5, the Reparation Commission decided to visit Berlin to study the means of paying the pending installments and of carrying out certain plans recommended by the guarantees committee. On December 2 a telegram was dispatched to Berlin urging the Government to pay full attention to the matter of preparing for the payments due on January 15 and February 15. This communication was important in that it asserted that Germany's difficulties were financial rather than economic. The Government, it charged, had failed to take timely steps to balance the budget, the result being that Government expenditures had been met in increasing proportions by credits from the Reichsbank, involving continuous expansion of the fiduciary note issue. The immediate outcome was the appointment by Chancellor Wirth of a commission concerned with direct dealing with foreign security brokers to obtain foreign credits to meet the German obligations immediately pending. These cash obligations, exclusive of deliveries in kind, were estimated at 400 millions of gold marks on January 15 and 240 millions on February 15, the latter being the export levy.

Some days later the Chancellor dispatched a lengthy memorandum on the subject to the commission. It asserted that reparation payments were dependent on the flotation of a foreign loan. It was well known that Herr Rathenau had been negotiating for some time

past with London financiers with this object in view. These negotiations, however, had broken down with the assurance that, in view of the reparation claims of future years, such a loan could not be raised in England, either as a long-dated loan or as a short-dated bank credit. Hence it was impossible to make full payment of the January and February installments. Apart from deliveries in kind and receipts under the British reparations recovery act, Germany could not procure for these payments more than 150 to 200 millions of gold marks. The commission was therefore requested to extend the time limit for payment. The note closed with a very significant passage: "The Government," it said, "confines itself to this request, although it realizes that similar difficulties will arise in connection with subsequent payments."

In its consideration of this note the commission recognized that under the circumstances there existed only three ways of making the payments. First, Germany might make use of the money held abroad by German nationals. The objection to this method was, however, that the German Government might well protest she had no power to acquire these balances. Second, payment might be made out of the gold reserve in the Reichsbank, which now, after the last payments, stood at only slightly more than 1 billion marks. It was, of course, true that as a reserve this sum was almost useless, representing as it did only 1 per cent of the note issue. Nevertheless it was felt that even this amount of gold is of great importance in any future rehabilitation of German currency. The third course was to buy foreign exchange with paper marks sold abroad, and the results of such a procedure were patent to all observers.

#### TAXATION AND INTERNAL REFORMS IN 1922.

While the Cannes Conference was proceeding, the commission conferred with German delegates and granted a provisional postponement<sup>5</sup> of the January and February payments, on certain very definitely prescribed conditions. Germany was to pay in lieu thereof 31 millions of gold marks every 10 days, beginning January 16, these continuing until the Allies should decide on a more permanent scheme. But, furthermore, Germany was to submit within 14 days a plan of reforms and guaranties for the budget and the currency and for reparation payments. This scheme would supply the starting point for the elaboration of the Allies' plans.

<sup>4</sup> The German Finance Minister himself, Dr. Dernberg, suggested in a newspaper article, on November 6, a 10-year moratorium.

<sup>5</sup> See January BULLETIN, p. 32, col. 2.

On January 26 Chancellor Wirth announced in the Reichstag the Government's taxation proposals. These included a compulsory loan of 1 billion gold marks, bearing interest only after a period of three years, abandonment of the taxes on post-war profits and imposition of a 2 per cent business tax, and raising of the duties on coal and sugar and the property, capital, and corporation taxes.

The German reply to the conditions imposed by the commission asked for a general reduction in the cash payments, accompanied, if necessary, by an increase in deliveries in kind. To this end Germany was willing to conclude, with other powers, agreements along the line of that made with France at Wiesbaden. The commission was also asked to permit the expenses of occupation to be credited to the total sum in cash and kind paid in 1922. The note pointed out that the recurring periodical payments in foreign currency greatly hampered the efforts being made to put the German finances in order; and proceeded to outline the measures of reform and guaranties proposed. An internal loan was to be raised, as well as a forced loan, in order to reduce the floating debt. Further, since recovery to the extent necessary to pay reparation obligations was impossible without a restoration of the world's confidence in Germany, the Allies were asked to assist in floating an external loan for her. Strong measures, such as the abolition of the obligation to secrecy imposed on the banks, would be taken to prevent the removal of capital out of the country and the evasion of tax payments. The postal and telegraph systems were to be reformed and food subsidies were to be cut from 2½ billions of paper marks to 1 billion in 1922, thus tending further to increase the cost of living. In place of the existing unemployment relief system, insurance at the expense of employees and employed was to be instituted. The ordinary budget now showed an estimated surplus of 16½ billions\* (paper) toward reparation payments.

The evils of currency speculation had by this time become apparent, and accordingly a law was passed in March to check exchange speculation in Germany. Only through certain recognized exchange banks, including the Reichsbank, might dealings in exchange be undertaken. Even these banks were only permitted to sell foreign exchange after having obtained information as to the buyer's purpose and furnished a statement thereof to the tax collector.

\* Revenue, 103 billions; exp enditure, 86½ billions.

In answer to the German note, the Reparation Commission on March 21 announced its 1922 program of 720 millions (gold marks) in cash and 1,450 millions (gold marks) in goods. Germany had fulfilled her obligations under the 10-day installment plan, paying in all 282 millions. The commission, therefore, demanded 18 millions on April 15, 50 millions monthly from May 15 to October 15, inclusive, and 60 millions on November 15 and December 15.

This demand being a material reduction from the London schedule, certain conditions were imposed upon which the granting of the partial moratorium was dependent. These were in the form of specific obligations. Germany was to raise an additional 60 billions of paper marks in the coming fiscal year, of which 40 billions were to be raised in 1922. An internal loan, which must not take the form of treasury bills discounted at the Reichsbank, and which must be of sufficient amount to balance the budget, must be raised. Plans for this loan were to be submitted before April 30. The flight of capital was to be stopped. The Reichsbank must be made independent and the prewar system of economic and financial statistics reinstated. Expenditures were to be radically reduced and Germany was to submit to a system of supervision through obligatory consultations with the guarantees committee. Lastly, Germany must either float an international loan or make a levy on the personal and real property of its citizens in order to raise a substantial sum for reparation. The commission reserved the right to revoke the moratorium if at any time Germany should cease to comply with these conditions.

In his speech in the Reichstag on March 28, referring to the Allies' demands, Chancellor Wirth was very insistent upon the outright impossibility of raising a further 60 billions in taxation and mentioned that "the cost of the armies of occupation and control commissions, where there was nothing to control, was an exceedingly heavy burden on Germany." While the suggestion of economic and financial supervision was flatly rejected, Germany would certainly proceed to stringent economies in the Government departments. In the course of the speech 14 new taxes were proposed, as well as the forced loan of 1 billion gold marks, these being enacted early in April. The final terms of the loan, as adopted by the Reichsrath in May, were for the payment of no interest up to October, 1925, and 4 per cent thereafter.

Most of these points were contained in the reply sent to the commission. The inability of

Germany to raise the extra 60 billions demanded was reiterated, as was the refusal of consent to control of revenues and expenditures. Again it was emphasized that the only means of acquiring currency to meet the reparation payments was by a foreign loan. The commission, however, insisted on the execution of the measures laid down by them. Nevertheless, it expressed its willingness "to consider any plan which the German Government might \* \* \* propose, giving a reasonable prospect of dealing satisfactorily with the whole of the budget deficit." Coupled with the adherence to its previous decision was a threat<sup>7</sup> by the commission to exact penalties on May 31. Forthwith, therefore, Germany paid, on April 21, the first installment of 18 millions, and on May 16 the second of 50 millions.

In accordance with the commission's demands, Germany, at the end of May, set forth before it the steps taken toward the required financial reforms. The autonomy of the Reichsbank had been assured by the act of May 25, withdrawing from the Government the right of direct intervention in the conduct of the bank's operations, and the publication of statistics, as in pre-war days, reinstated. Economies of 24½ billions, as compared with the 1921 appropriations, had already been effected. With regard to financial control, Germany acquiesced in control by the commission of revenues and expenditures, provided it did not infringe on German sovereignty or violate secrecy as to the fortunes and incomes of taxpayers. Furthermore, Germany agreed to confer with the guarantees committee to work out suitable measures to stop the flight of capital. To this reply the commission gave its approval, and the partial moratorium was formally granted. Germany met the 50 millions installment due on June 15 by deposits in Paris, London, and Brussels.

#### NEGOTIATIONS FOR AN INTERNATIONAL LOAN.

In the meantime the commission had taken the step of appointing a subcommittee of experts to examine the possibilities of an international loan for Germany. The members appointed to this "bankers' committee," as it was popularly but improperly termed, were Signor d'Ameglio (Italy); M. Delacroix (Belgium), chairman; Sir R. Kindersley (Great Britain); Dr. G. Vissering (Holland); Mr. J. P. Morgan (United States); and M. Ch. Sergent

(France). The committee met on May 24 and, owing to a certain indefiniteness in its terms of reference,<sup>8</sup> requested from the commission a more precise definition of them. With regard to the most vital matter—that of the reparation payments—a majority of the commission saw no object to the committee's suggesting such readjustments as it thought a necessary incident to the proposed loan. This decision was concurred in by the British, Belgian, and Italian delegates and was personally agreed to by the American unofficial observer, but unanimity was prevented by the dissension of the French member. It was this fact which rendered the committee's work more or less abortive.

The committee pointed out in its final report that had the commission named a definite limit to any reduction of reparation payments it could have proceeded on its investigations upon a more stable basis. Failing this, had it been invited to name a limit to the payments which they thought necessary to any internal loan they would have done so. Such limit would merely have represented what popular opinion would judge to be well within Germany's capacity to pay. For want of either of these prerequisites of useful inquiry, the committee felt it could not usefully continue its discussions in response to the majority invitation of the commission, the reasons being twofold. First, France, being Germany's biggest creditor and also the dissenting member of the commission, the committee could not well proceed with its deliberations against the desire of France. Second, an unfavorable atmosphere for desirable achievement had been created by the dissensions in the commission.

The question was then taken up: Was a loan possible under circumstances of the present schedule of payments? The reply was in the negative, the avenue of approach to the problem being the possibility of various classes of investors becoming interested in such a loan. Underlying the whole question was the inability of Germany to give sufficient security. The investing public, lacking confidence in Germany's capacity to pay, and in her "will and intention" to do so, was at the present time in fear of social upheaval in Germany. Passing on, then, the committee found that "investors in the United States and Great

<sup>7</sup> "The commission would be obliged to exact penalties," was the actual wording used.

<sup>8</sup> According to Mr. J. P. Morgan there was a difference between the French and English texts of the terms of reference. "This difference touched the very root of the matter in that the French reading definitely prohibited the committee giving consideration of the schedule of payments as now determined \* \* \*. The English text, on the other hand, was susceptible of a broader interpretation."

Britain would find no real attraction in a loan to Germany which was not calculated to promote the permanent settlement of the reparation problem." At the same time, neutral investors would not be attracted, owing to their having suffered heavy losses in exchange speculation and industrial competition through the depreciation of the mark. And lastly, a loan would be difficult to raise in France, because only a part of it would find its way directly back to France in reparation payments. Clearly, then, what all this amounted to was an opinion, necessarily circumlocutory, that no loan could be floated without a radical reduction of the present schedule of payments of reparation.

The report went on to offer some general observations. An essential condition of any loan to Germany was that the investing public should feel Germany was doing her best to stabilize her finances. To this end the removal of uncertainty regarding reparation payments was essential. Mere leniency, without a modification of the total obligation, was not enough. Then, again, in order to attract the American investor, the loan would have to be raised at the unanimous request of the Allies. This is particularly interesting, in view of the statement that a loan might be impracticable unless it were preliminary to other financial adjustments, such as adjustments of the external indebtedness of the Allies.

From this report M. Ch. Sergent dissented, submitting that "he could not, in order to promote a loan, contemplate new limitations on Germany's liability which did not appear to him justifiable, nor any diminution whatsoever of the rights of France recognized by the treaty."

The results of the committee's work were, then, in a tangible sense disappointing. Nevertheless, they did, at least to some extent, put before the world the enormous difficulties, based on national economic circumstances, with which those attempting an all-round settlement were faced. On the one hand was the necessity of providing for the rebuilding of the devastated areas and their restoration to their pre-war productive capacity. On the other was the desire to restore the old freedom of economic intercourse and revival of European markets. Not confined to Europe, there was the further problem of reimbursing the United States for the financial assistance rendered both during and after the war to the allied nations. The impossibility under these circumstances of negotiating an international loan for Germany in itself added to the difficulties of the situation.

#### PROPOSALS FOR FINANCIAL SUPERVISION.

Following the receipt of the report the commission on June 14 advised Germany to prepare measures to establish reasonable limitations of the Reichsbank's right to issue. The committee on guarantees, in conjunction with the German Ministry of Finance, had in the meantime appointed four subcommittees to investigate, respectively, revenues and expenditures, the smuggling of capital out of Germany, the German floating debt, and imports and exports and industrial data and statistics. The result was the urgent call to the Reparation Commission to take steps to stop an imminent financial collapse in Germany, and the Fischer-Schroeder mission to confer with the commission.<sup>9</sup> The formal request for a 2½-year moratorium on cash payments was presented on July 12, and decision thereon deferred pending receipt of the full report of the guarantees committee.

Following the payment of the 32 millions of gold marks, mainly in the form of dollar exchange, on July 15 Chancellor Wirth, in a note to the Reparation Commission dated July 22, accepted certain further measures of financial control for the period of the expected moratorium. Representatives of the guarantees committee were to supervise all departments, particularly those dealing with revenue and expenditure, the movement of capital, and the publication of economic and financial statistics. Daily statements of the floating debt, daily reports on the Government's financial position, monthly accounts of the progress of tax collections, the receipts from customs, post offices, railroads, telegraphs, etc., and quarterly résumés of receipts and expenditures under the current budget were to be rendered to the committee. In addition, the committee was to be furnished with budget estimates, copies of all financial bills, and applications for supplementary budget credits. Statistics of foreign trade, inland and international transportation, and steel production were also to be supplied. The export of capital was to be severely penalized. A special department was to be set up in the Finance Ministry to pass upon all requests for the export of capital, and only those authorized were to be permitted to engage in the export trade. All these measures of financial control were to come into effective operation on November 1.

At this point a new element enters into the negotiations, for in reply to the German Gov-

<sup>9</sup> See January BULLETIN, p. 33.

ernment's expression of its intention to suspend payments to the clearing house, the French Government on August 1 made public a note threatening "measures of retortion" unless assurances were given by August 5 that the £2,000,000 due on August 15 would be paid.

Fearing the nature of these measures, the German banks, early in July, removed their Paris balances to banks in Holland and Switzerland. Failing to give the required assurances, the "measures of retortion" were inaugurated on August 5. These took the form of the suspension of adjustments then proceeding of claims between French and German nationals, the payments to Germans for war losses in Alsace-Lorraine, the arbitration of disputed claims, the liquidation of German property, the restitution of the household effects of Germans formerly resident in Alsace-Lorraine. Further, all German property in Alsace-Lorraine was placed under seal, France having the right to sell it should Germany fail to resume payments to French citizens.

On the due date only £500,000 of the agreed payments was handed over to the French and British clearing offices. At the London conference just closed, however, it had been agreed that payment must be made within one month, and that separate agreements should be made subsequently between Germany and the several Governments, with the approval of the Reparation Commission. Germany eventually failed to meet the balance of the August payment (£1,500,000) due on September 15, and, as already noted,<sup>10</sup> on October 23 was freed from further payments under the clearing-house scheme until July, 1923.

In the meantime the guarantees committee had completed its report, making its recommendations to the Reparation Commission on July 28. It suggested the elimination from the budget of 30 billions of marks (paper) unnecessary expenditure, the levying of a series of new and increased taxes, and the raising of an international loan, to be shared in equally by the Allies and Germany. In order to deal with the flight of capital, a matter causing increasing anxiety, the committee suggested supplementary measures to those of December, 1920, and March, 1922, already in force. Regular payments, in the ordinary course of business, might be made with a chamber of commerce authorization; but otherwise all payments abroad must be sanctioned by a foreign office visé. Exporters who could be shown to have held the

proceeds of exports abroad intentionally, and to the detriment of German economic life, should not be allowed to engage in any further exporting without special permission. Heavy penalties were to be levied for infractions of the rules.

To these measures, aimed at preventing the export of capital, were added others in the presidential decree of October 12. In addition to the rules mentioned, regarding the purchase of foreign currency, banks were debarred from purchasing foreign currencies except from such person who signed a document explaining his identity and the nature of his transaction. Permissible transactions did not include speculation or the use of foreign currency as an investment. Furthermore, the fixing of domestic prices in foreign currency—a practice which had grown common with the rapidly falling purchasing power of the mark—was forbidden.

The decision of the Reparation Commission postponing further cash payments due in 1922, and the agreement reached between Belgium and Germany in September, called for deliveries of German treasury bills in large amount. Accordingly, on September 25 the German Government handed over to the Reparation Commission 96 millions of gold marks in treasury bills, guaranteed by the Reichsbank, payable at the bank of England. This amount was in respect of the August and September payments, the balance of 4 millions being credited in respect of merchandise. Subsequently the Belgian Government announced that these bills had been discounted at English, American, and Swiss private banks. Further payments were made in accordance with the plan.

THE PAYMENTS—THEIR NATURE AND DISTRIBUTION.

At this time the latest published account of the Reparation Commission showed total payments by Germany, up to August 31, 1922, amounting to nearly 7½ billions of gold marks, made up as follows:

[Thousands of gold marks.]

	Payments made.	Balance owing.
(a) On pre-May 1, 1921, army costs and coal advances account.....	2,621,650	913,084
(b) On capital debt account.....	2,504,342	134,999,658
(c) On post-May 1, 1921, army costs account...	268,190	56,160
(d) On schedule of payments account:		
On installments due to Aug. 15, 1922.....	1,952,923	1,649,153
On installments falling due Oct. 15.....	38,023	138,023
Total.....	7,385,128	137,580,032

<sup>1</sup> Credit.

<sup>10</sup> See January BULLETIN, p. 35.



Of the amount paid, 21 per cent was in the form of gold and foreign currencies, 45 per cent in deliveries in kind, and 34 per cent in State properties in ceded territories. The following are the actual figures (in thousands of gold marks):

I. Gold and foreign currencies:	
(a) Direct payments.....	1,447,814
(b) Receipts from other sources on German account—	
1. Payment by Denmark re Schleswig-Holstein cession.....	65,000
2. Destroyed war material sold.....	44,692
3. Sundry items.....	4,738
<b>Total.....</b>	<b>1,562,244</b>
II. Deliveries in kind (provisional figures):	
(a) To allied and associated powers.....	3,260,878
(b) Sold to Luxemburg, Textile Alliance of United States, etc.....	57,664
<b>Total.....</b>	<b>3,318,542</b>
III. State properties in ceded territories (provisional and incomplete figures); exclusive of Schleswig-Holstein cession in I (b) 1.....	
<b>Total.....</b>	<b>2,504,342</b>
<b>Total.....</b>	<b>7,385,128</b>

Of the deliveries in kind the most important in point of amount were (a) rolling stock handed over under the armistice convention; (b) coal, coke, and lignite; and (c) ships; constituting 25, 26, and 21 per cent, respectively, of the total amount. Omitting deliveries under the armistice convention, coal, etc., has comprised 40 per cent of the deliveries and ships 33 per cent. The full details of the deliveries are given below (in thousands of gold marks):

Under armistice convention:	
Abandoned war material.....	317,804
Rolling stock (127,039 wagons, 4,553 locomotives).....	826,653
Motor lorries (4,959).....	17,509
Fixed railway material (1,896 metric tons).....	2,461
Agricultural material.....	22,709
Louvain library.....	1,451
Proceeds of reparation recovery act.....	114,744
Under Annex III:	
Ships (2,593,057 gross tons).....	706,129
Inland water craft and installations.....	24,836
Under Annex IV:	
Reconstruction material.....	19,810
Live stock (99,300 horses, 175,439 cattle, 218,076 sheep, 21,664 goats, 245,688 poultry).....	157,073
Miscellaneous under Annexes II and IV.....	110,268
Under Annex V:	
Coal, coke, and lignite (actual tonnage, 41,019,432 metric tons; coke, converted tonnage, 45,760,053 metric tons) ..	776,618
Coal, credit in suspense.....	30,970
By-products of coal (121,855 metric tons).....	22,855
Under Annex VI:	
Dyestuffs (17,363,990 kilograms).....	46,937
Pharmaceutical products (753,775 kilograms).....	12,813
Under Annex VII: Submarine cables.....	49,000
Miscellaneous.....	236
Sales by Reparation Commission:	
Coal, coke, and lignite to Luxemburg (actual tonnage, 2,525,314 metric tons; coke, converted tonnage, 3,406,387 metric tons).....	50,074
Dyestuffs to United States Textile Alliance (2,341,497 kilograms).....	4,564
Dyestuffs to German buyers (626,805 kilograms).....	3,026
<b>Total.....</b>	<b>3,318,542</b>

In the final table below there is shown the division of the receipts amongst the various powers:

## DISTRIBUTION OF RECEIPTS.

[Thousands of gold marks.]

	Cash and deliveries in kind.		Cessions of State properties on reparation account.	Total debits.
	In repayment of net army costs and coal advances.	Upon reparation account.		
United States.....	1 59,491			59,491
British Empire.....	2 955,161	141,922	538	1,097,621
France.....	3 1,322,709	101,013	2,042	1,425,764
Italy.....	39,106	157,723		196,829
Japan.....		8,978	59,000	67,978
Belgium.....	254,640	1,208,202	635	1,463,477
Other powers.....		136,627	6,031	142,658
<b>Total.....</b>	<b>2,631,107</b>	<b>1,754,465</b>	<b>68,246</b>	<b>4,453,818</b>
Cession to—				
France—Saar (provisional).....				300,000
Poland (provisional).....				1,730,582
Danzig (provisional).....				305,514
Other items in suspense and undistributed assets:				
Pre-May 1.....				563,289
Post-May 1.....				44,350
<b>Total.....</b>				<b>7,397,553</b>

<sup>1</sup> 1,007,283,000 gold marks still unpaid.

<sup>2</sup> 60,159,000 gold marks still unpaid.

<sup>3</sup> 155,635,000 gold marks still unpaid.

Reverting now to the figures of total payments, it is found that 39 per cent of the total was absorbed by the expenses of occupation and the coal advances made under the Spa agreement. If to the actual amount paid on this account be added the amount still owing, the full expenses of occupation and coal advances are equal to 56 per cent of the payments.

Another important fact is that up to August 31, 1922, Germany had reduced the capital sum owing by her by little more than 1 billion gold marks. This result of the early years of payment is made still less encouraging by the large proportion of the total payments which consist of the handing over of capital goods. What might be called "current payments"—that is, payments out of current production—amount to only 65 per cent of the total, or 4,766,356,000 gold marks. So that apart from cessions of State property, etc., the capital debt would have stood on August 31, 1922, at just about the amount at which it was fixed on May 1, 1921. Such, in a word, is the net result, from Germany's point of view, of the events outlined in the preceding series of articles.

**ADDENDUM—PAYMENTS UNDER OTHER TREATIES.**

*Treaty of Neuilly.*—The inter-allied commission appointed under the treaty with Bulgaria<sup>12</sup> began an investigation into the economic condition of the country in the spring of 1921, the result being the postponement of cash payments for one year. A further partial moratorium was proposed, subject to certain guaranties. These being unacceptable in toto, the commission announced, on July 21, 1922, that the full provisions of the treaty had again come into force, and that the 112,500,000 gold francs already due therefore became payable immediately. The annuity payable under the treaty amounts to about 131,000,000 gold francs (about 3½ billions of leva at present rates of exchange). The payments made up to August 31, 1922,<sup>13</sup> are as follows:

[Millions of leva.]

	Allied army in Bulgaria.	Various allied commissions.
Nov. 11, 1918, to Aug. 9, 1920.....	285.6	22.0
Aug. 9, 1920, to Apr. 1, 1921.....	6.7	53.8
Apr. 1, 1921, to Aug. 31, 1922.....	14.0	111.8
Private reclamations from Nov. 11, 1918, to Aug. 31, 1922.....	108.1	.....
Total.....	414.4	187.6

Thus, the Bulgarian Government has already paid about 600 millions of leva on occupation and control, an amount estimated<sup>13</sup> to be equivalent to some 2 millions of pounds sterling. In addition, there is still owing over and above these amounts a sum of 120 millions of leva in respect of the military mission of control. Up to May 31, 1922, deliveries in kind had been made valued at the following amounts:

	Millions of leva.
Railway material.....	250.0
Coal delivered to Serbia.....	195.0
Cattle delivered to Serbia, Greece, and Rumania..	162.5
Total.....	607.5

*Treaty of St. Germain.*<sup>14</sup>—The subcommittee of the Reparation Commission appointed to deal with the case of Austria began its work in November, 1919. In this case, however, the commission has been concerned, not so much with securing payments, but with extending

the relief which from time to time appeared necessary for Austria's rehabilitation.

Apart from the periodic extensions of credit the first important step to this end was taken in May, 1921, when a delegation, consisting of MM. Avenol (French) and Glückstadt (Danish) and Sir Drummond Fraser (British), submitted to the financial committee of the League of Nations a scheme of financial restoration. It was proposed to set up a new bank of issue, with one-half foreign capital, to be given a 25-year monopoly of note issue. The essential conditions for the inauguration of the scheme included the suspension for at least 20 years of liens held on Austrian assets in respect of reparation and relief credits. Great Britain and France thereupon agreed to accept a delay of 20 years in pressing their liens derived from the treaty of St. Germain.

During the early months of 1922 negotiations were proceeding for loans abroad, to be raised in England, Czechoslovakia, Italy, and France, but no success had been met with in attempts to secure financial aid from the United States. In June the Reparation Commission announced its preparedness to release for 20 years the revenue from State forests, salt mines, and domains as security for the new bank, and its approval in principle of the liberation of the customs and tobacco monopoly, to be used as security for a foreign loan. The actual release of the assets was communicated by the commission on August 5.

On September 20 the League authorized the raising of a loan by Austria up to 560 millions of gold crowns to meet the estimated budget deficits for the next two years. The internal financial reforms were to be controlled by a League of Nations committee, consisting of representatives of Great Britain, France, Czechoslovakia, and Italy.

Early in October these powers entered into an agreement assuring the maintenance of the territorial sovereignty and integrity of Austria, and that no economic or financial measures would be taken to threaten her independence. The loan to Austria was not to exceed 650 millions of gold francs, and the four powers were to guarantee the service of the annuity of the loan up to 80 per cent. Austria on her side agreed on financial reforms, the pledging of the customs and tobacco monopoly as security for the loan, and to dispose of none of the proceeds of the loan without the permission of a commissioner-general, appointed by the League of Nations.

<sup>12</sup> See November, 1922, BULLETIN, p. 1295.

<sup>13</sup> According to the London Economist, Nov. 18, 1922.

<sup>14</sup> See November, 1922, BULLETIN, pp. 1295, 1296.

## BUSINESS AND FINANCIAL CONDITIONS ABROAD.

### A NEW STATISTICAL SUMMARY.

In this issue of the BULLETIN there is published for the first time a condensed summary table of basic foreign statistics designed to show the trend of business in the United Kingdom, France, and Germany. For purposes of comparison a column has been added giving similar figures for the United States, wherever possible. The items selected have been grouped under three broad heads: (1) Credit; (2) prices and exchange; and (3) production and trade. For detailed information in regard to the sources from which the data have been obtained, reference should be made to page 184 of this issue.

The object in view has been to select from the mass of diverse statistical data published in the four countries such items as would be indicative of business trends and at the same time be reasonably comparable between the several countries. The limitations of the figures from the point of view of exact comparison are many and various, since the methods of collecting and classifying somewhat similar data frequently differ in different countries. More important still, aside from all questions of statistical exactness, it should be remembered that the same item has different degrees of importance in reflecting conditions in different countries. Thus, for instance, foreign trade is a better business index for the United Kingdom than for France. Moreover, in interpreting the changes from month to month it should not be forgotten that seasonal influences are to some extent responsible for the fluctuations of certain of the items.

Since the accompanying table is designed to show trends in business rather than the absolute amounts of items at a given time, the data are shown as relatives on a 1913 base (i. e., the 1913 monthly average is taken as 100) wherever sufficient data are available. In other cases the actual absolute figures are used and that fact is indicated by the word "actuals" after each item. It will be obvious from what has been said about the comparability of the data of different countries that comparisons from country to country in a single month are not particularly significant. In using the figures, therefore, it is the trend of an item for one country from month to month which should be compared with the trend of a somewhat similar—but usually not strictly comparable—item

for another country. That is, the figures in the table should generally be read vertically and the trends observed before comparisons are made from country to country.

The accompanying figures, although by no means complete, may be used as indicators of economic conditions in the countries considered. They reflect the expansion and contraction of credit, the increase and decrease of prices, the movement and exchange of goods, and the condition of employment. Thus, for example, it is possible to trace the easing of credit in the United Kingdom during 1922 by the fall in loans and deposits and the lowering of the discount rate from 5 per cent to 3 per cent between January and July. The French commercial banks, on the other hand, show a gain both in loans and deposits, though the change from 1921 is not great. Throughout 1922 money rates remained comparatively high in France, the Bank of France changing its discount rate only once. In Germany the enormous increase in the Reichsbank discounts and note issues, in spite of the sharp rise in the discount rate from 5 to 10 per cent during the second half of 1922, indicates extreme inflation and highly depreciated currency. The statistics for the United States, showing the definite turn toward a larger volume of deposits, discounts, and note issues in the middle of the year, differ markedly from the data for either England or France. In the field of production and trade the increased activity which has been going on in the United Kingdom and France, as well as in the United States, is clearly reflected by the data here presented. The figures for Germany are not so clear or conclusive by reason of the disturbing factor of progressive currency inflation. Nevertheless, shipping displayed much greater activity at German ports in 1922 than in the previous year, and the lower unemployment figures for 1922 indicate also greater industrial activity.

In general, a study and comparison of the various figures shows unmistakably an increase of business and industrial activity during the past year in these countries. A somewhat detailed analysis of credit and business situation in England and France during 1922 will be found below. Similar studies of conditions in Germany and Italy will be presented in the March issue of the BULLETIN.

THE TREND OF BUSINESS ABROAD.<sup>1</sup>

Items.	United Kingdom.	France.	Germany.	United States.	Items.	United Kingdom.	France.	Germany.	United States.
<b>I. CREDIT (Actuals).</b>					<b>III. PRODUCTION AND TRADE.</b>				
<b>COMMERCIAL BANK LOANS:</b>					<b>PIG IRON PRODUCTION (relatives):</b>				
1921—January.....	1,207	13,132	.....	12,956	1921 average.....	26	65	.....	51
April.....	1,127	13,272	.....	12,249	1922 average.....	48	.....	.....	88
July.....	1,191	12,728	.....	11,662	1922—January.....	34	72	.....	64
October.....	1,196	13,375	.....	11,422	April.....	46	88	.....	82
1922—January.....	1,192	13,030	.....	10,919	July.....	47	99	.....	91
April.....	1,035	13,139	.....	10,816	October.....	56	116	.....	104
July.....	1,056	13,181	.....	10,739	November.....	58	118	.....	111
October.....	1,033	13,549	.....	11,249	December.....	62	.....	.....	121
November.....	1,031	.....	.....	11,219	<b>COAL PRODUCTION (relatives):</b>				
December.....	1,031	.....	.....	11,329	1921 average.....	77	97	.....	85
<b>COMMERCIAL BANK DEPOSITS:</b>					1922 average.....	88	.....	75	85
1921—January.....	1,810	12,749	.....	10,643	1922—January.....	80	101	81	91
April.....	1,710	12,933	.....	10,138	April.....	83	96	78	40
July.....	1,785	12,575	.....	10,062	July.....	84	103	67	43
October.....	1,602	13,019	.....	10,192	October.....	96	113	75	113
1922—January.....	1,826	12,880	.....	10,271	November.....	98	.....	73	114
April.....	1,737	13,015	.....	10,676	December.....	94	.....	64	117
July.....	1,730	13,063	.....	11,043	<b>UNEMPLOYMENT:<sup>2</sup></b>				
October.....	1,686	13,527	.....	11,162	1921 average.....	13.8	20,671	165	85
November.....	1,667	.....	.....	11,091	1922 average.....	13.3	1,679	.....	.....
December.....	1,685	.....	.....	11,255	1922—January.....	16.2	4,658	150	89
<b>CENTRAL BANK DISCOUNTS:</b>					April.....	14.4	2,447	113	84
1921—January.....	75,107	3,068	53	2,456	July.....	12.3	602	103	88
April.....	86,641	2,884	61	2,064	October.....	12.0	272	129	94
July.....	78,001	2,769	81	1,650	November.....	12.4	285	.....	96
October.....	82,203	2,473	100	1,309	December.....	12.2	414	.....	.....
1922—January.....	83,667	2,392	128	850	<b>BANK CLEARINGS (actuals):</b>				
April.....	78,461	2,580	158	500	1921 average.....	2,911	550	89	15,963
July.....	72,248	2,103	216	380	1922 average.....	3,097	525	.....	16,625
October.....	71,435	2,152	578	469	1922—January.....	3,399	489	117	15,872
November.....	67,936	2,818	919	614	April.....	3,305	411	176	13,671
December.....	78,158	2,401	1,607	630	July.....	3,236	562	243	16,343
<b>CENTRAL BANK NOTE ISSUES:</b>					October.....	3,124	556	789	18,424
1921—January.....	452	37,913	67	3,091	November.....	2,989	783	1,464	17,133
April.....	447	38,211	71	2,830	December.....	2,769	630	.....	19,586
July.....	434	36,941	77	2,538	<b>SHIPPING ACTIVITY (relatives):</b>				
October.....	416	37,154	92	2,409	1921 average.....	54	83	67	116
1922—January.....	408	36,433	115	2,184	1922 average.....	88	.....	92	120
April.....	405	35,787	140	2,158	1922—January.....	69	89	74	89
July.....	400	36,050	190	2,127	April.....	74	96	94	109
October.....	388	36,694	469	2,299	July.....	85	116	90	141
November.....	390	36,114	754	2,330	October.....	99	107	108	135
December.....	405	36,359	1,280	2,464	November.....	100	113	89	139
<b>CENTRAL BANK DISCOUNT RATE (p.ct.):</b>					December.....	91	.....	88	109
1921—January.....	7	6	5	7	<b>VALUE OF EXPORTS (actuals):</b>				
April.....	64	6	5	7	1921 average.....	58,600	1,796	.....	373,760
July.....	54	54	5	54	1922 average.....	60,011	1,890	331	319,316
October.....	54	54	5	44	1922—January.....	63,147	1,639	325	278,898
1922—January.....	5	54	5	44	April.....	55,508	1,993	326	318,100
April.....	4	5	5	44	July.....	60,419	1,433	337	301,313
July.....	3	5	6	4	October.....	60,399	1,937	290	370,720
October.....	3	5	8	4	November.....	63,491	1,766	255	380,052
November.....	3	5	10	4	December.....	58,883	3,079	423	344,425
December.....	3	5	10	4	<b>VOLUME OF EXPORTS (relatives):</b>				
<b>II. PRICES AND EXCHANGE.</b>					1921 average.....	51	74	28	109
<b>WHOLESALE PRICE INDEX (relatives):</b>					1922 average.....	66	102	29	101
1921 average.....	201	321	* 2,130	148	1922—January.....	61	85	33	95
1922 average.....	167	298	32,715	157	April.....	67	98	35	106
1922—January.....	170	286	4,217	142	July.....	65	105	27	95
April.....	167	299	6,703	149	October.....	70	111	25	120
July.....	171	307	9,102	165	November.....	111	25	112	.....
October.....	163	294	43,223	165	December.....	132	29	.....	.....
November.....	165	307	94,492	164	<b>VALUE OF IMPORTS (actuals):</b>				
December.....	165	315	166,495	164	1921 average.....	90,458	1,962	.....	209,085
<b>RETAIL PRICE INDEX (relatives):</b>					1922 average.....	83,680	1,992	517	.....
1921 average.....	226	337	1,199	153	1922—January.....	76,488	1,488	330	217,195
1922 average.....	183	301	13,433	142	April.....	80,661	1,744	508	217,073
1922—January.....	192	319	1,825	142	July.....	81,784	1,995	685	252,128
April.....	182	304	3,175	139	October.....	85,015	2,109	532	319,000
July.....	184	297	4,996	142	November.....	95,600	2,348	535	.....
October.....	178	290	19,564	143	December.....	94,912	2,923	.....	.....
November.....	180	297	40,047	145	<b>VOLUME OF IMPORTS (relatives):</b>				
December.....	180	305	61,156	147	1921 average.....	75	91	36	136
<b>FOREIGN EXCHANGE (per cent of par):</b>					1922 average.....	82	116	63	.....
1921—January.....	78.9	33.3	6.716	.....	1922—January.....	72	92	38	160
April.....	80.7	37.5	6.600	.....	April.....	80	103	48	169
July.....	74.6	40.5	5.467	.....	July.....	92	115	79	158
October.....	79.6	37.6	2.882	.....	October.....	86	123	91	.....
1922—January.....	86.8	42.3	2.185	.....	November.....	.....	124	75	.....
April.....	90.7	47.8	1.452	.....	December.....	.....	132	71	.....
July.....	91.4	42.7	.857	.....					
October.....	91.2	38.2	.139	.....					
November.....	92.1	35.5	.058	.....					
December.....	94.7	37.5	.062	.....					

<sup>1</sup> The sources of data and the units employed in this table are listed on pp. 184, 185.  
<sup>2</sup> For January.  
<sup>3</sup> For the United States an index of employment, instead of unemployment, is shown.

## THE TREND OF BUSINESS ABROAD— SOURCES.

The sources from which the summary table on the preceding page has been compiled are given below:

### I. CREDIT.

#### Commercial bank loans.

*United Kingdom.*—Discounts and advances of the nine London clearing banks, expressed in millions of pounds sterling.

*France.*—The following items of three commercial banks, expressed in millions of francs:

Comptoir National d'Escompte: (a) Portefeuille et bons de la Défense Nationale; (b) Reports (stock exchange loans); (c) Correspondants; (d) Comptes courants débiteurs; (e) Avances sur garanties.

Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France: (a) Portefeuille; Effets (bills) et bons de la Défense Nationale; (b) Reports; (c) Avances sur garanties; (d) Comptes courants divers.

Crédit Lyonnais: (a) Portefeuille et bons de la Défense Nationale; (b) Avances sur garanties et Reports; (c) Comptes courants.

*United States.*—Loans of 800 reporting member banks in leading cities, expressed in millions of dollars. These appear under the caption: Total loans and discounts, including bills rediscounted with the Federal reserve banks.

#### Commercial bank deposits.

*United Kingdom.*—Deposits of the nine London clearing banks, expressed in millions of pounds sterling.

*France.*—The following items of the three commercial banks, expressed in millions of francs:

Comptoir National d'Escompte: (a) Comptes de chèques et comptes d'escompte (checking and other deposit accounts); (b) Comptes courants créditeurs.

Société Générale pour Favoriser le Développement du Commerce et de l'Industrie en France: (a) Comptes de chèques; (b) Comptes courants divers.

Crédit Lyonnais: (a) Dépôts et bons à vue (time and demand deposits); (b) Comptes courants.

*United States.*—Net demand deposits of 800 reporting member banks in leading cities, expressed in millions of dollars.

#### Central bank discounts.

*United Kingdom.*—Figures in the Bank of England statement appearing under the heading of "Other securities," expressed in millions of pounds sterling. These are largely, but not exclusively, commercial bills.

*France.*—The following items from the statement of the Bank of France, expressed in millions of francs: (a) Portefeuille—Effets sur Paris; Effets sur l'Étranger (foreign bills); (b) Portefeuille de succursales (branches).

*Germany.*—The following items from the statement of the Reichsbank, expressed in billions of marks: (a) Wechsel und Schecks (bills); (b) Diskontierte Reichsschatzanweisungen (discounted treasury bills).

*United States.*—Discounts of the Federal reserve banks, including those secured by United States Government obligations, expressed in millions of dollars.

#### Central bank note issues.

*United Kingdom.*—The sum of Treasury notes and certificates outstanding and Bank of England notes in circulation, less bank notes held as part cover for currency notes, expressed in millions of pounds sterling.

*France.*—Billets au porteur (bearer notes) en circulation of the Bank of France, expressed in millions of francs.

*Germany.*—Notenumlauf (note circulation) of the Reichsbank, expressed in billions of marks.

*United States.*—Federal reserve notes in circulation, expressed in millions of dollars.

#### Central bank discount rate.

*United Kingdom.*—Discount rate of the Bank of England.

*France.*—Discount rate of the Bank of France.

*Germany.*—Discount rate of the Reichsbank.

*United States.*—Discount rate on commercial paper of the New York Federal Reserve Bank.

### II. PRICES AND EXCHANGE.

#### Wholesale price indexes.

*United Kingdom.*—The index number computed by the Federal Reserve Board, using an arithmetic average weighted according to 1913 production and trade, with average prices in 1913 taken as 100.

*France.*—The index number computed by the Federal Reserve Board according to the same method as for the United Kingdom.

*Germany.*—The index number computed by the Frankfurter Zeitung, using an arithmetic mean of relative prices of 98 commodities weighted to some extent by the system of multiple quotations. Prices of July, 1914, equal 100.

*United States.*—The index number computed by the Federal Reserve Board according to the same method as for the United Kingdom.

#### Retail price indexes.

*United Kingdom.*—The index number of cost of living constructed by the Ministry of Labor, using the retail prices of food and clothing, rents, and the cost of fuel and lighting, weighted according to the importance of the items in the budgets of working class families. Prices in July, 1914, are taken as 100.

*France.*—The index number computed by the General Statistical Office, using the retail price of 13 commodities in Paris, weighted according to the average annual consumption of a workingman's family of four persons. Prices in July, 1914, are taken as 100.

*Germany.*—The index of cost of living computed by the Federal Statistical Bureau, using prices of food, fuel, light, and rent in 46 cities. The year 1913-14 is taken as 100.

*United States.*—The index computed by the Bureau of Labor Statistics, using the retail prices of 43 commodities in 56 cities, weighted according to family consumption. The average for 1913 is taken as 100.

#### Foreign exchange.

*United Kingdom, France, Germany.*—Monthly averages of noon buying cable rates on London, Paris, and Berlin, in the New York market, expressed as percentages of par.

### III. PRODUCTION AND TRADE.

#### Pig iron.

*United Kingdom.*—Total production during the month as compiled by the National Federation of Iron and Steel Manufacturers, reduced to a relative on the base of average monthly production in 1913.

*France.*—Total production during the month as published in the League of Nations Monthly Bulletin of Statistics, reduced to a relative on the base of average monthly production in 1913.

*United States.*—Total production during the month as reported by the U. S. Geological Survey, reduced to a relative on the base of average monthly production in 1913.

#### Coal.

*United Kingdom.*—Average weekly production for the month, as published by the Board of Trade, reduced to a relative on the base of average production in 1913.

*France.*—Monthly production as published in the League of Nations Monthly Bulletin of Statistics, reduced to a relative on the base of average production in 1913. Since 1920 the figures include the output of Lorraine and the Saar.

*Germany.*—Monthly production as published in Glückauf, reduced to a relative on the base of average production in 1913.

*United States.*—Monthly production as reported by the U. S. Geological Survey, reduced to a relative on the base of average production in 1913.

#### Unemployment.

*United Kingdom.*—The percentage of unemployed in insured trades, as published in the Ministry of Labor Gazette.

*France.*—The actual number of unemployed in the city of Paris at the end of the month, as published in the Bulletin du Ministère du Travail.

*Germany.*—The number of applicants for every hundred available positions, as published in the Reichsarbeitsblatt.

*United States.*—An index of employment in 12 representative trades, computed from statistics published in the Monthly Labor Review, weighted according to the relative importance of the different trades in the census of 1910, with 1919 average employment taken as 100.

#### Bank clearings.

*United Kingdom.*—Total clearings for the month as published by the London Bankers Clearing House, expressed in millions of pounds sterling.

*France.*—Average daily clearings of the Chambre of Compensation of Paris, expressed in millions of francs. Since Dec. 1, 1917, 34 banks in Paris have reported.

*Germany.*—Total clearings during the month of the Reichsbank, expressed in billions of marks.

*United States.*—Total debits to individual accounts during the month by banks in 140 reporting centers, not including New York City, as compiled by the Federal Reserve Board, expressed in millions of dollars.

#### Shipping activity.

These figures, expressed originally in net tons, have been reduced to relatives, with 1913 averages as bases.

*United Kingdom.*—Total of ships cleared with cargoes, as published in Accounts relating to Trade and Navigation.

*France.*—Total of ships cleared with cargoes, as published in the League of Nations Monthly Bulletin of Statistics.

*Germany.*—Ship arrivals at Hamburg as published in Wirtschaftsdienst.

*United States.*—Total of ships cleared with cargoes, as published in Monthly Summary of Foreign Commerce of the United States.

#### Value of exports.

*United Kingdom.*—The value of total exports of domestic merchandise as published in Accounts Relating to Trade and Navigation, expressed in thousands of pounds sterling.

*France.*—The value of total exports as published in the Documents Statistiques sur le Commerce de la France, expressed in thousands of francs.

*Germany.*—The value of total exports as published in the Monatliche Nachweise über den Auswärtigen Handel Deutschlands, expressed in thousands of gold marks.

*United States.*—The value of total exports as published in the Monthly Summary of the Foreign Commerce of the United States, expressed in thousands of dollars.

#### Volume of exports.

*United Kingdom.*—Volume of exports, evaluated at 1913 prices and reduced to relatives with the corresponding figure for 1913 taken as 100. These figures are calculated quarterly by the Board of Trade.

*France.*—Tonnage of exports reduced to a relative, with 1913 average tonnage taken as 100.

*Germany.*—Tonnage of exports reduced to a relative, with 1913 average tonnage taken as 100.

*United States.*—The Federal Reserve Board foreign trade index indicating relative quantities of principal exports at 1913 prices, with 1913 monthly average value taken as 100.

#### Value of imports.

These are compiled from the same sources as the value of exports.

#### Volume of imports.

These are compiled from the same sources as volume of exports.

### UNITED KINGDOM.

#### ECONOMIC AND FINANCIAL CONDITIONS IN 1922.

*General survey.*—The year 1922 is noteworthy in that it marked a definite upturn in British business following the extreme depression of 1921. The principal lines of industry have been more active, production has increased, and especially toward the end of the year foreign trade has been expanding. Sterling exchange, moreover, increased during December to a point within 20 cents of gold parity. In spite of such indisputable signs of improvement, conditions in England are far from normal. Unemployment is still widespread, and many workers are being retained on only a part-time basis. As the present year opened, the internal situation in England appeared to be fundamentally sound and slowly improving, but the uncertainty of European affairs, and above all the disturbed state of Britain's European markets, make the prospect of further immediate progress doubtful.

*Industry and trade.*—No serious labor disturbances such as those which gravely affected industry in 1921 occurred during the past year. The result was that the principal industries were able to maintain a steady and

generally increasing output throughout the year. Coal production toward the end of the year had expanded to almost the pre-war volume, partly in response to the greater demand from domestic industries and partly to the demand from the United States and Germany. Exports of coal were largely in excess of those in either of the two years preceding, but were not up to the pre-war level. Production of pig iron likewise showed a steady increase throughout the year, but was still not much more than 50 per cent of the average monthly output in 1913. Semimanufactured and finished steel products were also turned out in steadily larger quantities throughout 1922, but they were well below the average monthly output for either 1920 or 1913. In the textile trades the situation improved very decidedly as compared with the previous year.

The foreign trade results of the year afford ground for encouragement when compared with the immediate past, although the situation is still far from normal or satisfactory. Among the favorable aspects is the reduction in the adverse visible trade balance by more than £100,000,000 in 1922. In the latter part of the year exports of coal and of iron and steel were particularly heavy, the foreign demand for these products having the effect, as already indicated, of stimulating production. In the case of imports the somewhat larger receipts of raw cotton and raw wool show up favorably, as do the importations of raw hides. If, however, comparison is made with the 1913 figures, it becomes evident at once that trade in most lines is far from its pre-war level, and that too much optimism may easily result from noting the degree of progress since the extreme depression of 1921.

*The money market.*—The general tendency of money rates was downward during the first half of 1922, after which the market steadied for a time and then stiffened toward the end of the year. The Bank of England discount rate was 5 per cent at the beginning of 1922, was reduced to 4½ per cent on February 16, to 4 per cent on April 13, to 3½ per cent on June 15, and finally to 3 per cent on July 13, where it has since remained. The rate paid by the joint-stock banks on deposits was kept at 2 per cent below the Bank of England rate, so that during the latter part of the year depositors were receiving only 1 per cent for the use of their funds. Both the banks and the discount houses as a result of this rather wide differential have been enabled to do better

than might be expected in the face of low interest rates and the abnormal state of trade. Nevertheless, bank profits have been quite generally reduced, as the recently issued yearly statements of the banks disclose. As illustrations may be mentioned the London Joint City and Midland Bank, whose net profits in 1922 were £2,253,492 as compared with £2,454,083 in 1921, and Lloyds Bank, whose profits in 1922 were £2,068,875, a reduction of some £460,000 below the preceding year.

*Government finances.*—The position of the Government will be clearer when the results of the entire fiscal year ending March 31 are available, but the details of revenue and expenditure for the first nine months are nevertheless instructive. Revenues have thus far exceeded expenditures by nearly £13,000,000, as compared with a deficit of over £63,000,000 in the same period of the previous fiscal year. This year both expenditures and receipts have been lower, but whereas the latter dropped £91,000,000, expenditures have been cut down by £167,000,000, giving rise to the surplus already mentioned. An analysis of the individual items under the head of receipts shows that the principal reduction has been in special miscellaneous receipts, which comprise sales of surplus war stocks and the like. Net returns from the excess-profits duty have almost disappeared, being less than £1,000,000 in the nine months as against estimated net receipts of about £28,000,000 from that source for the entire fiscal year. The income tax, on the other hand, has yielded more than was expected, showing an increase of £13,000,000 over the same period of the previous year, although a reduction of some £70,000,000 for the full year was anticipated when the Government made up its budget. It may be noted here that the new income tax rate of 5s. instead of 6s. in the pound did not become effective as regards payments until after December 31.

Under the head of Government expenditure, reductions are to be noted in all of the principal items. The largest savings in the first nine months of the current fiscal year, compared with the same period a year earlier, were £96,000,000 in the civil services, £45,000,000 in the army, navy, and air services, £14,000,000 in the revenue and post-office departments, and £11,000,000 in war-debt interest, etc. Unless supplementary expenditures of large amount are necessary in the remaining three months of the fiscal year, the Government



accounts should balance with something to spare.

An important feature of Government financial operations during the year has been the continued reduction in the floating debt. On December 31, 1922, the total floating debt amounted to £941,000,000, of which £719,000,000 was in the form of short-term treasury bills and the remainder in temporary advances on the credit of ways and means. As compared with the figures for the end of the previous year, this represents a decline of £341,000,000 in treasury bills, which, coupled with an increase in temporary advances, brings about a net reduction of £319,000,000 in the total floating debt. Most of this reduction occurred in the first quarter of 1922, the decrease in the floating debt since the beginning of the new fiscal year in April being £88,000,000. In the first nine months of the fiscal year, nevertheless, there has been a net reduction of some £163,000,000 in treasury bills outstanding. Retirement of war bonds and other obligations during this period brings the total net retirement to about £260,000,000. The surplus of revenues over expenditures, as indicated above, has been £13,000,000, so that, allowing for a reduction of £8,000,000 in exchequer balances, it has been necessary to create new debt to the amount of £239,000,000. Treasury bonds of varying maturities totaling nearly £133,000,000 have been issued to supply the larger part of the required sum, while the remainder has been provided for through national savings certificates (£30,000,000 net) and through additional temporary advances (nearly £75,000,000). As a result of the Government's conversion and funding operations during the year, the nominal amount of the national debt has been slightly increased at the same time that the burden of interest charges has been considerably reduced.

#### FRANCE.

##### REVIEW OF THE YEAR 1922.

The year 1922 was marked by notable improvement in practically all branches of French industrial and commercial activity. Production was high in most lines; crops, with the exception of wheat, were good; railway traffic increased and foreign trade, measured by volume, was materially in excess of pre-war figures; labor was continuously employed, and the savings of the people supplied capital for increasing the means of pro-

duction, especially through the restoration of the devastated regions.

Financially, the year was less bright. New capital could be obtained only at high rates. Bank figures show little reflection of the increased activity. Exchange rates closed the year at low levels. The Government, still unable to balance even its ordinary budget, was obliged to continue borrowing on most burdensome terms. Yet even the rather gloomy financial record of the year is not without encouraging signs. For the first year since 1913 the floating debt of the Government was not increased. The average volume of the note circulation was lower than in the preceding years, and the Government succeeded in reducing its expenditures while at the same time its income was considerably increased.

#### INDUSTRY AND TRADE.

*Production.*—Industrial activity, which in January, 1922, had rebounded somewhat from the depression of 1921, continued to increase throughout the year. The figures for iron and steel are particularly important, as they give some evidence of the fundamental change in French economics brought about by the recovery of Lorraine. For December, 1921, pig-iron production was 301,000 metric tons; in November, 1922, it had reached 513,000 metric tons. The significance of these figures is emphasized by the statement that French production of pig iron exceeded that of Great Britain in every month but two of the year. Production of crude steel increased throughout the year, though not on the same scale.

The metallurgical industry of France, it should be remembered, is dependent upon imported coal and coke. France is now producing within its own borders about three-fourths as much coal as before the war, and production is showing a steady but slow increase. It is, however, far from sufficient for current needs, and practically none of it is capable of reduction to coke. The principal outside sources are the Saar, Germany (the Ruhr), England, and Belgium. Production in the Saar was much higher than in 1920 or 1921, and is virtually at the 1913 level; consequently, not much further increase is to be anticipated. Germany, in the first 10 months of 1922, exported to France 7,031,369 metric tons, which is about 90 per cent of the 1921 deliveries (7,755,895 metric tons). As German



deliveries declined while the needs of French industry were expanding, imports from England were enormously increased, rising from 4,028,976 metric tons for the first 10 months of 1921 to 9,780,081 metric tons for the same period in 1922. The influence of these increased coal purchases in England was a major factor in the decline of French exchange in the latter half of the year.

Despite the radical economic changes introduced by the war, agriculture is still the leading industry of France. Crops in general were good, the wheat crop being poor and the potato and sugar-beet crops excellent. Wine production was exceptionally large. This situation necessitated heavy imports of wheat, but these can not be offset by exports of wine. In 1913 Germany and England were heavy importers of French wines, but exports to both these countries were much reduced in 1922.

*Internal trade.*—The year witnessed also increasing activity in internal trade. This is shown clearly in railroad traffic and earnings and in the figures for the sales tax.

The following table shows the receipts of the principal French railway companies for 1922.

#### FRENCH RAILWAY RECEIPTS FOR 1922.

[In thousands of francs.]

Railway.	Receipts for 1922.	Increase over 1921.	Percentage of increase.
Nord.....	1,100,100	109,531	11.0
Est.....	1,003,038	102,924	11.4
P. L. M.....	1,800,950	114,855	6.38
Paris-Orléans.....	917,817	10,823	1.2
Midi.....	462,460	17,243	3.87
State Railway.....	1,004,777	53,601	5.64

The net deficits, which must be made up by the State under the guarantee law, are given in the following table:

[In millions of francs.]

Railroad.	1920	1921	1922
Nord.....	578	233	170
Est.....	303	160	80
Paris-Lyon-Méditerranée.....	644	426	230
Paris-Orléans.....	494	385	250
Midi.....	275	184	150
State Railway.....	718	696	430
Total.....	3,012	2,084	1,310

This betterment is supported by the figures for car loadings, which have shown an irregu-

lar increase throughout the year, with this tendency becoming more pronounced in the fall months.

#### DAILY AVERAGE FREIGHT CAR LOADINGS.

1922—July.....	50,031	1922—October.....	57,185
August.....	51,095	November... ..	56,046
September.. ..	53,155	December... ..	55,848

The more recent figures are still below the 1913 average of 60,000, though the present totals include Alsace and Lorraine, which account for more than 10 per cent of the loadings. The recovery of the railroads from the impoverished position in which they were left by the war and the remarkable improvement in their situation in the last two years are most encouraging signs. It is to be noted that none of the lines is yet free from the need of State aid under the guaranty law described in detail in the FEDERAL RESERVE BULLETIN of November, 1922; but the draft upon the treasury has been reduced by over 50 per cent from 1920.

The returns from the turnover tax also show evidences of increasing business activity.

#### RECEIPTS FROM THE TURNOVER TAX.

[In millions of francs.]

	1921	1922		1921	1922
January.....	183	192	July.....	146	197
February.....	152	165	August.....	147	188
March.....	148	169	September.....	157	187
April.....	157	183	October.....	168	208
May.....	146	180	November.....	172	210
June.....	147	189	December.....	173	213

These figures indicate progress during recent months, though their reliability as a business index is yet to be tested, as the tax has not been in operation a sufficient time. The recent figures, however, are still far from equaling the monthly average of the third quarter of 1920 (the first three months of its operation), namely, 309,381,000 francs.

*Foreign trade.*—The complete figures for 1922 are given on page 216. At the date of writing, detailed statistics for the first 11 months only are available. These figures show an apparently favorable balance of trade with England, Germany, Belgium, Switzerland, and Spain, and unfavorable balances with the other countries reported. The following table shows the trade relations with the principal commercial countries:

**FOREIGN TRADE OF FRANCE (COMMERCE SPÉCIAL) IN FIRST 11 MONTHS OF 1922.**

[In millions of francs.]

Country.	Imports to France.	Exports from France.
England.....	2,981	3,236
Germany.....	1,170	1,592
Belgium.....	1,499	3,297
Switzerland.....	483	674
Italy.....	722	628
United States.....	3,356	1,807
Brazil.....	397	131
Argentina.....	706	256

In the first 11 months trade with England nearly balanced. Belgium was the best customer of France, while the latter purchased more in the United States than in any other one country.

In value, the principal imports of France from the United States have been as follows:

[In millions of francs.]

Merchandise.	First 11 months—		Merchandise.	First 11 months—	
	1921	1922		1921	1922
Cereals.....	510	173	Heavy oil.....	768	161
Sugar.....	74	172	Iron and steel.....	70	145
Tobacco.....	65	123	Copper.....	158	214
Cotton.....	918	987	Machinery.....	254	124
Mineral oil.....	653	521	Coal.....	189	2

Perhaps the most interesting of these items is that of cereals. Although her own crop was poor, France reduced her purchases of cereals from 50,860 metric tons to 33,304 metric tons in 1922. France has been purchasing less wheat in the United States and more from the Argentine; but imports of oats and corn from the United States show notable increases.

*Labor situation.*—The revival of industry has eliminated what little unemployment there was in France in 1921. Although at no time since the war could unemployment in France be considered a vital problem, the course of unemployment is summarized here to draw attention to data of this kind as a very valuable index of the economic condition of the country. The peak of unemployment was reached in March, 1921, when unemployment relief was extended to 45,504 persons (March 11). The same month the number of situations found for the unemployed reached its lowest. From that time the recovery was very rapid; and it is perhaps significant that the turn in employ-

ment figures was the first indication of recovery from the business depression of 1920-21. During 1922 unemployment was at all times negligible, but the decline in the number of persons aided in Paris from 4,658 (January 21), the high point of the year, to the low figure of 272 (October, 1922) indicates the trend. While these numbers do not include all persons out of work, they furnish a valuable index of unemployment. During the year there were only two strikes of consequence, a metal workers' strike at Havre and the shipping strike. The former has had no lasting result; but the latter, which arose from an attempt to modify the 8-hour law, has brought considerable losses to French shipping.

There is at present a shortage of labor in France. The demand for workers at high wages for restoring the devastated regions has depleted the supply of labor, particularly in the coal mines. To an extent this shortage is being met by immigration, notably from Italy and Poland.

**FINANCE.**

*Money rates.*—While business was showing remarkable improvement in 1922, financial recovery was still opposed by numerous obstacles. With the Government still a constant borrower in competition with the urgent needs of industry, money rates remained high. Early in the year an attempt was made to reduce these rates. On March 11 the Bank of France reduced its discount rate from 5½ to 5 per cent, and the same day the reduction in the rate on bons de la Défense Nationale was put into effect. The following table shows the average rate on the issues of new securities tabulated by the Association Nationale des Porteurs Français de Valeurs Mobilières.

**INTEREST RATE ON NEW SECURITY ISSUES.**

Jan.....6.66	May.....6.37	Sept.....6.36
Feb.....6.61	June.....6.30	Oct.....6.41
Mar.....6.57	July.....6.02	Nov.....6.59
Apr.....6.45	Aug.....6.32	

This table is valuable because it shows the trend, but it does not accurately depict the cost of capital. Some of the issues are tax free; in others the tax is assumed by the issuing corporation, so that for October the cost of money for an industrial enterprise of high standing would have been nearly 8 per cent. In October several departments were authorized to contract loans; the maximum rates authorized ranged from 7.95 per cent to 8.10

per cent, though none was for a sum of over 750,000 francs and most of them were for much smaller amounts. It will be recalled that on the 3-5 year treasury loan of October the Government had to pay over 6½ per cent. In December the Crédit Foncier reduced charges on mortgage loans to municipalities from 7.60 to 7.45 per cent and to private persons from 8.25 to 7.60 per cent.

*Security markets.*—In spite of the price of money, a great number of new issues was brought out.

#### SECURITY ISSUES FOR 1922.

[In millions of francs.]

Month.	Industrial. <sup>1</sup>	Railroad.	Treasury bills.
January.....	791	241	1,367
February.....	5,054	285	2,305
March.....	456	392	747
April.....	340	222	689
May.....	769	185	1,362
June.....	3,989	333	920
July.....	125	271	*1,284
August.....	92	1,804	412
September.....	601	34	1,011
October.....	421	.....	702
November.....	179	.....	*8,190

<sup>1</sup> Includes Crédit National issues in February and June.

<sup>2</sup> Also 33,000,000 francs obligations de la Défense Nationale issued in January and February.

<sup>3</sup> Cancellations exceeded new sales.

<sup>4</sup> 3-5 year Treasury bonds. Figure of Treasury bills unavailable.

The course of securities listed on the Paris Bourse shows two distinct movements. During the early part of the year, when business was still dull, securities bearing a fixed rate of return advanced; during the latter part of the year popular interest turned to securities of variable return, including foreign bonds whose interest is payable in currencies higher or more stable in value than the franc.

#### INDEX NUMBERS OF SECURITY PRICES (STATISTIQUE GÉNÉRALE.)

[End of month figures, 1901-1910=100.]

	Securities with fixed return.	Securities with variable return.
Average:		
1913.....	91.3	127
1919.....	75.8	157
1920.....	67.9	192
1921.....	65.9	145
1922—January.....	66.8	142
February.....	68.1	133
March.....	69.2	137
April.....	69.2	135
May.....	69.6	140
June.....	69.7	141
July.....	71.3	146
August.....	72.5	159
September.....	72.3	153

It will be noted that for the securities bearing a fixed rate of return, the course is parallel to that of the American bond market, the peak of this movement in both countries being reached at nearly the same time. In the case of securities not bearing a fixed rate of return, the average rate declined during the first four months and then began to rise sharply. The averages for the last three months of the year are not available, but they will probably show a continuation of the rise into November, when the list reacted slightly, but closed the year at high levels. The course of the Bourse this year has run approximately opposite to the course of the foreign exchange rate of the franc; and the fluctuation of the exchange has often been employed to explain the movement, especially in the autumn rise in stocks which, because of its similarity to the phenomenon of the Berlin Börse, some persons described as a "flight from the franc." There can be no doubt that such a factor might have a strong influence, particularly in the case of a security whose interest or dividend was payable in a foreign currency. In the case of French stocks, however, the influence of improving business and rising commodity prices was also a material factor in the rise. The recovery has been well distributed, though concerns whose products could be used for reconstruction purposes have done particularly well. Stocks of gas companies and shipyards have shown little improvement. A comparison of security prices with such other indexes as commodity prices or foreign exchange rates shows how little the security markets have reflected the depreciation of the franc.

*Banking.*—The marked revival in trade and industrial activity finds comparatively little reflection in bank figures. For the purpose of this discussion typical items of the Société Générale pour Favoriser le Développement du Commerce et de l'Industrie, the Crédit Lyonnais, and the Comptoir National are given below:

#### ASSETS.

[In millions of francs.]

Date.	Three commercial banks.		Bank of France. <sup>1</sup>	
	Bills, including treasury bills.	Open accounts.	Portfolio.	Advances to private persons.
Dec. 31, 1921.....	9,866	2,354	2,505	2,241
Mar. 31, 1922.....	9,594	2,270	2,914	2,311
June 30, 1922.....	10,671	2,296	2,332	2,188
Sept. 30, 1922.....	10,532	2,069	2,104	2,086
Dec. 31, 1922.....	.....	.....	2,401	2,069

LIABILITIES.		
[In millions of francs.]		
Date.	Three commercial banks-- Demand deposits and current accounts.	Bank of France-- Current accounts and deposits.
Dec. 31, 1921.....	12, 873	2, 718
Mar. 31, 1922.....	12, 374	2, 210
June 30, 1922.....	13, 582	2, 391
Sept. 30, 1922.....	13, 147	2, 180
Dec. 31, 1922.....		2, 289

<sup>1</sup> For the Bank of France the figures are those of the last weekly statement of the month.

The changes, though not so large as might have been expected, are distinctly encouraging. They are more noticeable in the case of the commercial banks than in the Bank of France. Several explanations are offered to account for the relatively small changes. The first is that the three banks chosen, in spite of their great size, are not so widely represented in the northeast, where the metallurgical industry, which has had a remarkable recovery, is largely located. The second theory is that there is a lag of several months between an industrial revival and its reflection in bank figures, owing to the gradual reduction of frozen credits. Still another possibility lies in the relative proportion of commercial bills to treasury bills in the item of "Bills, including treasury bills." It is impossible to say definitely, as this item is not given in detail, but it is at least possible that the banks have been getting rid of the treasury paper, with its relatively low rate, and increasing their holdings of commercial paper. Another reason—and perhaps one of the most important reasons—for the phenomenon lies in the fact that much of the revival of business is due to the direct activity of the Government in reconstruction. Such governmental transactions do not require banking service to the same degree as the enterprises of individuals.

*Savings deposits.*—Deposits of the "ordinary" savings banks showed a net increase in every month of 1922, the average being 52,910,000 francs. This figure compares with 66,688,000 francs in 1921 and 48,471,000 francs in 1920. The highest month was February and the lowest October. The reason for the decline in this month was probably the competition with the 3 to 5 year treasury bonds. The net increase for the year was 634,917,000 francs (provisional figure). These figures are for the

Caisses d'Epargne ordinaires, and do not represent the total savings deposits of the year. These figures are not yet available.

*Foreign exchange.*—The course of exchange rates on France was exceedingly irregular in 1922, but for the second consecutive year the franc, as measured by the dollar, registered improvement. The average for the 12 months was 8.20 cents per franc, as contrasted with 7.45 cents in 1921 and 7.04 cents in 1920, a gain of 1.16 cents in two years. During the year there were a great number of fluctuations which it is at least plausible to ascribe to speculation. But, besides these minor fluctuations, it is possible to trace two major movements or trends, which appear distinctly in the following table of monthly averages:

FRENCH EXCHANGE ON NEW YORK IN 1922.

January.....	\$0.0816	July.....	\$0.0823
February.....	.0873	August.....	.0795
March.....	.0900	September.....	.0766
April.....	.0922	October.....	.0737
May.....	.0911	November.....	.0686
June.....	.0876	December.....	.0723

This shows an uninterrupted rise in the franc from the beginning of the year, a rise which started in November, 1921, and culminated in April, 1922. From that peak of 9.35 cents on April 24, it declined steadily to a low of 6.20 cents on November 8, rallying in December. The length of these swings up and down renders necessary a search for fundamental causes.

In considering the causes for these major movements it is worth while to consider the influence of the visible balance of trade and of foreign loans. The following table shows the course of trade for 1922:

VISIBLE TRADE BALANCE OF FRANCE FOR 1922.

[Thousands of francs.]

Period.	Imports.	Exports.	Unfavorable balance.
First 6 months.....	10, 671, 592	9, 368, 660	1, 302, 932
July.....	1, 995, 746	1, 433, 042	562, 704
August.....	1, 939, 729	1, 676, 314	283, 415
September.....	1, 893, 121	1, 741, 062	152, 059
October.....	2, 108, 872	1, 937, 467	171, 405
November.....	2, 348, 245	1, 706, 499	641, 746
December.....	2, 923, 000	3, 079, 000	156, 000
Total for year.....	23, 900, 305	20, 942, 044	2, 958, 261

<sup>1</sup> Favorable balance.

For the first five months of the year, when the exports were valued on a higher scale of prices, the total indicated balance was slightly in favor of France. The readjustment of the scale in June changed this to an unfavorable balance for the first six months, but so far as can be determined from such statistics it appears that French foreign trade for the first five months of 1922 was very nearly in equilibrium. During the same period France floated several good-sized foreign loans, particularly in England and the United States, as may be seen from the following summary:

## FRENCH EXTERNAL LOANS IN 1922.

Month.	Amount.	Issued by—	Where placed.
January.....	\$25,000,000	Department of the Seine.	United States.
	£ 3,000,000	do.	England.
February.....	£ 5,000,000	P. L. M. R. R.....	Do.
March.....	\$ 6,000,000	Soissons.....	United States.
Do.....	\$10,000,000	Framerician Industrial Development Corporation.	Do.
Do.....	\$30,000,000	P. L. M. R. R.....	Do.
Do.....	£ 2,000,000	Paris-Orleans R. R.....	England.
Do.....	£ 3,000,000	Midi R. R.....	Do.
Do.....	\$1,975,000	do.	United States.
Do.....	£ 5,000,000	Nord R. R.....	England.
April.....	\$10,000,000	P. L. M. R. R.....	United States.
July.....	\$50,000,000	Paris-Orleans R. R.....	Switzerland.

<sup>1</sup> The issue was in francs; 25,000,000 francs, sold at \$79 per 1,000 francs.  
<sup>2</sup> Swiss francs.

The following table showing the movement of gold from France to the United States should also be noted in this connection:

## EXPORTS OF GOLD FROM FRANCE TO THE UNITED STATES.

Month.	1921	1922
January.....	\$4,695,491	\$1,874,799
February.....	13,583,374	1,425,881
March.....	26,956,333	6,649,971
April.....	10,895,170	1,161,039
May.....	9,725,929	543,754
June.....	7,482,146	667,019
July.....	27,973,327	1,688,202
August.....	34,999,294	889,784
September.....	17,784,302	2,070,389
October.....	18,596,507	2,635,251
November.....	15,051,331	1,910,844
December.....	3,730,062	5,526,222
Total.....	191,473,266	27,043,158

Since July no French loan has been floated abroad. The influence of these loans on the exchange rate, at a time when the visible trade balance was approximately in equilibrium, is so obvious as to require no comment. It was equally obvious that after the proceeds of these loans were spent, and the exchange market deprived of their temporary support, the franc had to decline. The French wheat crop was

known to be poor, while under the influence of the trade revival the demand for raw materials, especially cotton and coal, was certain to be heavy. Against this inevitable increase in imports, France had no increased item of exports to offer. Finally in November, when imports increased and exports diminished, the unfavorable balance for the single month was half of the entire first six months of the year. In that month only about three-fourths of the imports were covered by exports. The French press is particularly insistent on the part played by speculation in the sensational decline in November; and in all probability, encouraged not only by the known economic facts, but also by alarmist statements of French Government finances, and the unpromising reparation situation, speculative selling was a factor. Doubtless, also, speculative purchasing or short covering was a factor in the abrupt rise in early December. But the fact remains that the actual status of the visible balance of French trade will go far toward explaining the vulnerable condition of French exchange in November, and, in fact, since. The sudden increase in French exports in December may be explained in part, at least, by low exchange in the preceding month.

*Government finance.*—The finances of the Government have been discussed at length in the December, 1922, and January, 1923, BULLETINS. The most encouraging fact to note is the increased yield of taxation, estimated at 23,623,000,000 francs, about 960,000,000 francs greater than in the preceding year. As to the total estimated expenditures of the year, they were discussed in the December BULLETIN and no further information has become available. They are stated to have been almost 8,000,000,000 francs less than in the preceding year. The budget for 1923 had not been passed at the end of the year, but the project indicates a material deficit. The ministry made several attempts to introduce tax legislation, looking toward stricter methods of assessment or increasing rates. These proposals met with effective resistance; on the other hand, the lower limits of tax exemption were actually raised during the year. While the loss in revenue on this account is not likely to be large, the incident is significant.

*The public debt.*—As the public debt has recently been discussed in the BULLETIN, only two facts may be mentioned here. The Minister of Finance announced at the end of the year that there had been no increase in the floating debt, and that the October loan

brought in only 2,400,000,000 francs of fresh money. This is interpreted as meaning that approximately 5,600,000,000 francs of the October issue, which carried a rate considerably over 6 per cent, was exchanged for treasury bills or bonds de la Défense Nationale on which the highest rate is  $4\frac{1}{2}$  per cent. Further, by convention with the Bank of France, dated December 21, 1922, the convention of December 29, 1920, was modified, reducing the repayment of advances to the bank from 2,000,000,000 francs to 1,000,000,000 francs. The repayment was largely met out of the amortization fund of the Bank of France, which on December 28, 1922, stood at 796,310,223 francs, and on January 4, 1923, at only 2,937,929 francs. Although the convention of December 21, 1922, specified that the reduction to 1,000,000,000 francs of the annual amortization of the debt to the bank is exceptional and is not to be regarded as a precedent, the discussion about it has shown that there is a considerable opinion opposed to the extinguishment of this debt, preferring to accept as permanent the devaluation of the franc rather than to subject the country to the problems arising from an attempt to elevate the value of the franc by such measures, at least for the present.

From the point of view of internal Government finance, it would appear that the two most pressing problems are (a) to balance the regular budget and (b) to relieve the situation of the floating debt, particularly the bonds de la Défense Nationale. The former, of course, may be accomplished either by reducing expenditures or increasing income, which will present new problems in the future as returns from war taxes and the sales of war stocks diminish. The question of the floating debt is more difficult. The October loan did not indicate that the condition of the money market was very propitious for a funding loan. The increase in business activity has rendered the bonds, with their present low rate, relatively less attractive as short-time investments. Proposals have been offered to reduce the rates still further; one effect of such a reduction might be to improve the market for rentes, while other results may be conjectured.

The total budget includes also the so-called recoverable items of pensions and reconstruction. At present there is no prospect of meeting these items out of current income.

Reconstruction represents a capital investment and as such it is manifestly sound finance to fund the costs, whether or not they are eventually met out of reparations.

*Note circulation.*—The note circulation was subject to only slight fluctuations during the year. The average circulation was 36,330,198,000 francs, compared with 37,404,000,000 francs for 1921, and 38,065,628,000 francs for 1920. The low figures of 35,281,790,000 francs was touched March 23 and the high of 37,514,493,000 francs on October 5. A part of this reduction in circulation is due to the reduction of the State's debt to the Bank of France, by 2,000,000,000 francs in 1921; and the fact that the circulation did not decline by an approximately similar amount may be ascribed to the increase in industrial activity during 1922. French business methods require a very large per capita circulation, as compared with the United States. On December 28, 1922, the per capita circulation of Bank of France notes was about 947 francs, while on a comparable date (January 1, 1923) the circulation for the United States was only \$42.81 per capita, which at the average rate for December was about 600 francs, though gold prices for France are materially lower than in the United States. This difference is commonly ascribed to the greater use of checks in the United States and to a higher velocity of circulation. The purpose of mentioning it here is to call attention to the fact that an increase of note circulation from the levels of last year would not necessarily imply inflation of the currency, nor would a decline in the circulation of itself indicate a sounder financial condition, unless carefully checked against the general commercial and industrial condition of the country.

*Summary.*—The year 1922 brought a pronounced industrial and economic improvement to France. Industrially the greatest obstacle to further improvement lies in the problem of securing a sufficient quantity of coal, and more particularly coke, to exploit the natural resources of the country. Agriculturally the shortage of the 1922 wheat crop was rather serious, but indications for the current year are more promising. Financially the record of the year is less bright, for it brought a considerable increase in the already heavy public debt; but to offset this it must be remembered that the revival of industry which marked 1922 has rendered France more capable of bearing the burden of that debt.

## GERMANY.

## THE ECONOMIC IMPORTANCE OF THE RUHR.

The occupation of the Ruhr district by French and Belgian troops brings the coal and iron situation of Continental Europe again into the center of European political and economic discussion. With the cession of Alsace-Lorraine to France under the treaty of Versailles, the political division between the iron and coal districts of Europe became much more pronounced than it was before the war. France, as a result, now possesses about 48 per cent of the total iron-ore deposits of Europe, thus being in a position to become an iron and steel producing country of the first importance.

Nevertheless, in spite of her full control of the Saar Basin, the development of the Pont-a-Mousson coal fields, and the increase in production of the Pas de Calais mines, France is unable to produce enough coal, and especially coke, for the proper exploitation of her iron deposits and the full development of her metallurgical industry. Even in the present state of that industry, which is operating at about half of its capacity, France is forced to import large quantities of coal and coke from other countries, especially from the Ruhr district. Germany, on the other hand, as long as she retains control over this district, is in possession of the most important coal fields, with the largest reserve of coking coal on the European Continent, but at the same time is without the necessary iron ore at home for fully utilizing her coal and coke. Even before the war, with Germany in control of Lorraine, large quantities of coal and coke were shipped from the Ruhr to France, which in turn exported considerable quantities of iron ore into this industrial district. This exchange of coal for iron between Germany and France was immediately resumed after the armistice.

The treaty of Versailles drew a political boundary between these two important raw materials,<sup>1</sup> neither of which can well be exploited without the other. To state it more explicitly, the French metallurgical industry can hardly be developed to its full capacity without the coke of the Ruhr, while the German metallurgical industry, chiefly located in the Ruhr, can attain only about half of its pre-war output if it is deprived of the French iron ore. The rich coal fields of the Ruhr are

thus of great economic importance to both France and Germany. But while the Ruhr district is of vital significance to France only for the future development of her metallurgical industry, it is one of Germany's greatest economic resources and the basis of a large part of her industries. For upon the coal of the Ruhr rest not only the German coal and iron industries (the so-called "heavy" industry—*Schwerindustrie*), but also the electrical, dye-stuff, and, to a considerable extent, the textile industry. In the Ruhr Valley there are located the largest German iron and steel plants and the head offices of the large German combines; from this part of Germany comes a large percentage of Germany's exported goods, especially iron and steel products; and finally from here the German railways and public utilities derive much of their fuel.

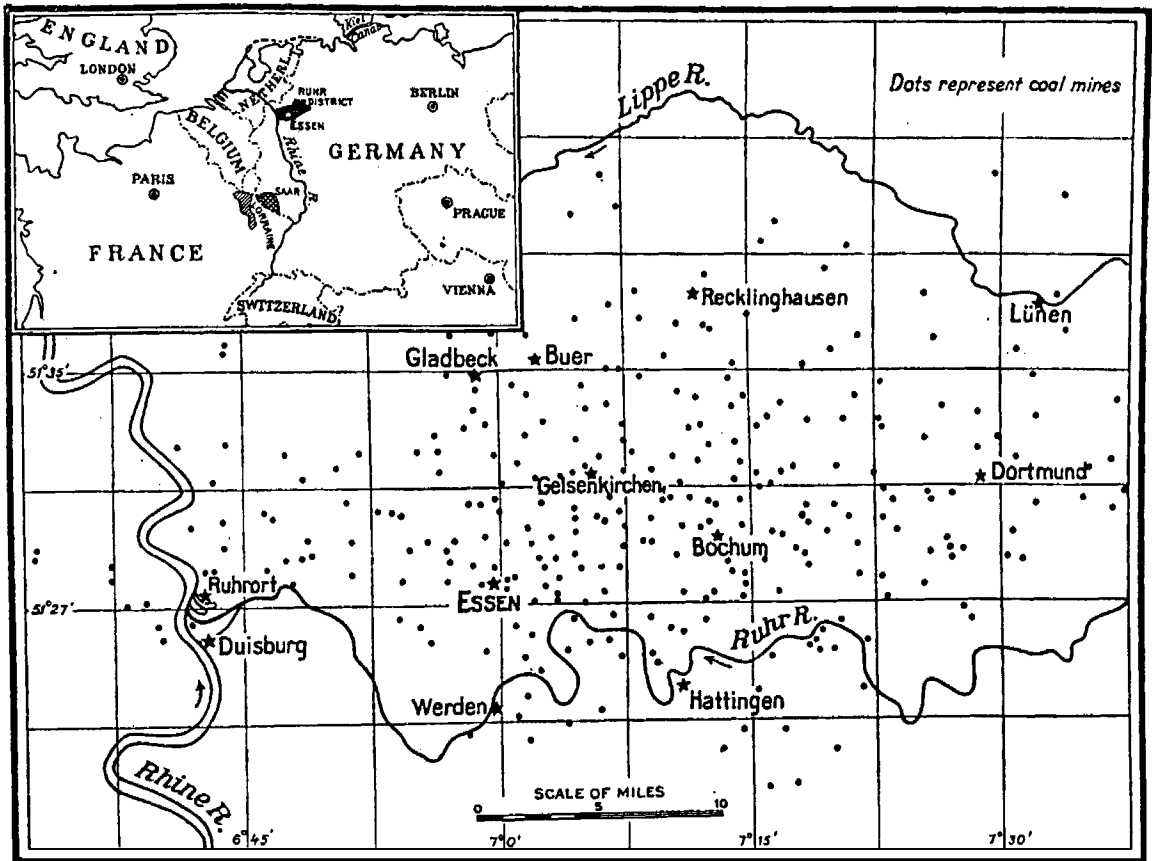
The importance of the coal fields of the Ruhr is not limited to the two mentioned countries. Ruhr coal plays an important part also in the Belgian, Dutch, Italian, and other central European industries.

## RELATION OF THE RUHR DISTRICT TO GERMANY.

The Ruhr district is the most important industrial region in Germany. It contains the richest coal fields of the country, and there are also located the most important German key industries. The cession of a large portion of Upper Silesia to Poland crippled Germany's industries located in that section of the country and enhanced the relative importance of the Ruhr. Furthermore, after the conclusion of peace a great readjustment and expansion took place in the Ruhr district, which further increased its economic importance to the rest of Germany. The big German industrialists, after the loss of their Lorraine iron and steel plants, concentrated their efforts mainly in the Ruhr district and established there a number of new factories in order to replace those located in Lorraine. This district thus became of greater importance to Germany after the war than it was before the armistice.

The Ruhr district is not an administrative unit. It forms a part of the Rhineland Province and Westphalia. It comprises a territory of about 7,920 square kilometers and is inhabited by about 6,000,000 persons, of whom about 1,500,000 are employed in mining. In this comparatively small area are located some of the most important industrial cities, such as Essen, Dortmund, Bochum, and Gelsenkirchen. (See accompanying map.)

<sup>1</sup> See small inset map on p. 195 showing location of the Ruhr coal district of Germany and the principal iron district of France in Lorraine.



MAP OF THE RUHR DISTRICT IN GERMANY.<sup>1</sup>

Although the largest industrial plants, especially those engaged in the production of steel and iron, are located in the Ruhr Valley, its economic importance is due to the prevalence of coal. The Ruhr coal region embraces an area of 2,000 square kilometers, and, according to German experts, has a visible reserve of 54,300,000,000 tons, distributed as follows: 11 billion tons down to a depth of 700 meters; 18.3 billion tons between 700 and 1,000 meters; and 25 billion between 1,000 and 1,500 meters. Besides black coal, the Ruhr has also an invisible reserve of 4 billion tons of lignite or brown coal.

The dominating position of the Ruhr as a coal-producing district becomes more apparent from the following table, which compares the total output of coal and the number of employees engaged in mining in Germany with the output and number of miners in the Ruhr.

<sup>1</sup> The small inset map shows the location of the Ruhr coal district (black area); the iron district of Lorraine (hatched area); and the Saar iron district (cross-hatched area).

BITUMINOUS COAL PRODUCTION IN GERMANY IN 1920.

	Number of mines in operation.	Number of miners.	Total amount of wages and salaries (000 marks).	Output of coal.	
				Quantity (tons).	Value (000 marks).
Ruhr.....	263	452,620	7,509,488	88,380,212	13,437,441
Total Germany	407	713,199	10,825,856	131,355,964	20,160,311
Per cent Ruhr.	64.6	63.5	69.5	69.4	66.7

The relation of the pre-war and post-war coal output of the Ruhr to that of Germany as a whole is as follows:

OUTPUT OF COAL, IN TONS.

	1913	1920	1921	1922 <sup>1</sup>
Germany.....	190,109,000	131,347,000	136,210,000	120,664,000
Ruhr.....	114,550,153	88,380,000	94,114,785	97,350,000
Per cent Ruhr....	60.3	67.3	69.1	80.7

<sup>1</sup> Estimated.



As already mentioned, the chief quality of the Ruhr coal is that it can easily and cheaply be converted into first-class coke. In fact, the percentage of coke produced in the Ruhr district of the total coke production in Germany is much larger than that of coal, as may be seen from the following figures:

COKE PRODUCTION IN GERMANY, IN TONS.

	1922 <sup>1</sup>	1921	1920	1913
Ruhr.....	22,600,000	24,203,000	21,546,000	29,379,000
Total Germany.....	29,409,000	27,921,000	25,177,000	34,630,000
Per cent Ruhr of total	76.8	86.7	85.6	84.8

<sup>1</sup> Estimated.

The by-products of coal and coke are of no less importance to many German industries than these raw materials themselves, and the abundance of coal has made the Ruhr the center of Germany's coal and coke by-product industries upon which the dye and other chemical industries depend. The value of the total output of coal and coke by-products in the Ruhr as compared with that of Germany may be seen from the following table:

PRODUCTION OF BY-PRODUCTS OF BITUMINOUS COAL.

	Tar and tar products.	Benzol.	Ammonia.	Illuminating gas (000 cubic meters).
1913.				
Ruhr district.....	934,546	155,086	390,530	145,863
Total Germany.....	1,152,772	194,425	456,411	161,805
Per cent of Ruhr district.....	81.1	79.8	85.6	90.1
1918.				
Ruhr district.....	893,254	198,410	421,266	280,307
Total Germany.....	1,102,659	247,160	492,142	320,210
Per cent of Ruhr district.....	81.0	80.3	85.6	87.5
1919.				
Ruhr district.....	581,016	113,910	230,358	246,373
Total Germany.....	734,484	146,440	274,167	287,224
Per cent of Ruhr district.....	79.1	77.8	84.0	85.8

The abundance of rich coking coal, coupled with its geographical proximity to the Lorraine iron ore and its closeness to tidewater, has made the Ruhr district not only the greatest coal and coke producing center in Continental Europe, but also the heart of the German steel and iron industry. Of the 288 German blast furnaces operated in 1913 (excluding Luxemburg), 103 were located in the Ruhr district. This region also produced, in 1913, 8,220,000 tons of pig iron, out of a total German output of 17,760,000 tons, or 46.3 per cent. Of

Germany's 159 steel plants in 1913, 91, or 57.2 per cent, were in the Ruhr Valley, and of the 17,617,000 tons of steel produced in 1913, 10,112,000 tons, or 57.4 per cent, came from that region.

Since a large percentage of German mines, steel and chemical plants, and other industries are located in the Ruhr district, one can easily comprehend its importance in Germany's foreign trade. Although no definite figures are available as to the quantity of exported goods originating in the Ruhr, the following data throw some light on the situation. Of the total value of German exports in 1913, amounting to about 10 billion gold marks, about 700 million gold marks represent the value of exported coal, coke, and briquettes, and about 3 billion gold marks the value of the exports of cast iron and steel, which came to a large extent from the Ruhr district. In the importation of food products the Ruhr district is of similar importance.

The economic influence of the Ruhr district upon the rest of Germany is so important that one is justified in saying that the presence of coal in the Ruhr district is largely responsible for the great transformation produced in German industry, whereby Germany changed from an agricultural nation to a highly developed industrial nation.

#### THE GREAT GERMAN COMBINES.

As stated before, the Ruhr district contains the bulk of the coal, iron, and other industries of the nation and furnishes the coal for a large number of public utilities, railways, and other industrial enterprises throughout Germany. Consequently, the Ruhr became the center of Germany's industrial and economic system, which at present is more completely organized and more closely controlled by a small number of combines than is the case in any other country in the world. The powerful combines and syndicates which to-day control Germany's industries have their head offices in the Ruhr or in near-by cities. The activities of these syndicates are so closely connected with the entire industrial structure of the Ruhr district that a discussion of their organization and development is necessary for a more complete analysis of the present industrial status of the Ruhr district.

Long before the outbreak of the war a number of concerns in Germany combined the manufacture of iron and steel products with the production of such primary materials as iron ore, coal, and coke. Although the formation of

combines dates as far back as 1862, when the first German tin-plate syndicate was formed, their present organization and economic importance date only since the armistice.

The isolated condition in which Germany found herself at the end of the war, the great loss of valuable territories and of important sources of raw material, especially iron ore and coal, and the heavy burden of reparation all necessitated closer cooperation among the various industries of the country. The promoting of "vertical" and "horizontal" syndicates was further encouraged by the fact that many German independent concerns which had lost their connections and plants in Alsace-Lorraine and Luxemburg combined with other firms to form better working units. The greatest results were achieved in the mining and closely allied steel and iron industries. Here the vertical form of syndicate is predominant and mostly favored. The 13 great combines at present existing in Germany are so organized that they appear as entirely independent and self-sufficient units, beginning with the production of iron ore, coal, and coke, and ending with the manufacture of finished products such as locomotives, cars, and a large number of hardware and other highly finished steel products.

Not satisfied with the full control over raw materials and the plants involved in the various phases of production of the above-mentioned commodities, these combines brought under their influence a number of transportation companies operating on land and sea. Furthermore, they established their own sales offices in Germany as well as abroad, so that the goods produced by them are under their control until they reach the final consumer. Most of the combines are closely connected with large banking institutions which enable them to do their financing on most favorable terms.

In the following paragraphs is a brief discussion of the 10 most important combines with headquarters in the Ruhr or in near-by cities. Although some of the plants of the above concerns are located outside the Ruhr district, the most important plants, especially those engaged in the mining of coal and the production of steel and iron, are located in the Ruhr district. In most cases the operation of all plants is so closely connected and interlocked, and the plants located outside of the Ruhr district are to such an extent dependent upon the raw materials and half-finished products of their allied organizations in the Ruhr district, that any economic rupture or the establishment of a tariff barrier between the

two would immediately result in a decrease of output of all the plants and in some cases even lead to a complete standstill.

*1. Siemens Rhein Elbe Schuckert Union.*— This is the most important of all syndicates of Germany and consists of the following five concerns, each of which is in turn a separate integrated group.

1. Gelsenkirchener Bergwerks A. G.
2. Deutsch Luxemburgische Bergwerks und Hütten A. G., Bochum.
3. Bochumer Verein für Bergbau u. Gusstahlfabrikation, Bochum.
4. Siemens & Halske A. G., Berlin.
5. Elektrizitäts A. G. vormals Schuckert & Co.

These five concerns, each of which controls a number of industrial and electrical plants and coal and iron mines, are combined into one huge corporation whose board of directors is in charge of the entire operation and disposition of the output of all the mines and plants. The vastness of this enterprise can be gauged from the fact that one concern alone, the Gelsenkirchen, employed during the fiscal year 1920-21 more than 55,000 men. The plants and mines of the first three concerns are located almost exclusively in the Ruhr or other occupied territory. The third and fourth groups also have interests outside the Ruhr.

The executive offices of the corporation, however, are in Düsseldorf, just outside the Ruhr Valley. This combine controls 65 iron-ore mines, 26 coal mines, 26 blast furnaces, 12 different kinds of steel plants, 21 puddling furnaces, and 24 rolling mills. Statistics of the output of iron ore and the production of iron and steel products of all combines to be discussed in this article are very incomplete and therefore will not be reproduced here. The quantity of coal produced, however, is carefully recorded and for the combine under discussion is as follows:

[In tons.]		
	1913	1920
Coal.....	17,405,000	12,602,000
Coke.....	4,494,000	3,090,000

This combine is generally known abroad as the Stinnes Syndicate, and in fact Mr. Stinnes as the main shareholder of the Deutsch Luxemburger Werke was primarily responsible for the formation of this syndicate. A clear distinction, however, must be made between this combine, which is an integrated unit in itself, and the original Stinnes group usually known under the name of Hugo Stinnes Mühlheim-

Ruhr. The former is mainly interested in mining and in the production of steel and iron, while the latter is more in the nature of a large holding company, which controls a number of shipping companies such as the Hugo Stinnes Shipping Co., Hamburg, export and import houses, and other mercantile establishments in Germany and abroad. The last especially are of great importance, for the "Stinnes" sales offices abroad are in many cases agents for the other German combines. Since a number of plants and firms of the original Stinnes group are located outside the Ruhr and little data regarding their production are available, no detailed discussion of the original Hugo Stinnes combine can be undertaken here.

2. *Klöckner combine.*—This combine is less important as regards output of coal and iron than the two groups controlled by Stinnes. The chief member of this group is the Lothringen Bergwerks und Hütten Verein, most of whose iron and steel mines were located in Lorraine. After the cession of this Province to France, the "Verein" had a number of steel mills, rolling plants, and blast furnaces, but no iron and coal of its own. During the three years following the armistice it acquired control of a number of mines and also reached a working agreement with other organizations controlling iron and coal mines. At present it is a complete vertical combine consisting of 8 ore mines, 7 coal mines, 7 blast furnaces, 5 different kinds of steel plants, 7 puddling furnaces, and 13 rolling plants. The coal and coke output of the mines of this concern for the years 1913 and 1920 were:

[In tons.]

	1913	1920
Coal.....	3,504,000	2,856,000
Coke.....	1,297,000	1,013,000

3. *Haniel group.*—This combine is an outgrowth of the Haniel concern controlled by the Haniel family. After the armistice it reached a working arrangement with a number of other concerns, so that at present the group has under its control 6 ore mines, 7 coal mines, 11 blast furnaces, 4 steel plants, and 8 rolling mills. Its coal and coke output for the years 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	10,449,000	7,257,000
Coke.....	2,045,000	1,889,000

Although this group possesses a number of coal and iron mines, its main activities are concentrated on the production of finished steel and iron products such as wharves, bridges, locomotives, etc. Its output of steel and iron during 1921 amounted to 800,000 tons of cast iron and 850,000 tons of steel.

4. *Stumm combine.*—The organization of this combine is more or less in the nature of a holding company which controls and operates a number of industrial establishments and iron and coal mines. It also differs from the organization of the previously discussed combines in that the various concerns under its control form both a vertical and horizontal syndicate and that French capital is interested to a considerable extent in one of the important constituent companies. At present this group has under its control 9 ore mines, 3 coal mines, 3 blast furnaces, 7 steel plants of different types, 1 puddling plant, and 14 rolling mills. Its coal and coke output for 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	2,431,000	1,758,000
Coke.....	683,000	475,000

5. *Henschel Lothringen Essener Steinkohlen Vereinigung.*—This group was founded in 1921 mainly as a horizontal syndicate controlling a number of coal mines. In 1922 a number of iron and steel plants were brought under its sphere of influence, so that it has assumed in part the character of a vertical combine. About the middle of 1922 it controlled 12 ore mines, 21 coal mines (not including those in course of development), 5 blast furnaces, 2 steel plants, and 2 rolling mills. Its coal and coke output for 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	5,491,000	3,978,000
Coke.....	889,000	738,000

Recently the chemical interests of this syndicate have been enlarged and the well-known Badische Anilin works have come under its influence.

6. *Rhein Stahl Arenberg.*—This combine was founded in February, 1921, and is to a large extent under the control of Otto Wolff, who

has large interests within and outside the Ruhr district. It controls 6 ore mines, 8 coal mines, 6 blast furnaces, 5 different types of steel plants, and 12 rolling mills. Its coal and coke output for 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	4,822,000	4,175,000
Coke.....	1,229,000	963,000

7. *Friedrich Krupp*.—This is perhaps the most completely integrated of all combines in Germany. It consists of a number of smaller groups, which in turn are generally integrated and independent. After the armistice a complete reorganization was carried through in practically all Krupp plants, for during the entire period 1914–1918 the Krupp works were producing mainly war material. The adaptation to the changed conditions was therefore much more difficult for the Krupp combine than for most German plants. After the reorganization a working arrangement was reached with several other groups, including the German General Electric Co. and the Otto Wolff interests. This combine controls 37 ore mines, 6 coal mines, 17 blast furnaces, 5 various steel plants, and 12 rolling plants. The output of coal and coke of the mines under its control was:

[In tons.]

	1913	1920
Coal.....	7,560,000	5,881,000
Coke.....	2,263,000	1,850,000

During 1921–22 it produced 1,500,000 tons of cast iron and 1,300,000 tons of steel. Since the beginning of 1922 a further expansion has taken place, mainly with regard to sales offices and transportation companies.

8. *Hoesch Köln Neu-Essen*.—This group was founded at the end of 1920, and its syndicate agreement runs for 80 years. The group includes 5 ore mines, 4 coal mines, 7 blast furnaces, 2 steel plants, and 7 rolling plants. Its production of coal and coke for 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	4,497,000	3,679,000
Coke.....	1,073,000	1,115,000

9. *Phoenix combine*.—Although this group has suffered heavy losses in Lorraine, where its main iron mines and plants were located, it followed a policy of expansion to a smaller extent than the other Ruhr combines. Furthermore, about 25 per cent of its total capital stock is owned by Dutch steel interests. At present it controls 1 ore mine, 5 coal mines, 18 blast furnaces, 5 steel plants, 21 rolling mills, and 1 puddling plant. Its coal and coke output for 1913 and 1920 was:

[In tons.]

	1913	1920
Coal.....	5,189,000	3,347,000
Coke.....	670,000	384,800

During the past two months a tendency toward a much larger expansion has set in, and a number of iron and steel plants as well as transportation companies have become closely allied with the Phoenix combine.

10. *Thyssen*.—As with the Phoenix, so the Thyssen concern suffered heavily from the cession of Lorraine to France. It also followed a policy of expansion to a lesser degree than most other Ruhr combines and thus has remained more or less a one-family organization controlled by the Thyssen family. The number of plants and mines controlled to-day by this combine is almost the same as it was before the war, and includes 15 ore mines, 3 coal mines, 3 blast furnaces, 10 different classes of steel plants, and 19 rolling mills. Its production of coal and coke during 1913 and 1920 amounted to:

[In tons.]

	1913	1920
Coal.....	4,506,500	3,345,000
Coke.....	1,490,000	888,000

THE RHEINISCH-WESTPHALIAN COAL SYNDICATE.

The best illustration of how far the concentration of German industry has proceeded is presented by the Rheinisch-Westphalian Coal Syndicate, of which all previously-discussed combines are members. The leading purpose of this combination, whose head office is in Essen, is to eliminate all price competition among its members, to regulate the production, and to fix the prices of coal. With this end in view it entered into an agreement with the mine owners, members of the syndicate,

whereby it undertook to buy the entire output of their mines; the mine owners, on the other hand, undertaking to sell their coal and coke exclusively to the syndicate under certain arrangements as to price and payment. The mine owners further agreed with the syndicate and with each other to form an organization of mine owners (mine owners' assembly), which may make certain rules and confer authority on certain members of the syndicate which all mine owners agree to obey.

The chief function of the mine owners' assembly is to determine (a) the amount of coal to be produced; (b) the quota of contribution and compensation; and (c) admission of new members. Heavy penalties are provided for non-compliance with the rules adopted by the syndicate, and a special commission is established with authority to examine the books and records of the members and to supervise all their activities.

The duration of the syndicate is only for a certain limited period and must be renewed from time to time. The next to the last renewal took place in 1917, when the duration of the syndicate was prolonged for five years. It was recognized in 1919 by the Reichskohlenrat (Federal Coal Council), which was granted by the Government the power to exercise supervisory powers over the coal syndicate, especially with regard to fixing the price of coal. The 1917 agreement expired on March 30, 1922, but due to the uncertain economic and political conditions prevailing in Germany at that time it was not renewed until May, 1922. The new contract runs only for 11 months, i. e., up to April 1, 1923.

The importance of the syndicate is seen if one compares the output of coal from the mines under its control with the total coal production of Germany.

**COAL PRODUCTION OF THE RHEINISCH-WESTPHALIAN SYNDICATE COMPARED WITH THE TOTAL PRODUCTION OF GERMANY.**

[In thousands of tons]

	1921-22	1920-21	1913-14
Rheinisch-Westphalian Syndicate.....	93,733	87,546	101,652
Total Germany.....	145,785	140,757	190,109
Percentage of syndicate out of total....	64.3	62.2	53.5

The percentage of the coal produced by the syndicate mines increased steadily, especially during the fiscal year 1921-22. The loss of important coal fields in Upper Silesia further increased the percentage of the coal produced

by the mines of the Rheinisch-Westphalian Coal Syndicate.

Its control of the coke output of the country is even larger than that over coal. Out of a total production of coke during the fiscal year April, 1921-March 30, 1922, amounting to 27,963,000 tons, 26,430,350 tons, or 94.5 per cent, were produced by members of the syndicate.

The syndicate played also a very important part in the delivery of coal and coke for reparation account. Of the total quantity of coal and coke delivered during the fiscal year 1921-22 amounting to 38,757,780 tons of coal and coke,<sup>1</sup> 10,071,283 tons of coal and briquets and 4,309,165 tons of coke came from the Rheinisch-Westphalian Coal Syndicate. Only through the complete organization of practically all the coal mines located in the Ruhr was the German Government enabled to make these huge deliveries without demoralizing the entire coal and coke industries of the country.

Upon occupation of Essen by French and Belgian troops, the syndicate removed its records and head office to Hamburg. This step in itself will make the delivery of coal for reparation account very difficult, even if the German mine owners should be willing to make deliveries, for instead of dealing with one body having full authority as to total output and participation of almost all mines, the representatives of the French Government would have to make separate contracts with a considerable number of individual mine owners.

**SWEDEN.**

Because of the exceptional importance of price and exchange movements since the armistice in different parts of the world, and particularly because Swedish prices have followed much the same course as prices in the United States, it is believed that the following article from a Swedish source will be of interest to readers in this country. The article originally appeared in the issue of Social-Demokraten for December 6, 1922, and the translation has been supplied by the American consulate at Stockholm.

**THE COURSE OF PRICES IN SWEDEN—SOME INTERNATIONAL COMPARISONS.**

When the great price wave at last reached its culmination during the fall of 1920 and the long expected downward trend became a certainty, the question uppermost in the minds of all was, "At what figure above the pre-war level will the bottom be reached?" It was generally conceded that a return to the prices of 1914 was out of the

<sup>1</sup> Coke converted into its coal equivalent.

question, and estimates and guesses usually stopped at double these prices, or in other words, an index figure of 200. In less than a year, however, this limit was passed by the wholesale price index published by the Swedish Journal of Commerce (Svensk Handelstidning), which was followed April 1, 1922, by the cost of living index calculated by the Department of Social Affairs. At that time the prophecies had come down to the figure of 175 and were later, as a result of continued further reductions, to remain for the time being at a level one and one-half times as high as the pre-war prices. Now even this point has practically been reached. The wholesale price index, now made public by the Göteborg Commerce Journal (Göteborgs Handelstidning), reports for the month of October, 1922, the figure of 155, and the Board of Trade's index figure for the price of raw materials is 149, while manufactures still remained at 186, according to the Board of Trade, whose general wholesale price index was 169. Simultaneously the Department of Social Affairs reported a cost of living index figure of 190.

Thus far, therefore, the attempts at prophesying the limit of the fall in prices have proved just as fruitless as those during the war to determine the limit of the rise in prices. Will the 150 limit now prove as unstable as the former ones, and the prices fall still lower? Lately the opinion has been expressed that not only will a stabilization of prices take place at this level, but a gradual increase is to be expected. As a principal objection to all these prophecies, Professor Cassel has stated that it is impossible to talk of an international price level and draw conclusions therefrom, as has been done in this case, until a universal gold standard exists. Theoretically this is naturally quite correct, but, on the other hand, it would seem that the Swedish exchange is now so near its gold value that calculations can profitably be made upon the supposition that the Swedish krona will even in the future maintain its gold parity—that is, approximately its normal peace value in comparison with the dollar. It is evident that the basis of all estimates of the above nature must be the American price level.

As a matter of course, the problem actually divides itself into two, viz, first, that of forming an idea of the wholesale price level's future movements based upon international and domestic tendencies, and, second, that of endeavoring to make clear, on the basis of such movements and other factors influenced by the cost of living, what is to be expected in connection with the question of the development of retail prices and other living costs. The first question will be discussed below, while the latter must be spared for another article.

As regards wholesale prices, the Swedish price level has, like that of other countries with a high exchange, followed the price index of the United States very closely. As long as the latter continued to fall, it was only to be expected that there should be a continued fall in those other countries in which the demand has been and is maintained that the exchange be restored to its former position of parity with the dollar so that the redemption in gold of paper currency might again be resumed by these Governments on the old basis.

The American wholesale price index has, for the past half year, not shown any tendency downward, but on the contrary a considerable increase has set in. For this reason it has been assumed that the bottom has been reached in America and a rise in prices is to be expected. Upon closer examination of the American price movements and factors operating in connection therewith, it becomes evident that such a conclusion must be considered rather doubtful.

A glance at the American figures indicate that the increase was mainly due to the rise in the price of coal and

coke, resulting from the recent coal mine strike during the first half of this year. From an index figure of 160 in February, these commodities have been recorded as high as 560 in August, but have successively fallen to 382 and 329 during the two following months. This last figure is abnormally high, however (compared, for example, with the coal and coke price index in England of 165, and Sweden of 169). These high coal and coke prices contribute indirectly toward raising the general index figure by causing a rise in production costs of various industries. Thus the main increases in the metal group can be ascribed to this cause. The coal prices are, however, rapidly falling again and there is no reason to suppose that the above increase in the price index will have any permanent effect.

During October, however, there has been such a general rise in the American index figures that it can not be laid to the results of the coal strike. On the contrary, it is possible to trace in this action a direct influence of the considerably increased tariff effective September 22.

Neither the one nor the other of the above-mentioned factors would seemingly reflect upon the wholesale price index of this country, however, at least not in any one direction. As the increased duties produce a rise in the production costs in America, a certain rise can also be expected here, but this will be counteracted by the effect of the high tariff wall on the importation by America, a fact which Professor Cassel has likewise pointed out.

Comparing the Swedish and American index figures for various groups for the month of October, it is found that the American figures are always lower than the Swedish as regards most of the commodities, so that the rise of prices in America must reach considerably greater dimensions before any influence upon the rise in prices here can be expected. The American figures are higher only for coal and coke (according to the Göteborgs Handelstidning 329 compared with 169), metals (162 compared with 117), and hides and leather (114 compared with 91). In the opposite direction the differences are considerable for the important groups of vegetable food products (122 for United States compared with 143 for Sweden, which difference, however, can be explained by the price of sugar in Sweden, which difference, however, can change), animal food products (138 compared with 166), and agricultural supplies (119 compared with 158). As regards the last-named item, a further approach toward the American figure can be expected shortly.

The above conclusions are likewise evident from a comparison of the Swedish and English figures for October. Considering that the English pound is now from 7 to 8 per cent lower than the Swedish krona in relation to the pre-war parity, there is no group of commodities registering a higher price than the Swedish, and many which fall far below the Swedish prices.

From the above it would be reasonable to conclude that the rise in prices in America or England have not gone so far that a corresponding rise in Sweden should result. On the contrary, a general stabilization of prices and a tendency toward reduction is rather to be expected, with possibly a rise in the prices of some commodities, but very likely a reduction in others.

The index figure of the Board of Trade mentioned above shows, among other things, the difference in the development of the pre-war prices between raw materials and manufactures. The index figure for October is, without doubt, worthy of notice. The difference is great, the figure being 149 for the former and 186 for the latter. This difference is, without doubt, of some importance. Since the price of raw materials during the entire past year has shown only a small reduction, and in certain cases a slight increase, the margin of difference can not be explained by

saying that the manufactures have necessarily been made from higher priced raw materials and therefore naturally must cost more than those now made from cheaper raw materials. The correct explanation is undoubtedly the one which is most natural, namely, that manufacturing industries have not yet been able to adapt themselves to the reduced price of raw materials, but continue to operate with factory and transportation costs which are greatly out of proportion to those prevalent before the war. In certain instances the monopoly existing within industry can be shown to be the cause of the high prices.

As examples of the large disproportion between the prices of raw materials and manufactured articles, the following index figures for October, according to the calculations of the Board of Trade, may be cited:

Textiles.....	157	Leather.....	117	Pig iron.....	134
Yarns.....	185	Shoes.....	164	Steel and iron	
Weavings....	221	Iron ore.....	112	manufactures	156
Hides.....	92	Coke.....	88		

In certain cases, as in the last-mentioned examples, it is to be expected that the prices of raw materials will rise as soon as the manufacturing industries begin operating on a larger scale. The general rule will be, however, that the manufacturer will have to take the largest step in order to restore reasonable proportions as compared with the prices of raw material. No other proportion can be called reasonable than that under which the relative costs of merchandise become the same as in pre-war days. In other words, the finished article is to correspond to that of the raw material.

Even with regard to manufactures as a whole a successive reduction may be predicted, but naturally it is to be expected that the reduction, as hitherto, will take place slowly, at least in certain branches, especially in the case of such articles where a monopoly exists for the supplying of the demand of the internal market and where the public demand is steady and not as elastic as is the case with regard to the articles that are most necessary.

#### CHILE.

The Chilean economic situation was distinctly more favorable during the last three months of 1922. The recent weakening of Chilean exchange seems to have been due to speculative influences, in view of the essentially sound general situation. Sales of nitrate have continued to increase in volume and still better results are expected during the busy season from December until March. Unemployment has been considerably reduced in the nitrate and copper industries as well as in undertakings of the nature of public improvements. Commercial transactions increased in volume during the last quarter of the year, and if the adverse conditions prevailing in Europe do not have too great an influence upon the general market for raw materials produced by Chile, a rapid advance toward economic normalcy in that country may be expected. According to recent reports, a larger flow of American investment capital has been apparent in Chile during the latter half of 1922, which is being employed principally in real estate mortgages, bonds,

and mining property. The losses of capital on account of the recent earthquakes are not sufficient to affect foreign trade seriously.

#### THE EXCHANGE SITUATION.

Notwithstanding the increasing exports of nitrate, the gradual weakening of the Chilean peso, which started early in October, 1922, continued until the close of the year. The average quotation for dollar exchange in Chile in January, 1922, was 10.42 pesos. The rise which began in the following month was due principally to the considerable advance selling of foreign exchange by the nitrate producers, who were confident that the gradual liquidation of the large stocks of nitrate in Europe and the exhaustion of those in the United States would result in a renewal of sales at a new scale of prices. The result was that before the sales of the new nitrate year started, the Chilean peso had advanced in value over 25 per cent. Thus, on the one hand, the speculative operations of the nitrate producers, who sold in advance at from 37 to 45 pesos per pound sterling the bills which they expected to receive at a later date in payment for nitrate shipments, were responsible for the decline in the Chilean exchange which started in October; and, on the other hand, speculation in anticipation of the Government loan of \$18,000,000 recently placed in the United States was a strong factor responsible for the sudden change in the trend of the value of the peso. The general belief in Chile was that the entire proceeds of the loan would be spent in Chile after being converted into paper pesos. This course would naturally have resulted in bringing about a rapid rise in the value of the local currency. When the fact was made clear that the major portion of the loan had been assigned to firms in London and New York to take care of maturing obligations of the Government, the sudden action on the part of traders to cover their transactions brought about a considerable decline in local exchange. That portion of the proceeds of the loan which was actually brought into Chile was used by the Government principally in the payment of salary arrears and the liquidation of accounts with several municipalities. The position of the Government has been temporarily improved as a result of the distribution in Chile of the imported portion of the New York loan, but a permanent improvement is not to be expected until further revenue-producing measures, such as the income-tax legislation now under consideration, are put into effect.



## TRADE CONDITIONS.

The movement of foreign trade, as judged by the customhouse collections, has been satisfactory. At the end of September, 1922, the total sales of nitrate effected for delivery since July 1 amounted to about 900,000 tons. Sales for delivery during July and August amounted to 405,000 tons. Exportation of nitrate during the same period totaled 272,000 tons, and it is estimated that there remained at the beginning of October on the coast about 150,000 tons sold but unshipped. As a result of the encouraging prospect for the nitrate industry, it is reported that about 50 plants will be opened for production within a short time, as against a total of 31 producing plants during the dullest period in 1921. Reports of several nitrate delegations in Europe reveal a general condition of depleted stocks there. It is upon the European consumption that the success of the nitrate season depends, and the hope is entertained in Chile that the European demand will warrant the continuation of nitrate production on the present basis and a consumption sufficient to help toward the liquidation of the Chilean stocks. This would bring about, within a short time, the renewal of production in Chile upon a scale that would result in economic equilibrium in that country. The feeling exists at present among nitrate producers in Chile that nitrate prices are too low, and the association has announced that sales for delivery later than March, 1923, will not be made at prices in force at present. An indication of the strong confidence which prevails in Europe regarding the Chilean nitrate industry may be seen in the fact that when a nitrate company in the Antofagasta district recently offered bonds for £300,000, the issue was oversubscribed six times in the one hour that the books remained open. Unemployment in the nitrate districts no longer exists. There is now employment for all the labor available, and laborers from other parts of Chile are returning to the nitrate section.

Exports of copper for the eight months ended August 31 amounted to about 83,464 tons. This amount compares most favorably with the total exports for the same period in 1921, which amounted to about 40,000 tons. Although the recent slight fall in the price of copper as well as the decrease in the demand from the United States have affected production in the small mines, the stronger companies are proceeding to produce copper on a considerably larger scale. This is probably due to the fact that the copper companies will be able to take

advantage of lower production costs, since production at present is not attended with the restrictions and difficulties incident to times of war or market inactivity. It is reported also that stocks of wool held in the southern region are being reduced, although large stocks held in Punta Arenas still remain unsold.

The import trade has not shown signs of considerable activity, although it is more satisfactory than at any time during the past two years. While its volume has not increased to any large extent, it represents transactions on a sound basis of credit and of volume proportional to current demands. Importations have been almost entirely limited to articles of necessity, luxuries and costly merchandise being rather the exception. This has undoubtedly been due principally to the low level of Chilean exchange.

## GOVERNMENT FINANCES.

The loan for 135,000,000 paper pesos was partly negotiated in New York and partly in Chile. The American loan amounted to \$18,000,000 and was recently offered by the National City Co. of New York. The other portion of the loan, amounting to 30,000,000 pesos, was placed among four banking institutions in Chile, the Bank of Chile underwriting 20,000,000 pesos of the loan. The bonds are issued for a term of seven years, bear 8 per cent interest, and are exempt from all taxation, either fiscal or municipal. Whatever sums may be produced by duties collected on exports of nitrate during the year 1922 in excess of 38,870,000 gold pesos, and during the year 1923 in excess of 54,418,000 gold pesos will be applied to amortization of the loan.

During recent months municipal loans have been under discussion in Santiago and Valparaiso and, according to recent reports, authorization of these loans by the National Congress is expected within a short time.

## CUBA.

## THE SUGAR CROP.

The harvesting of the 1922-23 sugar crop, which started in November, has shown satisfactory results, and a general feeling of optimism prevails throughout the island. It is of importance to note, however, that the majority of the sugar mills in operation at present are foreign owned and that the domestic enterprises are still more or less extensively committed to foreign banks. This means that



a considerable portion of the sugar produced during the present season will be exported from Cuba without bringing into the island corresponding returns which would affect the current trade balance.

The final figures showing the total amount of sugar produced during the sugar season of 1921-22 indicate that this crop was larger than in any previous year, notwithstanding the fact that several centrals remained closed throughout the season. The following table gives a comparison of the 1921-22 sugar crop with five preceding crops:

Crop.	Sugar obtained (tons, 2,240 lbs.)	Molasses obtained (gallons).	Sugar yield (per cent)	Cane ground (arrobas, 25 lbs.).
1916-17.....	3,051,997	160,287,484	11.23	2,522,225,733
1917-18.....	3,473,184	174,642,257	10.80	2,785,649,838
1918-19.....	4,009,737	227,083,679	10.76	3,231,937,234
1919-20.....	3,735,425	185,091,804	10.99	3,024,125,578
1920-21.....	3,934,297	210,945,113	10.91	3,268,090,546
1921-22.....	4,033,455	203,146,196	11.77	3,069,953,733

The estimates of the 1922-23 sugar crop indicate a further increase in the total output. According to the most reliable estimates the crop will amount to about 4,223,000 tons of 2,240 pounds each. In December, 1922, 46 sugar mills were grinding, as compared with 19 in the same month in 1921 and 18 in 1920.

#### TOBACCO CROP.

The tobacco crop for 1921-22 was a small one, and it is therefore expected that there will be no difficulty in disposing of the stocks held. During the first nine months of 1922, 6,082,775 kilos of leaf tobacco, valued at \$8,521,434, were exported through Habana, besides 4,629,136 kilos of stemmed tobacco, valued at \$8,996,533.

#### CREDIT CONDITIONS.

Loans are still being made with a great deal of caution by banks at rates of interest which range between 10 and 12 per cent on first-class commercial paper. The general improvement in the situation, however, has been reflected in the operations of the credit institutions, since commercial credits are being obtained more easily and upon better terms than in any period during 1922. Branches of foreign banks operating in Cuba have been instrumental in introducing into the island the use of trade acceptances. These documents are meeting with increasing popularity. The supply of

capital available to finance building and other long-term operations is not organized in a manner that would produce the most effective results. Up to the present time there has been no apparent movement toward the establishment in Cuba of associations of joint investment to finance building projects. Considerable activity may be noticed, nevertheless, in building operations, which is partly due to the desire on the part of the public to invest their surplus funds in operations of that character instead of depositing them in banks.

#### BANKING LIQUIDATION.

The process of liquidation pursued by the banking commission has been attended by many difficulties which have delayed the final liquidation of the affairs of the banks under its jurisdiction. This has given rise to severe criticism on the part of the creditors, voiced through the Cuban press. According to Mr. Clarence Marine, a member of the Bank Liquidating Commission,<sup>1</sup> this institution has at present under its control 18 banks and about 300 branches, with combined assets at the time of the suspension of payments amounting to \$166,091,901, and liabilities amounting to \$142,118,004. One of the principal difficulties encountered has been that of harmonizing the provisions of the banking liquidation law with the commercial code and laws formerly in force. Mr. Marine has further stated that it has been almost impossible to find a market for even the highest class of securities held by the banks; ordinary collections have been difficult to effect; and forced liquidation has been confined almost entirely to transactions involving a small percentage of payment in cash and the balance in checks or mortgages to be liquidated at public sales. One of the principal reasons for delay, he also stated, has been that the commission, hoping that conditions would improve, especially in the sugar market, has in most cases restrained the liquidating committees from accepting compensation in paper secured by collateral or by mortgages, although a movement has been on foot to secure the removal of all restrictions on compensation as a means to more rapid liquidation. However, the various liquidating committees have reduced to 20 the 300 branches of the banks under their control. Expenses have been curtailed extensively, and during the period that the banks have been in liquidation the total liabilities have decreased to \$127,440,339.

<sup>1</sup> A full description of the creation and functions of the Bank Liquidating Commission was given in the July, 1922, issue of the BULLETIN, p. 827.

GOVERNMENT FINANCES.

In the month of July, 1922, the Cuban budget for the fiscal year 1922-23 went into effect. A full discussion of this budget was presented in the August, 1922, issue of the BULLETIN (p. 960). According to statements recently issued by the Treasury Department of the island, the actual revenues obtained since the budget went into effect have exceeded the estimated revenues in the budget law for 1922-23. By arrangements with the banks of the Habana Clearing House, all current expenses of the Government are being promptly paid, with the result that a remarkable improvement has been noticed in the general attitude toward the Government's credit. The following table shows the revenue collected by the Cuban Government during the first four months (July-October) of the fiscal year 1922-23, as compared with the revenue estimated in the budget law, on the same basis of four months. It may be noticed that the total excess of actual revenue over estimated revenue amounted to \$132,576 during the period mentioned.

Items.	Revenue estimated in budget law for 1922-23.	Estimated revenue for 4 months (one-third of preceding column).	Actual revenue obtained in first 4 months of 1922-23.	Increase or decrease over estimate in 1922-23 budget law.
<b>Customs:</b>				
Tariff duties.....	\$28,000,000	\$9,333,333	\$9,919,694	+\$586,361
Tonnage dues.....	400,000	133,333	184,856	+ 51,523
Other income.....	600,000	200,000	157,915	- 42,085
<b>Total.....</b>	<b>29,000,000</b>	<b>9,666,666</b>	<b>10,262,465</b>	<b>+ 595,799</b>
Port dues.....	1,200,000	400,000	470,312	+ 70,312
Consular fees.....	1,600,000	533,333	342,972	- 190,361
Postal revenues.....	2,000,000	666,667	667,599	+ 932
<b>Taxes on profits:</b>				
Banks, stock companies, sugar producers, cane planters, etc.....	3,500,000	1,166,667	1,041,307	- 125,360
Mining, 6 per cent..	1,000	333	11,571	+ 11,238
Industry and commerce, 4 per cent.	1,900,000	633,333	359,728	- 273,605
<b>Total.....</b>	<b>5,401,000</b>	<b>1,800,333</b>	<b>1,412,606</b>	<b>- 387,727</b>
Inheritance and transfer of property.....	1,100,000	366,667	898,561	+ 531,894
Documentary stamp tax.....	3,900,000	1,300,000	799,225	- 500,775
Tax on sugar production.....	2,000,000	666,667	156,131	- 510,536
State rights and properties.....	427,800	142,600	107,761	- 34,839
Tax on liquors and other articles for the service of external loan of 1904.....	3,800,000	1,266,667	1,414,222	+ 147,555
National lottery.....	4,000,000	1,333,333	1,549,968	+ 216,635
<b>Miscellaneous income:</b>				
Amount to be paid in by the municipalities for public health services.....	950,000	316,666	411,089	+ 94,423
Other income.....	260,000	86,667	185,931	+ 99,264
<b>Grand total..</b>	<b>55,638,800</b>	<b>18,546,266</b>	<b>18,678,842</b>	<b>+ 132,576</b>

The external debt of Cuba amounts at present to about \$51,000,000 and the internal debt to about \$39,000,000. The new loan for

\$50,000,000, which was approved by the Cuban Congress on October 9, 1922, will increase the indebtedness to about \$128,500,000, after liquidating the \$5,000,000 loan of J. P. Morgan & Co. floated in January, 1922, and the \$6,640,800 in bonds of the issues of 1904, 1905, and 1917, held by the same banking firm. The new loan, offered for subscription by a New York syndicate headed by Messrs. J. P. Morgan & Co., is dated January 15, 1923, and matures January 15, 1953. It was offered to the public at 99½ and accrued interest. According to the terms of the contract the principal and interest of this loan are payable in United States gold coin in New York City and are exempt from any Cuban taxes now existing or which may hereafter be levied. These bonds are the direct obligation of the Republic of Cuba and, in addition, they are secured by lien on certain revenues of the country. These include customs revenues, subject to existing charges but prior to any future charges, and more specifically a first charge on 10 per cent of the amount by which the revenues of the Government in each fiscal year exceed \$60,000,000. Recent reports from Habana indicate that the proceeds of the loan will be used by the Government as follows:

Fund of special accounts.....	\$9,000,000
Liquidation of J. P. Morgan & Co. loan.....	5,000,000
Salaries, wages, etc., due before July 1, 1922..	7,000,000
Pensions due before July 1, 1922.....	2,000,000
Department of public works, for liquidation of past-due indebtedness.....	12,000,000
Other departments, and for expenses of auditing and tax collecting (any surplus to department of public works).....	6,000,000
Department of public works, for reconstruction and repairs.....	6,000,000
Interest and sinking fund internal debt (due prior to July 1, 1922).....	3,000,000
<b>Total.....</b>	<b>50,000,000</b>

The deficit which will probably be created by the pledging of certain revenues to the new loan will be met, according to the Government, by two new taxes recently created. A 1 per cent tax on gross sales is to be levied on all merchants, manufacturers, or individual establishments. The tax will be based on the exact value of the article at the time of sale. The following will be excepted: Exports of raw materials or manufactured products, except sirup, wines, and tobacco, when sold directly by the producer; gross sales of merchandise which do not exceed \$1,000 for each quarter; and sales made by small retail dealers. The tax became effective on December 1, 1922. Hotels and restaurants, public utility companies, and others are to be taxed 1 per cent on gross receipts.

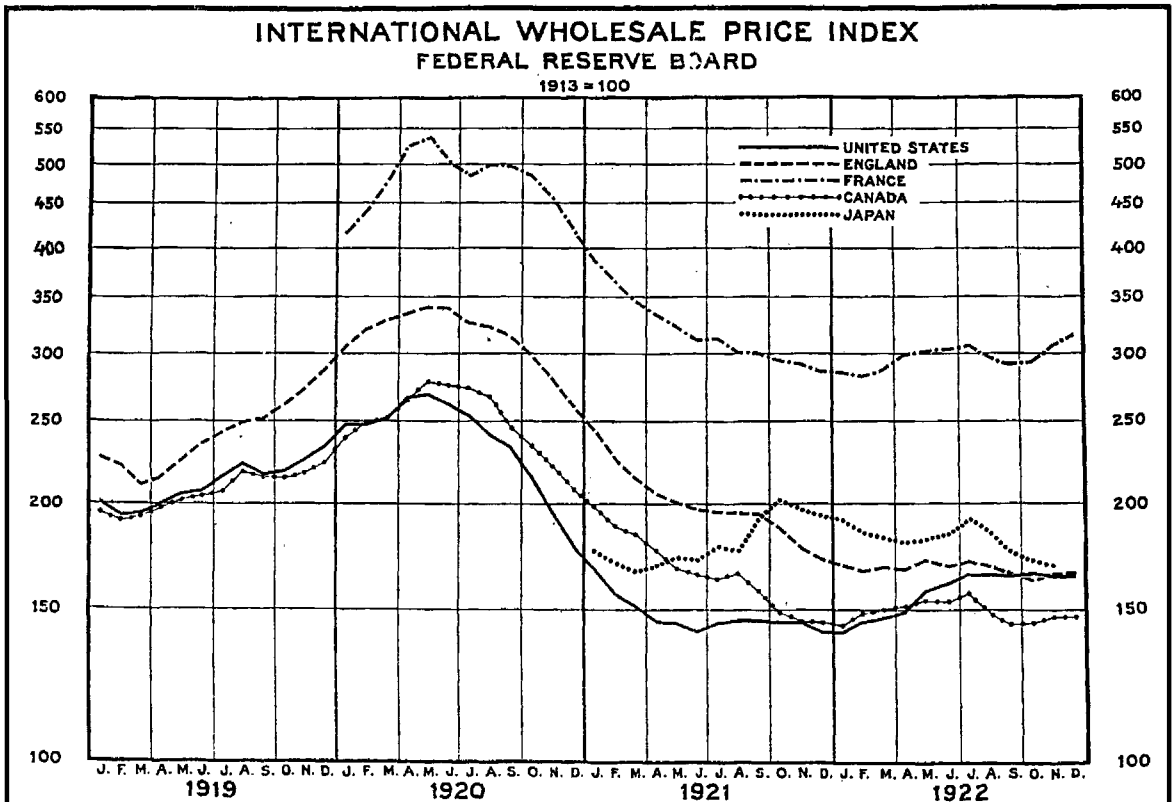
# PRICE MOVEMENT AND VOLUME OF TRADE.

## INTERNATIONAL WHOLESALE PRICE INDEX.

Wholesale prices in December were exceedingly stable in most of the countries covered by the index numbers of the Federal Reserve Board. In the United States and Canada there was no change from the November price level, and in England and Japan there was but a one-point increase. In France, however, there was an increase of 8 points, in comparison with the rise of 13 points in November. The improved condition of the French and British exchanges during December brought about a rise in the price levels of these two countries on a gold basis.

The outstanding feature of the price situation in December was the rise of prices of consumers' goods in every country, which, with the increases in this class of goods during the previous month, seems to indicate the beginning of a marked upward trend from the low points of two and three months ago. The other groups showed little change, there being an unusual number of commodities among raw materials and producers' goods which remained unchanged in price, and no definite movement of such groups as farm products, steel products, or chemicals.

Prices in France have recently been quite out of line with those of the other countries. The last two months have witnessed striking price increases in that country, especially in agricultural products, foods, metals, and textiles.



INTERNATIONAL WHOLESALE PRICE INDEX—FEDERAL RESERVE BOARD.

Year and month.	Based on prices in respective currencies.					Converted to gold basis.				
	United States.	England.	France.	Canada.	Japan.	United States.	England.	France.	Canada.	Japan.
1913, average.....	100	100	100	100	100	100	100	100	100	100
1919, average.....	211	241	207	207	211	221	199	199	199	199
1920, average.....	239	314	478	250	239	242	185	223	175	175
1921, average.....	148	201	321	167	148	159	124	150	150	150
1922, average.....	157	167	298	149	157	152	127	147	147	147
1921.										
December.....	142	172	287	145	193	142	147	117	135	186
1922.										
January.....	142	170	286	144	191	142	148	121	137	181
February.....	146	167	283	149	185	146	150	128	145	176
March.....	147	168	287	150	182	147	151	134	145	173
April.....	149	167	299	152	180	149	151	143	148	171
May.....	153	171	302	154	180	158	155	143	152	171
June.....	161	169	304	153	184	161	154	138	151	176
July.....	165	171	307	151	192	165	156	131	152	184
August.....	165	163	295	149	184	165	154	123	149	176
September.....	161	165	294	144	176	161	150	117	144	169
October.....	165	163	294	145	171	165	148	112	145	165
November.....	164	165	307	147	169	164	151	109	147	164
December.....	164	166	315	147	170	164	157	118	146	167

INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES.<sup>1</sup>

[Average prices in 1913=100]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.
1919, average.....	214	174	221	209	198	221	211
1920, average.....	242	191	235	235	217	244	239
1921, average.....	148	108	136	141	142	160	148
1922, average.....	154	123	157	166	139	157	157
1921.							
December.....	140	111	141	140	127	153	142
1922.							
January.....	139	110	139	141	127	150	142
February.....	143	110	142	145	127	155	146
March.....	144	111	144	147	126	157	147
April.....	146	115	144	150	129	156	149
May.....	155	119	155	164	137	160	158
June.....	153	124	163	167	141	161	161
July.....	162	128	165	177	143	163	165
August.....	162	127	162	184	144	156	163
September.....	161	128	157	181	147	154	164
October.....	161	135	193	179	150	156	165
November.....	160	137	173	177	150	156	164
December.....	160	138	174	177	149	157	164

<sup>1</sup> A complete description of the United States index number, as originally published, may be found in the May, 1920, BULLETIN, pages 499-503. Revisions in prices or weights appear in the BULLETINS for June, 1920; June, 1921; and May, 1922.

INDEX NUMBERS OF WHOLESALE PRICES IN ENGLAND.<sup>1</sup>

[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1919, average.....	238	247	275	226	261	241	241	221
1920, average.....	315	294	438	291	355	292	314	242
1921, average.....	207	171	183	197	178	219	201	159
1922, average.....	169	155	155	168	145	181	167	152
1922.								
January.....	174	149	158	171	147	161	170	148
February.....	171	148	151	168	144	161	167	150
March.....	172	147	153	170	142	163	163	151
April.....	171	148	152	167	143	163	167	151
May.....	175	153	155	169	146	161	171	156
June.....	172	154	158	167	148	196	162	154
July.....	172	158	158	168	147	190	171	156
August.....	170	155	159	170	143	183	168	154
September.....	165	157	154	166	143	177	165	150
October.....	160	161	149	165	144	170	163	148
November.....	161	165	154	166	146	172	165	151
December.....	163	163	157	166	146	177	166	157
1923.								
January.....	165	164	165	167	151	175	167	160

<sup>1</sup> A complete description of the British index may be found in the February, 1922, issue of the BULLETIN, pages 147-153.

**INDEX NUMBERS OF WHOLESALE PRICES IN FRANCE.<sup>1</sup>**  
[Average prices in 1913=100.]

Year and month.	Goods produced. <sup>2</sup>	Goods imported.	Goods exported.	Raw materials.	Producers' goods. <sup>2</sup>	Consumers' goods.	All commodities. <sup>2</sup>	Converted to gold basis.
1920, average.....	466	536	512	506	533	474	478	185
1921, average.....	322	313	288	341	248	348	321	124
1922, average.....	295	310	295	324	235	309	298	127
1921.								
December.....	284	303	283	313	230	294	287	117
1922.								
January.....	284	295	277	308	229	299	286	121
February.....	282	280	275	300	227	300	283	128
March.....	285	282	272	305	229	306	287	134
April.....	302	282	274	318	228	327	299	143
May.....	305	288	279	322	226	333	302	143
June.....	305	295	292	327	231	327	304	138
July.....	306	308	297	332	237	325	307	131
August.....	296	309	296	329	238	303	298	123
September.....	289	320	301	323	238	296	294	117
October.....	286	333	308	328	238	290	294	112
November.....	296	362	336	348	248	296	307	109
December.....	306	361	333	352	253	310	315	118

<sup>1</sup>A complete description of the French index may be found in the August, 1922, issue of the BULLETIN, pp. 922-929.

<sup>2</sup> Revised figures.

**INDEX NUMBERS OF WHOLESALE PRICES IN CANADA.<sup>1</sup>**  
[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1919, average.....	207	204	220	197	188	227	207	199
1920, average.....	249	253	268	235	255	270	250	223
1921, average.....	168	164	181	155	174	183	167	150
1922, average.....	147	160	145	138	151	164	149	147
1922.								
January.....	143	151	139	132	147	161	144	137
February.....	148	150	152	138	147	164	149	145
March.....	150	150	151	140	146	166	150	145
April.....	152	151	153	142	146	169	152	148
May.....	153	157	154	145	147	168	154	152
June.....	151	162	149	143	150	168	153	151
July.....	153	165	154	143	152	171	151	152
August.....	146	166	144	136	154	166	149	149
September.....	140	170	133	133	154	157	144	144
October.....	141	171	134	134	155	158	145	145
November.....	143	165	138	135	157	160	147	147
December.....	143	167	138	135	159	161	147	146
1923.								
January.....	146	171	140	137	160	163	149	148

<sup>1</sup> A complete description of the Canadian index may be found in the July, 1922, issue of the BULLETIN, pp. 801-806.

**INDEX NUMBERS OF WHOLESALE PRICES IN JAPAN.<sup>1</sup>**  
[Average prices in 1913=100.]

Year and month.	Goods produced.	Goods imported.	Goods exported.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.	Converted to gold basis.
1921, average.....	186	154	173	154	188	193	181	175
1922, average.....	185	159	189	165	181	189	180	173
1921.								
December.....	201	154	192	167	192	209	193	186
1922.								
January.....	198	153	197	168	191	203	191	181
February.....	192	151	186	163	183	198	185	176
March.....	187	153	175	157	183	195	182	173
April.....	186	151	176	157	183	192	180	171
May.....	185	157	183	164	182	189	180	171
June.....	188	166	192	168	191	191	184	176
July.....	197	167	196	170	195	203	192	184
August.....	189	160	189	161	187	196	184	178
September.....	180	156	180	159	177	185	176	169
October.....	173	159	195	166	171	174	171	165
November.....	170	166	194	173	168	167	169	164
December.....	171	165	192	171	167	171	170	167

<sup>1</sup> A complete description of the Japanese index may be found in the September, 1922, issue of the BULLETIN, pp. 1052-1059.

COMPARATIVE WHOLESALE PRICE LEVELS IN PRINCIPAL COUNTRIES.

ALL-COMMODITIES INDEX NUMBERS.<sup>1</sup>

Year and month.	EUROPE.												
	Belgium; Ministry of Labor. <sup>2</sup>	Bulgaria; General Statistical Bureau.	Denmark; Finans-tidende. <sup>3</sup>	France; General Statistical Bureau. <sup>4</sup>	Germany; Frankfurter Zeitung. <sup>5</sup>	Germany; Federal Statistical Bureau. <sup>6</sup>	Italy; Riccardo Bacchi. <sup>7</sup>	Netherlands; Central Bureau of Statistics. <sup>8</sup>	Norway (Christiania); Oekonomisk Revue. <sup>9</sup>	Poland; Central Statistical Office.	Spain; Institute of Geography and Statistics. <sup>10</sup>	Sweden; Göteborgs Handels- och Sjöfartstidning. <sup>11</sup>	Switzerland; Dr. F. Lorenz. <sup>12</sup>
	(128)		(33)	(45)	(98)	(38)	(100)	(53)	(93)	(58)	(74)	(47)	(71)
1913.....	100	100	100	100	100	100	100	100	100	100	100	100	100
1914.....	<sup>13</sup> 100	103	<sup>14</sup> 100	101	<sup>15</sup> 100	106	95	105	<sup>16</sup> 115	<sup>17</sup> 100	101	<sup>18</sup> 100	116
1915.....	137	138	137	137	142	133	145	159	222	233	119	145	185
1916.....	1268	164	187	187	153	202	222	233	341	345	141	185	244
1917.....	667	228	262	262	179	299	286	341	409	392	166	207	339
1918.....	830	293	339	339	217	409	392	345	409	392	207	339	330
1919.....	1,166	294	357	357	416	364	297	322	377	377	204	330	347
1920.....	1,940	382	510	510	1,965	1,486	624	282	322	322	221	347	330
1921.....	2,006	250	345	345	2,130	1,911	578	181	269	269	190	211	195
1922.....	367	2,473	179	327	32,715	34,182	562	160	220	137,579	176	162	160
1922.													
January.....	366	2,172	178	314	4,217	3,665	577	161	260	59,231	179	170	176
February.....	356	2,272	177	306	4,599	4,103	562	162	253	63,445	179	179	144
March.....	350	2,287	182	307	5,420	5,433	533	161	240	73,729	177	179	135
June.....	356	2,436	179	325	7,851	7,030	537	167	230	87,694	177	174	160
July.....	360	2,489	180	325	9,102	10,059	558	162	232	101,587	174	165	161
August.....	360	2,526	180	331	13,978	19,202	571	155	227	135,786	174	163	163
September.....	364	2,531	178	329	29,116	28,698	582	158	225	152,365	173	158	163
October.....	385	2,558	176	337	43,223	56,601	601	156	221	201,320	172	155	163
November.....	408	2,564	180	352	94,492	115,100	596	158	221	275,647	174	154	169
December.....	407	2,630	182	362	166,495	147,480	550	158	220	346,400	172	155	170
1923.													
January.....	434		181	387	205,417	278,476			220			156	175

Year and month.	EUROPE—continued.			NORTH AMERICA.		ASIA AND OCEANIA.					AFRICA.		
	United Kingdom; Board of Trade.	United Kingdom; Economist. <sup>4</sup>	United Kingdom; Statist. <sup>4</sup>	United States; Bureau of Labor Statistics.	Canada; Department of Labor. <sup>11</sup>	Australia; Bureau of Census and Statistics. <sup>4</sup>	China (Shanghai); Ministry of Finance. <sup>20</sup>	Dutch East Indies; Statistical Bureau.	India (Calcutta); Department of Statistics. <sup>6</sup>	Japan (Tokyo); Bank of Japan. <sup>8</sup>	New Zealand; Department of Statistics.	Egypt (Cairo); Department of Statistics.	South Africa; Office of Census and Statistics.
	(150)	(44)	(45)	(404)	(271)	(92)	(147)	(17)	(75)	(56)	(106)	(23)	(187)
1913.....	100	100	100	100	100	100	<sup>19</sup> 100			100	100		
1914.....	99	101	98	101	101	<sup>15</sup> 100		<sup>22</sup> 100	<sup>23</sup> 100	96	104	<sup>24</sup> 100	<sup>25</sup> 100
1915.....	123	126	101	110	141	141			112	97	123	102	
1916.....	161	159	127	135	132	128			128	117	134	124	127
1917.....	204	206	177	177	155	155			147	147	151	168	145
1918.....	225	226	194	206	170	170		<sup>18</sup> 232	180	192	175	207	158
1919.....	235	242	206	217	180	180	133	<sup>19</sup> 281	198	236	178	225	170
1920.....	307	283	295	226	246	218	140	<sup>18</sup> 226	204	259	212	299	231
1921.....	197	181	188	147	182	167	145	186	181	200	201	171	
1922.....	159	159	155	149	166	154	146		180	196	177	145	133
1922.													
January.....	164	159	156	138	168	147	149	164	178	206	186	156	135
February.....	162	158	155	141	169	147	150	163	179	204	181	152	
March.....	160	160	157	142	166	146	152	164	182	201	180	153	
June.....	160	163	159	150	165	156	144	167	183	197	175	139	
July.....	160	163	157	155	166	157	144	168	181	201	177	138	
August.....	156	158	152	155	164	155	142	163	178	195	177	139	131
September.....	154	156	150	153	163	158	140	159	176	193	174	138	
October.....	155	158	153	154	162	159	143	163	177	190	174	140	133
November.....	157	159	153	156	164	162	143	164	178	188	175	144	193
December.....	155	158	152	156	165	161	149		176	183	172	147	
1923.													
January.....		158		156	165					184		141	

<sup>1</sup> The number of commodities or quotations used in the computation of each index is indicated by figures in parentheses at head of each column.  
<sup>2</sup> Average of last half of month.  
<sup>3</sup> First of month.  
<sup>4</sup> End of month.  
<sup>5</sup> Beginning of month—not always the 1st.  
<sup>6</sup> Average for the month.  
<sup>7</sup> 38 commodities prior to 1920; 76 commodities during 1921. End of month.

<sup>8</sup> Based upon price of 52 commodities during 1920; 53 during 1921.  
<sup>9</sup> End of year and end of month.  
<sup>10</sup> 15th of the month.  
<sup>11</sup> Middle of month.  
<sup>12</sup> July 1, 1913, to June 30, 1914=100.  
<sup>13</sup> April, 1914=100.  
<sup>14</sup> July 1, 1912, to June 30, 1914=100.  
<sup>15</sup> July, 1914=100.  
<sup>16</sup> Dec. 31, 1913, to June 30, 1914=100.  
<sup>17</sup> January, 1914=100.

<sup>18</sup> December figure.  
<sup>19</sup> January figure.  
<sup>20</sup> As of last Wednesday in month.  
<sup>21</sup> February, 1913=100.  
<sup>22</sup> As of Jan. 1.  
<sup>23</sup> End of July, 1914=100.  
<sup>24</sup> Jan. 1, 1913, to July 31, 1914=100.  
<sup>25</sup> Average for year.

The foreign index numbers published on the preceding page are constructed by various foreign statistical officers and are sent to the Federal Reserve Board by cable. References to the BULLETIN in which these are described may be found in the BULLETIN for January, 1923.

Index numbers showing the price levels of separate groups of commodities in the United States and a few foreign countries are presented on the following pages. Group index numbers

for the other countries are published only occasionally, but such figures may be obtained from the Division of Analysis and Research at any time upon request.

A comparative summary table showing the board's international index for the United States, England, Canada, France, and Japan appears on page 207. Group index numbers, computed as part of this international series, will also be found on that page.

**GROUP INDEX NUMBERS—UNITED STATES—COMMODITIES IN BUREAU OF LABOR STATISTICS INDEX REGROUPED BY FEDERAL RESERVE BOARD.**

Year and month.	Raw materials.					Producers' goods. (117)	Consumers' goods. (199)	All commodities. (404)
	Agricultural products. (21)	Animal products. (21)	Forest products. (11)	Mineral products. (35)	Total raw materials. (88)			
	1913.....	100	100	100	100			
1919.....	251	221	211	179	217	179	211	206
1920.....	255	186	311	236	228	214	231	226
1921.....	134	110	165	184	142	135	159	147
1922.....	145	125	185	207	158	128	151	149
1921.								
December.....	130	103	169	179	137	125	151	140
1922.								
January.....	130	109	167	178	139	123	146	138
February.....	140	121	166	177	140	118	148	141
March.....	141	122	165	178	147	120	150	142
April.....	145	120	167	180	148	122	149	143
May.....	152	122	174	202	157	125	150	148
June.....	146	123	186	211	159	127	151	150
July.....	147	130	183	241	171	129	152	156
August.....	138	127	191	261	173	129	149	155
September.....	136	132	199	236	168	132	150	153
October.....	147	132	204	218	166	135	152	154
November.....	160	129	207	209	166	136	155	156
December.....	161	128	211	208	167	135	157	156

**GROUP INDEX NUMBERS—UNITED STATES—BUREAU OF LABOR STATISTICS.**

Year and month.	Farm products. (56)	Foods. (110)	Cloths and clothing. (65)	Fuel and lighting. (20)	Metals and metal products. (37)	Building materials. (41)	Chemicals and drugs. (43)	House furnishing goods. (31)	Miscellaneous. (25)	All commodities. (404)
	1913.....	100	100	100	100	100	100	100	100	100
1919.....	231	207	253	181	162	201	169	184	175	206
1920.....	218	220	295	241	192	264	200	254	196	226
1921.....	124	144	180	199	129	165	136	195	128	147
1922.....	133	138	181	218	122	163	124	176	117	149
1922.										
January.....	122	131	176	195	112	157	124	178	117	138
February.....	131	135	174	191	120	156	123	177	117	141
March.....	130	137	172	191	109	155	125	175	117	142
April.....	129	137	171	194	113	158	124	175	116	143
May.....	132	138	175	216	119	160	122	176	116	148
June.....	131	140	179	225	120	167	122	176	114	150
July.....	135	142	180	254	121	170	121	173	114	155
August.....	131	138	181	271	126	172	122	173	115	158
September.....	133	138	183	244	134	180	124	173	116	153
October.....	138	140	183	226	135	183	124	176	120	154
November.....	143	143	192	218	133	185	127	179	122	156
December.....	145	144	194	216	131	185	130	182	122	156
1923.										
January.....	143	141	196	218	133	188	131	184	124	156

GROUP INDEX NUMBERS—UNITED KINGDOM—BOARD OF TRADE.

Year and month.	Cereals. (17)	Meat and fish. (17)	Other foods. (19)	Total food. (53)	Iron and steel. (24)	Other metals and minerals. (20)	Cotton. (16)	Other textiles. (15)	Other articles. (22)	Total not food. (97)	All articles. (150)
1913 average.....	100	100	100	100	100	100	100	100	100	100	100
1920 average.....	273	263	279	272	353	252	480	359	273	329	307
1921 average.....	194	219	214	209	210	179	192	172	196	191	197
1922 average.....	151	172	172	165	137	141	182	166	165	155	159
1921.											
December.....	153	180	186	173	152	152	183	165	177	165	168
1922.											
September.....	143	174	152	156	132	140	185	168	160	153	154
October.....	145	169	157	157	131	139	184	170	165	154	155
November.....	144	173	162	160	131	139	193	172	168	156	157
December.....	141	174	156	156	131	138	189	172	166	155	155

GROUP INDEX NUMBERS—FRANCE—GENERAL STATISTICAL BUREAU.

Year and month.	Animal foods. (8)	Vegetable foods. (8)	Sugar, coffee, and cocoa. (4)	All foods. (20)	Minerals. (7)	Textiles. (6)	Sundries. (12)	All industrial materials. (25)	All commodities. (45)
1913 average.....	100	100	100	100	100	100	100	100	100
1919 average.....	392	313	253	336	272	444	405	373	357
1920 average.....	503	427	422	459	449	737	524	550	510
1921 average.....	380	330	343	355	275	355	374	338	345
1922 average.....	349	295	329	325	270	390	338	329	327
1922.									
January.....	309	306	259	302	258	363	350	324	314
September.....	346	279	333	318	279	418	341	339	329
October.....	341	283	311	313	309	446	347	357	337
November.....	365	289	345	331	305	468	363	369	352
December.....	387	300	364	349	311	473	365	373	363
1923.									
January.....	388	322	412	367	346	533	377	404	387

GROUP INDEX NUMBERS—GERMANY—FEDERAL STATISTICAL BUREAU.

Year and month.	Goods produced. (16)	Goods imported. (22)	All commodities. (38)	Year and month.	Goods produced. (16)	Goods imported. (22)	All commodities. (38)
1913 average.....	100	100	100	1922.			
1919 average.....	385	558	416	September.....	25,815	43,113	28,693
1920 average.....	1,253	2,652	1,466	October.....	49,853	90,343	56,601
1921 average.....	1,788	2,533	1,911	November.....	95,290	214,150	115,100
1922 average.....	29,655	56,818	34,162	December.....	128,330	243,230	147,480
1922.				1923.			
January.....	3,383	5,075	3,665	January.....	239,005	475,632	278,476

GROUP INDEX NUMBERS—GERMANY—FRANKFURTER ZEITUNG.<sup>1</sup>

Year and month. <sup>2</sup>	Foodstuffs and luxuries. (26)	Textile and leather. (16)	Minerals. (18)	Miscellaneous. (17)	Industrial unfinished products. (21)	All commodities. (98)
July, 1914.....	100	100	100	100	100	100
January, 1920.....	1,972	2,611	2,749	1,101	1,465	1,965
January, 1921.....	2,019	2,325	2,790	1,776	1,704	2,130
January, 1922.....	3,640	5,789	5,176	3,149	3,347	4,217
1922.						
February.....	4,300	6,281	5,525	3,492	3,581	4,599
March.....	5,211	6,805	6,810	4,201	4,060	5,420
April.....	6,330	8,551	8,585	5,288	4,972	6,703
May.....	6,649	9,228	9,305	5,961	5,982	7,384
June.....	6,967	9,626	10,141	6,413	6,341	7,851
July.....	8,323	11,001	12,168	6,881	7,292	9,102
August.....	13,691	19,661	18,355	10,993	10,001	13,978
September.....	29,175	32,184	42,648	21,605	22,684	29,116
October.....	38,593	66,157	54,905	32,134	35,025	43,223
November.....	88,980	153,696	128,982	72,038	57,683	91,492
December.....	144,753	266,622	219,395	134,177	118,365	166,495
1923.						
January.....	175,845	320,632	262,212	177,752	151,793	205,417
February.....	555,005	1,413,673	931,239	534,734	476,564	715,881

<sup>1</sup> Latest figures subject to revision.

<sup>2</sup> Beginning of month—not always the 1st.



## GROUP INDEX NUMBERS—ITALY—RICCARDO BACHI.

Year and month.	Vegetable foods.	Animal foods.	Chemicals.	Textiles.	Minerals and metals.	Building materials.	Other vegetable products.	Sundries.	All commodities.
	(25)	(13)	(11)	(12)	(16)	(6)	(5)	(12)	(100)
1920 average.....	100	100	100	100	100	100	100	100	100
1922 average.....	110	105	71	74	62	83	113	92	90
1922.									
January.....	112	114	73	72	64	92	112	94	92
October.....	113	114	72	85	69	86	124	96	96
November.....	112	112	71	82	67	88	127	98	96
December.....	110	110	69	78	65	88	129	94	93

## GROUP INDEX NUMBERS—SWEDEN—GÖTEBORGS HANDELS OCH SJÖFARTSTIDNING.

[July 1, 1913-June 30, 1914=100.]

Year and month.	Vegetable foods.	Animal foods.	Raw materials for agriculture.	Coal.	Metals.	Building materials.	Wood pulp.	Hides and leather.	Textiles.	Oils.	All commodities.
	(16)	(7)	(5)	(2)	(5)	(7)	(3)	(5)	(5)	(2)	(47)
1913-14.....	100	100	100	100	100	100	100	100	100	100	100
1919.....	261	409	340	804	258	266	308	211	.....	.....	330
1920.....	262	296	312	1,007	278	371	675	215	324	294	347
1921.....	210	220	227	285	159	243	310	107	144	228	211
1922.....	161	164	168	172	123	217	163	91	165	160	162
1921.											
December.....	156	186	202	157	134	243	189	110	146	179	172
1922.											
September.....	146	179	160	169	119	215	154	90	171	150	158
October.....	143	166	158	169	117	216	160	91	176	150	155
November.....	132	171	159	175	117	208	178	89	194	150	154
December.....	136	165	162	178	117	209	181	89	198	150	155
1923.											
January.....	137	161	163	184	117	211	185	89	205	150	156

## COMPARATIVE RETAIL PRICES IN PRINCIPAL COUNTRIES.

In the following table are presented statistics showing the trend of retail prices and the cost of living in the United States and certain other countries:

## INDEX NUMBERS OF RETAIL PRICES AND COST OF LIVING.

Year and month.	Retail prices.						Cost of living.									
	United States.	Canada.	Czechoslovakia.	France (Paris).	Italy.	Sweden.	Austria (Vienna).	Belgium.	Germany (46 cities).	Germany (Berlin).	Poland.	Switzerland.	United Kingdom.	India (Bombay).	New Zealand.	South Africa.
1914.....	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1	\$ 100	\$ 1.0	\$ 1.0	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100
1920.....	199	215	.....	371	454	298	.....	.....	9.1	10.8	.....	249	.....	.....	.....	155
1921.....	150	164	.....	337	548	237	.....	434	12.0	12.4	28,622	210	226	173	.....	133
1921.																
November.....	149	149	.....	326	533	211	.....	.....	16	18	47,628	192	203	182	160	127
December.....	147	148	.....	323	535	202	.....	533	447	17	46,740	189	199	179	153	124
1922.																
January.....	139	140	1,467	319	576	190	669	418	18	19	46,883	186	192	173	157	122
February.....	139	143	1,461	307	559	189	770	394	22	22	48,085	175	183	165	156	120
March.....	136	142	1,414	294	546	185	792	372	26	27	52,353	170	186	165	153	120
April.....	136	138	1,415	304	524	182	875	368	32	32	58,627	162	182	162	152	122
May.....	136	138	1,444	317	530	178	1,092	365	35	35	63,914	156	181	163	152	122
June.....	133	137	1,475	307	.....	179	1,871	373	38	41	68,406	155	180	163	151	121
July.....	139	138	1,430	297	522	179	2,645	372	50	61	78,798	159	184	165	150	120
August.....	136	141	1,290	289	531	181	5,932	369	70	103	90,823	154	181	164	150	120
September.....	137	139	1,105	291	.....	180	11,806	384	114	164	107,663	154	179	165	150	120
October.....	140	138	1,016	290	.....	178	10,368	406	195	261	123,415	155	178	162	149	121
November.....	142	139	984	297	.....	170	9,730	433	400	565	170,987	158	180	160	.....	122
December.....	144	140	.....	305	.....	168	.....	429	612	868	.....	.....	180	.....	.....	.....

<sup>1</sup> Average for the month.  
<sup>2</sup> Average for 1913.

<sup>3</sup> July.  
<sup>4</sup> Apr. 15, 1914=100.

<sup>5</sup> 1913-1914=1.  
<sup>6</sup> August, 1913-July, 1914=1.

<sup>7</sup> June.  
<sup>8</sup> 1909-1913=100.

NOTE.—The Canadian index, computed by the Department of Labor, consists of the retail prices of 29 foods in 60 cities. Descriptions of the index numbers for the other countries will be found in the FEDERAL RESERVE BULLETIN for January, 1923.

INDEXES OF INDUSTRIAL ACTIVITY IN FOREIGN COUNTRIES.

UNITED KINGDOM.

Year and month.	PRODUCTION.				Raw cotton, visible supply. <sup>3</sup>	EXPORTS.			IMPORTS.				TRANSPORTATION.			Unemployed among approximately 12,000 insured persons.	Net profits of industrial companies.		
	Coal.	Pig iron.	Steel ingots and castings.	Finished steel.		Iron and steel manufactures.	Cotton manufactures.	Coal.	Raw cotton.	Raw wool.	Raw wet hides.	Hides, dry and salted.	Vessels under construction.	Vessels cleared.	British railways.				
															Net ton-miles.			Total freight receipts.	
Monthly av:	Long tons. <sup>1</sup>	Long tons. <sup>1</sup>	Long tons. <sup>1</sup>	Long tons. <sup>1</sup>	Bales. <sup>1</sup>	Long tons. <sup>1</sup>	Sq. yds. <sup>2</sup>	Long tons. <sup>1</sup>	Lbs. <sup>3</sup>	Lbs. <sup>3</sup>	Lbs. <sup>3</sup>	Lbs. <sup>3</sup>	Gross tons. <sup>1</sup>	Tons. <sup>1</sup>	Ton-miles. <sup>1</sup>	Pounds sterling. <sup>1</sup>	Per cent.	Per cent.	
1913.....	23,953	855	639	646	1,397	414	4,596	6,117	181	67	6,927	5,189	2,003	5,652	.....	.....	.....	11.7	
1920.....	19,108	670	756	646	1,397	271	374	2,078	158	73	4,025	6,277	3,603	3,049	1,540	.....	.....	15.2	
1921.....	13,696	218	302	238	1,234	142	244	2,055	98	63	4,792	2,469	3,313	3,032	1,108	9,074	.....	10.3	
1921.																			
November.....	17,876	272	444	330	1,216	194	366	3,504	195	67	8,967	4,504	.....	3,944	1,318	10,581	.....	15.7	
December.....	22,594	275	381	292	1,271	205	333	4,309	166	84	7,875	3,800	2,640	4,003	1,306	.....	.....	16.2	
1922.																			
January.....	17,693	288	328	271	1,298	253	342	4,021	134	90	4,557	4,186	.....	3,919	1,320	9,370	.....	16.2	
February.....	19,764	300	419	321	1,240	224	254	4,014	99	112	12,184	12,882	.....	3,891	1,363	9,655	.....	15.7	
March.....	19,921	390	549	369	1,112	296	307	5,201	83	123	4,568	4,102	2,236	4,814	1,527	11,143	.....	14.0	
April.....	22,875	394	404	294	1,181	258	305	4,097	101	117	3,164	3,590	.....	4,187	1,236	9,198	.....	14.4	
May.....	19,146	408	462	334	1,143	272	345	5,057	120	138	3,994	2,471	.....	5,104	1,379	10,442	.....	7.2	
June.....	15,827	369	400	310	1,111	236	315	4,794	127	97	2,772	3,393	1,920	4,975	1,160	8,003	.....	12.7	
July.....	23,135	399	473	345	890	252	447	5,064	111	79	7,390	2,982	.....	4,828	1,369	9,561	.....	5.9	
August.....	19,151	412	528	338	864	270	381	6,146	81	107	7,281	4,422	.....	5,855	1,455	9,795	.....	12.0	
September.....	25,681	430	556	386	853	279	400	7,083	60	52	7,339	3,616	1,617	5,731	1,464	9,294	.....	9.1	
October.....	21,207	482	565	493	882	347	357	6,196	128	60	5,090	6,571	.....	5,590	1,545	9,922	.....	12.0	
November.....	21,712	494	601	410	1,056	372	402	5,671	183	60	5,500	5,469	.....	5,633	.....	.....	.....	12.4	
December.....	25,841	534	646	.....	1,138	341	364	5,953	205	70	5,099	6,204	1,469	5,145	.....	.....	.....	12.2	

<sup>1</sup> In thousands; 000 omitted.  
<sup>2</sup> In millions; 000,000 omitted.

<sup>3</sup> Figures for end of the month.  
<sup>4</sup> Expressed in yards.

<sup>5</sup> Figures for 5 weeks.

FRANCE.

Year and month.	PRODUCTION.			Cotton stocks at Havre. <sup>2</sup>	EXPORTS.	IMPORTS.				TRANSPORTATION.		Unemployed receiving municipal aid in Paris.
	Pig iron.	Crude steel.	Bales. <sup>1,4</sup>		Total.	Total.	Raw cotton for consumption.	Raw silk for consumption.	Coal for consumption.	Vessels cleared.	Receipts of principal railways. <sup>5</sup>	
Monthly average:	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Bales. <sup>1,4</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Tons. <sup>1</sup>	Francs. <sup>1</sup>	Number.
1913.....	434	391	274	1,840	3,685	27,428	629	1,559	2,176	165,892	.....	.....
1920.....	286	254	225	1,071	4,211	19,577	390	2,005	1,412	479,894	.....	3,022
1921.....	280	255	169	1,333	3,165	16,666	206	1,472	1,802	516,397	.....	20,671
1921.												
November.....	295	277	192	1,515	5,161	29,058	477	2,244	1,862	483,216	.....	3,730
December.....	301	302	208	2,507	5,197	30,835	382	2,895	1,992	641,857	.....	4,175
1922.												
January.....	312	315	188	1,554	3,396	14,870	502	1,676	1,735	454,323	.....	4,658
February.....	323	317	163	1,520	4,126	14,714	467	2,153	1,744	468,175	.....	4,385
March.....	386	367	127	1,570	4,494	20,978	408	2,081	1,934	472,779	.....	3,546
April.....	383	324	138	1,794	3,787	17,391	207	1,539	2,088	608,764	.....	2,447
May.....	442	364	169	1,538	4,396	18,090	404	2,058	2,340	472,607	.....	1,636
June.....	410	358	145	1,799	4,307	32,380	391	1,829	2,473	504,431	.....	1,958
July.....	428	369	153	1,936	4,223	26,325	566	1,631	2,523	651,720	.....	602
August.....	447	397	135	1,788	4,512	18,291	579	1,767	2,399	546,310	.....	606
September.....	462	407	99	2,616	4,138	17,302	550	1,692	2,359	720,210	.....	410
October.....	503	430	131	2,034	4,543	27,877	722	1,768	2,336	563,314	.....	272
November.....	513	410	158	2,034	4,577	20,387	526	1,905	2,455	532,152	.....	245
December.....	.....	.....	197	2,429	4,930	.....	.....	.....	.....	539,073	.....	344

<sup>1</sup> In thousands; 000 omitted.

<sup>2</sup> End of the month figure.

<sup>3</sup> Railways included are: State Railways, Paris-Lyon-Méditerranée, Nord, Orléans, Est, Midi, Alsace-Lorraine, and Guillaume-Luxembourg

<sup>4</sup> Bale of 50 kilograms.

<sup>5</sup> Figures do not include Lorraine.

<sup>6</sup> Excludes the Alsace-Lorraine and Guillaume-Luxembourg Railways.

## GERMANY.

Year and month.	PRODUCTION.		EXPORTS. <sup>2</sup>				IMPORTS. <sup>3</sup>				SHIPPING.		UNEMPLOYMENT.	
	Coal and coke.	Lignite.	Iron and iron manufactures.	Machinery and electrical supplies.	Dyes and dye-stuffs.	Coal. <sup>3</sup>	Raw wool.	Half-manufactured silk.	Cotton. <sup>4</sup>	Iron ore. <sup>5</sup>	Arrivals of vessels in Hamburg.		Applicants for every 100 available positions.	Unemployed persons receiving State aid.
Monthly average:	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons.	Metric tons.	Metric tons.	Metric tons.	Metric tons.	Metric tons.	Metric tons.	Metric tons. <sup>1</sup>	Number.	Tons. <sup>1</sup>	Number.	Number. <sup>1</sup>
1913.....	17,003	7,266	541,439	60,919	21,812	2,881,126	16,608	920	43,424	1,225	1,256	1,182	169	366
1920.....	13,043	9,303	145,833	46,772	8,462	603,749	4,025	232	12,490	538	401	374	169	366
1921.....	13,664	10,241	203,681	39,037	8,530	518,937	11,860	393	30,894	619	700	794	165	310
1921.														
November.....	14,052	10,479	233,204	35,697	9,953	569,657	12,628	346	27,242	937	838	881	136	150
December.....	14,343	11,029	214,812	46,397	9,212	640,877	10,984	388	28,313	791	503	873	148	149
1922:														
January.....	14,640	10,978	221,743	39,470	9,552	752,340	10,400	347	23,426	942	745	875	150	165
February.....	13,655	10,091	172,709	45,089	9,332	668,433	26,202	383	17,915	493	461	716	145	203
March.....	15,931	12,260	211,979	48,813	12,299	795,200	26,988	440	26,130	810	894	969	113	213
April.....	13,800	10,634	200,677	46,112	11,095	795,940	24,091	462	24,070	866	972	1,112	113	116
May.....	14,670	11,437	209,432	47,354	12,629	701,941	25,619	486	26,112	1,519	1,143	1,244	107	65
June.....	11,416	10,487	213,220	49,347	16,335	528,766	15,723	436	22,037	1,159	1,092	1,287	103	29
July.....	11,972	11,411	212,365	44,162	12,671	199,961	14,119	435	26,085	962	793	1,065	106	20
August.....	12,780	12,147	198,408	50,978	12,616	121,359	11,011	459	20,915	997	1,005	1,171	109	15
September.....	12,623	11,823	244,012	40,150	13,477	110,245	8,708	342	13,959	1,090	945	1,208	122	12
October.....	13,329	12,089	246,074	50,699	15,187	125,670	10,023	371	10,584	1,316	1,016	1,272	129	16
November.....	12,956	11,896	233,553	41,644	11,110	137,341	9,198	425	20,622	842	877	1,046	.....	24

<sup>1</sup> In thousands; 000 omitted.<sup>2</sup> Export and import figures for first 4 months of 1921 not available; 1921 averages based on 8 months.<sup>3</sup> Not including coal for reparations account.<sup>4</sup> Includes linters.<sup>5</sup> Includes manganese ore.<sup>6</sup> Average based on 6 months.

## SWEDEN.

Year and month.	PRODUCTION.		EXPORTS.		IMPORTS.	TRANSPORTATION.			Unemployed workmen per 100 vacancies.
	Pig iron.	Iron and steel ingots.	Unplanned boards.	Paper pulp.	Coal.	Vessels entered.	Vessels cleared.	Freight carried on State railways.	
Monthly average:	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Cubic meters. <sup>1</sup>	Metric tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Net tons. <sup>1</sup>	Net tons. <sup>1</sup>	Metric tons. <sup>1</sup>	Number.
1913.....	61	49	328	71	408	1,147	1,147	830	112
1920.....	39	37	306	73	234	677	692	991	107
1921.....	26	17	162	40	122	519	482	589	276
1921.									
November.....	18	22	361	54	192	601	578	721	334
December.....	19	17	356	99	246	575	582	558	473
1922.				104					
January.....	18	13	87	28	114	442	409	495	482
February.....	17	17	25	11	62	235	255	630	479
March.....	22	22	63	36	197	617	509	730	381
April.....	19	21	66	21	206	524	485	622	368
May.....	24	31	99	76	230	600	633	578	257
June.....	21	24	500	80	172	596	738	645	215
July.....	20	27	608	69	214	625	787	715	203
August.....	22	27	539	104	294	694	836	765	172
September.....	22	31	508	113	229	684	808	776	155
October.....	23	31	494	144	270	699	822	799	177
November.....	.....	.....	465	189	302	705	751	796	.....

<sup>1</sup> In thousands; 000 omitted.

CANADA.

Year and month.	PRODUCTION.			EXPORTS.				IMPORTS.			Railroad receipts.	Unemployment among trade union members.
	Pig iron.	Coal.	Crude Steel.	Planks and boards.	Pre-served fish.	Wood pulp.	Wheat.	Coal.	Raw cotton.	Machinery.		
	Tons <sup>1</sup>	Tons <sup>1</sup>	Tons. <sup>1</sup>	Feet <sup>2</sup>	Lbs. <sup>1</sup>	Lbs. <sup>1</sup>	Bushels. <sup>1</sup>	Tons. <sup>1</sup>	Lbs. <sup>1</sup>	Dollars. <sup>1</sup>	Dollars. <sup>1</sup>	Per cent.
1921 average.....	50	1,255	56	85	11,007	87,871	12,238	1,525	7,269	2,288	33,568	12.5
1921.												
January.....	41	1,373	40	44	8,595	43,510	11,440	1,907	7,774	3,033	31,868	13.1
February.....	58	1,215	59	46	8,130	37,077	9,181	1,454	7,940	2,820	28,144	16.1
March.....	60	1,143	53	67	7,564	58,929	7,486	1,787	8,427	3,423	31,880	16.5
April.....	39	933	27	41	6,424	30,163	4,983	971	5,835	2,179	28,925	16.3
May.....	56	993	52	85	6,083	76,012	8,112	1,214	3,673	2,435	29,136	15.5
June.....	55	1,107	64	88	10,649	64,889	6,003	1,571	4,212	1,968	30,269	13.2
July.....	54	1,170	54	88	9,246	84,515	3,649	1,722	4,903	2,244	33,059	0.1
August.....	50	1,519	72	93	14,967	92,109	3,972	1,718	7,401	2,094	35,760	8.7
September.....	44	1,321	56	97	15,616	123,982	7,145	1,553	6,665	1,728	39,680	8.5
October.....	50	1,408	72	115	19,780	118,343	21,131	1,416	8,044	1,921	43,841	7.4
November.....	48	1,522	75	151	15,238	155,714	29,254	1,528	9,972	1,744	40,200	11.1
December.....	40	1,354	43	110	9,786	169,204	34,492	1,401	12,377	1,863	33,852	15.1
1922.												
January.....	32	1,208	33	82	10,180	124,012	6,103	1,060	11,007	1,640	26,053	13.9
February.....	34	1,313	42	88	7,140	87,039	5,602	1,148	8,758	1,573	26,053	10.6
March.....	35	1,400	30	119	8,929	117,543	6,042	1,857	12,538	2,410	31,966	9.6
April.....	33	666	22	84	5,075	62,153	1,940	896	7,230	1,637	26,809	10.4
May.....	23	721	17	156	5,711	105,107	14,207	548	9,788	1,999	30,799	8.8
June.....	28	811	33	214	6,749	168,169	11,760	412	8,438	2,008	30,536	5.3
July.....	32	858	63	215	9,936	155,502	9,487	427	7,518	1,559	32,624	4.1
August.....	29	789	59	213	7,607	169,611	11,587	440	8,459	1,963	34,937	3.6
September.....	25	.....	36	191	20,675	180,068	9,233	663	4,276	1,918	39,158	2.8
October.....	37	.....	53	239	13,239	154,019	37,593	1,465	4,383	1,931	47,641	.....
November.....	12	.....	51	205	9,995	173,180	55,316	2,127	11,284	2,114	44,259	.....

<sup>1</sup> In thousands; 000 omitted.

<sup>2</sup> In millions; 000,000 omitted.

JAPAN.

Year and month.	PRODUCTION. <sup>1</sup>			Raw silk stocks, Yokohama market.	EXPORTS.				IMPORTS.			TRANSPORTATION. <sup>1</sup>		
	Cotton yarns.	Silk fabrics (habutayé).	Paper.		Silk, raw.	Silk fabrics (habutayé).	Cotton yarns.	Sheetings and shirtings, gray.	Raw cotton, ginned.	Wool.	Iron plates and sheets.	Vessels cleared in foreign trade.	Freight carried on State rail-ways.	Receipts of State rail-ways.
Monthly average:	Bales.	Hiki. <sup>2</sup>	Pounds.	Bales.	Piculs. <sup>3</sup>	Piculs.	Piculs.	Yards. <sup>1</sup>	Piculs. <sup>1</sup>	Piculs.	Piculs. <sup>1</sup>	Tons.	Tons.	Yen.
1913.....	126	.....	.....	53,111	16,857	2,302	113,374	7,921	537	13,162	132	2,075	2,923	11,723
1920.....	151	.....	.....	53,111	14,537	2,264	74,839	28,465	618	46,918	528	2,216	4,548	27,589
1921.....	151	149	44,538	58,477	21,836	1,702	73,064	23,210	718	22,277	312	2,324	4,342	31,182
1921.														
October.....	159	145	45,969	53,535	24,006	1,253	53,506	13,289	685	31,013	218	2,491	4,625	31,960
November.....	168	170	45,658	48,832	29,169	1,855	53,481	16,707	696	14,639	296	2,611	4,610	31,729
December.....	178	169	46,781	44,766	37,250	1,857	68,032	20,352	646	24,064	371	2,718	4,922	32,520
1922.														
January.....	168	166	46,488	40,561	16,924	1,080	61,414	19,124	1,161	41,724	462	2,749	4,102	28,576
February.....	174	129	46,605	32,213	18,102	1,551	63,719	21,900	1,167	93,411	594	2,817	4,261	28,036
March.....	184	153	49,644	44,701	16,647	2,003	123,605	24,194	1,084	61,865	637	3,094	5,066	36,337
April.....	191	110	52,687	40,777	27,380	1,669	138,226	24,725	707	76,416	582	2,971	4,968	42,074
May.....	194	160	53,975	18,293	35,147	1,977	146,354	25,821	580	24,753	752	3,257	5,225	38,456
June.....	192	173	52,791	18,547	29,569	2,176	139,057	29,713	490	68,415	890	3,024	4,965	32,180
July.....	181	159	53,734	45,848	34,541	1,793	51,660	25,284	433	37,431	872	2,937	4,641	32,977
August.....	179	116	54,553	56,032	36,196	2,017	40,075	22,343	731	29,936	697	3,119	4,489	33,944
September.....	179	121	53,326	48,810	35,959	1,686	68,773	17,668	766	17,559	351	2,849	4,502	32,464
October.....	193	118	54,892	48,472	35,970	1,839	118,431	25,259	330	16,994	332	2,784	4,920	35,374

<sup>1</sup> In thousands; 000 omitted.

<sup>2</sup> One hiki equals two piculs.

<sup>3</sup> A picul varies from 133 to 140 pounds avoirdupois.

## FOREIGN TRADE OF PRINCIPAL COUNTRIES.

In the following tables are presented figures from official sources showing the monthly value of the foreign trade of a group of European countries, Canada, Brazil, India, Japan, and the United States.

## FOREIGN TRADE OF UNITED KINGDOM.

[In thousands of pounds sterling.]

Year and month.	IMPORTS.					EXPORTS.					Reex-ports.	Total exports and reex-ports.
	Food, drink, and tobacco.	Raw materials and articles mainly unmanufactured.	Articles wholly or mainly manufactured.	Miscellaneous, including parcel post.	Total.	Food, drink, and tobacco.	Raw materials and articles mainly unmanufactured.	Articles wholly or mainly manufactured.	Miscellaneous, including parcel post.	Total.		
Monthly average:												
1913.....	24,184	23,485	16,131	259	64,061	2,716	5,825	34,281	949	43,770	9,131	52,901
1920.....	63,817	59,196	37,787	254	161,387	4,245	12,126	93,312	1,523	111,206	18,563	129,769
1921.....	47,391	22,598	20,421	268	90,458	3,122	5,297	49,055	1,126	58,600	8,921	67,521
1921.												
December.....	39,115	27,792	18,291	165	85,364	3,187	7,446	47,364	1,378	59,375	9,204	68,579
1922.												
January.....	33,972	24,565	17,710	241	76,488	2,861	7,032	51,824	1,429	63,147	8,459	71,606
February.....	32,257	20,220	16,576	322	69,375	2,754	6,889	48,000	712	58,355	10,174	68,509
March.....	45,261	22,095	20,309	215	87,879	3,270	8,465	51,760	1,085	64,581	10,154	74,735
April.....	40,097	21,404	18,962	199	80,661	3,011	7,376	44,336	785	55,508	9,200	64,708
May.....	43,075	25,358	20,207	176	88,814	3,045	8,757	45,073	1,171	58,045	8,965	67,010
June.....	39,936	25,242	18,857	263	84,298	3,044	7,671	40,556	875	52,146	8,720	60,866
July.....	38,817	24,247	18,379	151	81,784	2,806	8,041	48,455	1,117	60,419	8,317	68,736
August.....	37,762	24,141	20,326	432	82,661	3,105	8,900	47,149	878	60,032	7,504	67,536
September.....	35,555	21,848	19,244	296	76,944	3,154	10,099	48,361	897	62,511	6,381	68,893
October.....	38,617	26,409	19,726	262	85,015	3,066	9,211	47,010	1,112	60,399	8,277	68,676
November.....	45,501	30,223	19,587	290	95,600	3,408	10,101	51,964	1,018	66,491	9,148	75,639
December.....	42,292	32,499	19,838	283	94,912	2,796	9,493	44,932	1,662	58,883	8,479	67,362

FOREIGN TRADE OF FRANCE.<sup>1</sup>

Year and month.	IMPORTS.					EXPORTS.					
	In thousands of francs.				In thousands of metric tons.	In thousands of francs.				In thousands of metric tons.	
Food.	Raw materials.	Manufactured articles.	Total.	Food.		Raw materials.	Manufactured articles.	Parcel post.	Total.		
Monthly average:											
1913.....	151,465	412,144	138,169	701,778	3,685	69,908	154,841	301,421	47,182	573,351	1,840
1920.....	989,576	2,096,379	1,072,787	4,158,741	4,211	217,733	509,485	1,413,548	100,479	2,241,245	1,071
1921.....	517,158	1,033,170	412,045	1,962,373	3,165	161,031	463,219	1,067,413	104,430	1,796,092	1,333
1921. <sup>2</sup>											
December.....	754,671	1,850,148	543,445	3,154,264	5,197	259,605	549,495	1,193,161	180,059	2,182,326	2,507
1922. <sup>3</sup>											
January.....	352,572	887,253	247,827	1,487,652	3,396	121,526	458,460	994,852	63,908	1,638,741	1,554
February.....	385,021	1,137,855	324,150	1,847,026	4,126	153,892	448,455	1,108,507	144,458	1,853,312	1,520
March.....	460,765	1,005,463	465,737	1,931,965	4,434	130,595	456,930	1,189,712	99,431	1,876,668	1,570
April.....	438,000	983,000	323,000	1,743,640	3,787	136,000	461,000	1,231,000	134,000	1,962,000	1,794
May.....	504,000	996,000	310,000	1,810,125	4,396	132,000	498,000	1,127,000	111,000	1,895,000	1,538
June.....	483,356	1,082,371	285,448	1,851,184	4,307						1,799
July.....	476,813	1,200,764	318,169	1,995,746	4,223	113,435	374,959	885,029	59,619	1,433,042	1,936
August.....	510,597	1,096,903	352,229	1,959,729	4,512	179,407	408,005	931,066	157,836	1,676,000	1,788
September.....	473,000	1,087,000	383,000	1,893,000	4,138	141,000	477,000	1,055,000	68,000	1,741,000	2,616
October.....	570,000	1,190,000	349,000	2,109,000	4,543	195,000	494,000	1,099,000	149,000	1,937,000	2,034
November.....	517,000	1,478,000	533,000	2,548,000	4,577	196,000	537,000	856,000	117,000	1,706,000	2,034
December.....	629,000	1,904,000	390,000	2,923,000	4,930	249,000	1,186,000	1,120,000	224,000	3,079,000	2,429

<sup>1</sup> Not including reexport trade.<sup>2</sup> Calculated on 1919 value units.<sup>3</sup> Imports calculated on basis of actual declared value.<sup>4</sup> Value of exports not available. Beginning with June, exports calculated on 1921 value units.

FOREIGN TRADE OF DENMARK, NETHERLANDS, SWEDEN, CANADA, BRAZIL, INDIA, AND JAPAN.

Year and month.	Denmark. (In millions of kroner.)		Netherlands. (In millions of guilders.)		Sweden. (In millions of kronor.)		Canada. (In millions of dollars.)		Brazil. (In millions of milreis.)		India. (In millions of rupees.)		Japan. (In millions of yen.)	
	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.	Im-ports.	Ex-ports.
Monthly average:														
1913.....	71	60	( <sup>2</sup> )	( <sup>2</sup> )	71	68	56	31	84	82	134	205	61	53
1920.....	292	151	278	142	281	191	89	107	174	146	173	272	195	162
1921.....	136	121	187	114	106	91	103	101	141	142	280	214	135	104
1921.														
October.....	143	113	179	115	101	99	60	81	112	166	235	182	130	112
November.....	143	102	176	107	95	103	64	88	96	155	261	199	152	121
December.....	155	107	180	97	112	108	60	87	113	175	232	218	161	146
1922.														
January.....	102	80	152	86	77	61	51	47	92	199	276	230	179	87
February.....	70	76	152	84	49	38	54	47	101	161	189	222	198	101
March.....	103	100	180	113	109	71	79	61	131	172	215	277	208	115
April.....	126	76	167	93	102	60	48	33	127	187	178	239	185	129
May.....	159	108	194	108	97	90	66	70	127	141	191	273	169	154
June.....	140	125	151	101	93	101	62	73	129	149	164	192	157	146
July.....	117	101	164	105	83	113	61	72	109	154	182	244	142	144
August.....	134	90	179	99	105	132	67	74	146	182	212	252	137	146
September.....	134	121	165	116	109	123	60	73	133	202	182	216	135	150
October.....	148	112	187	112	118	122	67	104	226	229	235	182	105	161
November.....			172	104	111	128	76	132	170	-238	206	288	116	139
December.....			163	100	110	120							143	158

<sup>1</sup> Italian yearly figures for 1921 based on average for six months only.  
<sup>2</sup> Dutch figures for 1913 not comparable with later figures.

FOREIGN TRADE OF UNITED STATES.

[In thousands of dollars.]

Year and month	IMPORTS.							EXPORTS.								
	Gold.	Silver.	Merchandise.					Total merchandise. <sup>1</sup>	Gold.	Silver.	Merchandise.					Total merchandise. <sup>3</sup>
			Crude materials for use in manufacturing.	Food-stuffs in crude condition and food animals.	Food-stuffs partly or wholly manufactured.	Manu-fac-tures for further use in manu-fac-turing.	Manu-fac-tures ready for consumption.				Crude materials for use in manufacturing.	Food-stuffs in crude condition and food animals.	Food-stuffs partly or wholly manufactured.	Manu-fac-tures for further use in manufacturing.	Manu-fac-tures ready for consumption.	
Monthly average:																
1913.....	5,309	2,989	50,414	18,399	16,529	28,354	34,453	149,383	7,650	5,231	64,072	14,132	27,069	33,077	64,928	207,002
1920.....	34,756	7,438	145,995	48,136	103,178	66,871	73,060	439,873	26,841	9,468	155,897	76,499	93,050	79,875	267,071	685,069
1921.....	57,608	5,270	71,090	25,331	30,737	28,069	51,577	209,085	1,991	4,298	82,002	57,631	55,809	33,323	135,450	373,760
1921.																
December.....	31,635	5,516	94,016	32,707	25,473	32,083	51,171	237,373	2,162	7,145	89,950	28,737	38,282	35,145	93,370	296,306
1922.																
January.....	26,571	6,496	82,639	27,498	25,900	30,272	49,811	217,195	863	3,977	72,838	31,054	43,019	35,143	91,810	278,898
February.....	28,701	4,771	80,971	22,370	27,762	34,041	49,375	215,743	1,732	7,092	55,895	27,798	45,164	32,193	84,684	250,748
March.....	33,488	6,953	86,910	28,756	36,014	42,820	59,880	256,178	963	4,302	73,001	31,507	58,809	43,632	112,765	330,267
April.....	12,244	4,800	69,801	25,711	32,482	37,252	50,820	217,073	1,579	5,109	79,511	31,174	47,372	37,969	113,876	318,100
May.....	8,994	5,512	88,088	31,264	34,785	39,398	58,254	252,817	3,407	5,677	64,441	34,143	50,376	40,467	112,112	307,689
June.....	12,969	6,346	91,146	26,170	37,346	46,471	58,439	269,391	1,601	6,001	70,219	41,000	55,485	39,096	121,281	334,684
July.....	12,987	6,957	87,298	27,596	38,511	48,393	49,464	252,128	645	6,289	60,024	41,958	49,226	35,676	109,543	301,313
August.....	19,092	4,944	110,285	22,489	42,404	43,430	55,868	281,412	1,996	3,735	65,619	55,142	43,231	35,596	106,542	313,092
September <sup>4</sup>	24,464	6,370	86,818	18,769	24,023	41,026	54,038	228,795	1,399	3,265	133,703	40,798	47,919	32,943	110,177	370,720
October <sup>5</sup>	20,866	3,940	137,378	37,465	30,324	65,685	71,452	343,083	17,592	6,599	114,329	33,615	51,471	33,593	110,532	340,052
November <sup>4</sup>	18,308	5,855							3,431	6,599	114,329	33,615	51,471	33,593	110,532	340,052
December.....	26,440	7,548							2,710	6,913	113,350	25,764	49,620	35,879	113,937	344,425

<sup>1</sup> Including miscellaneous merchandise imported.  
<sup>2</sup> Including miscellaneous and foreign merchandise exported.  
<sup>3</sup> Imports under old tariff law September 1-21, 1922, only.  
<sup>4</sup> Import figures delayed owing to change in tariff.  
<sup>5</sup> Imports for Sept. 21-Oct. 31.

## FOREIGN TRADE INDEX.

There are presented below the Federal Reserve Board's series of index numbers designed to reflect relative quantity movements in the foreign trade of the United States. Changes in the level of prices have been allowed for by multiplying the quantities of selected commodities exported or imported each month by fixed 1913 prices.<sup>1</sup>

	Exports.				Imports.			
	Raw materials (12 commodities).	Producers' goods (10 commodities).	Consumers' goods (7 commodities).	Total (29 commodities).	Raw materials (10 commodities).	Producers' goods (12 commodities).	Consumers' goods (5 commodities).	Total (27 commodities).
1913, year..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1919, year..	88.9	155.1	183.6	115.3	157.5	192.9	147.5	168.4
1920, year..	92.2	153.7	133.6	107.5	135.8	227.5	138.9	168.8
1921, year..	103.1	116.9	124.1	108.9	113.6	162.8	141.4	135.6
1922, year..								
1921.								
January....	105.2	208.6	126.2	120.2	74.5	130.9	123.9	102.6
February....	91.0	162.4	119.4	104.1	118.2	143.7	135.4	130.1
March.....	78.2	135.1	120.2	92.7	160.6	177.2	178.9	169.5
April.....	76.5	132.5	116.4	90.5	153.3	177.6	185.1	167.1
May.....	97.6	96.4	110.8	100.3	98.7	150.0	162.1	127.2
June.....	107.9	94.2	132.2	111.5	94.5	152.3	130.4	129.8
July.....	111.6	78.6	133.8	112.9	96.3	126.6	121.4	112.6
August....	142.7	99.6	160.7	142.1	116.8	165.1	139.8	136.0
September..	115.7	89.7	142.3	118.6	102.8	137.7	99.3	114.6
October....	121.7	107.0	113.2	118.4	96.1	173.5	116.5	128.9
November..	85.1	100.2	106.2	98.1	115.1	139.4	149.2	150.6
December..	93.8	96.0	107.8	96.9	133.0	219.1	164.8	168.7
1922.								
January....	82.6	104.3	129.7	94.5	118.4	228.7	135.2	160.1
February....	68.5	86.0	127.6	82.6	123.3	281.3	133.5	183.4
March.....	89.8	121.7	156.5	106.9	148.1	306.8	161.1	206.5
April.....	94.5	120.9	150.5	106.0	125.5	236.1	152.0	169.1
May.....	78.3	128.8	155.4	93.4	144.6	227.9	168.0	177.9
June.....	80.3	124.3	169.2	107.4	143.7	273.3	137.3	191.0
July.....	79.1	124.0	133.5	95.0	146.9	266.3	137.5	187.7
August....	88.8	90.0	126.3	96.7	174.2	255.5	120.3	194.2
September..	91.2	98.9	111.5	96.2	138.5	182.7	90.6	148.6
October....	122.9	96.8	121.0	119.8	.....	.....	.....	.....
November..	112.6	101.6	117.2	112.4	.....	.....	.....	.....
December..	86.7	109.9	122.8	96.5	.....	.....	.....	.....

The December figure of 96.5 shows a decrease of 15.9 points, or over 13 per cent, from the November figure for volume of exports. The level is thus back to that of late summer. The decrease took place in raw materials, which fell 26 points, while producers' and consumers' goods showed increases. The change in raw materials was occasioned by a falling off in the exports of grains; oats 87 per cent, barley 51 per cent, and corn 36 per cent. Crude oil was

<sup>1</sup> The list includes 27 of the most important imports the value of which in 1913 formed 49.3 per cent of the total import values, and 29 of the most important exports the value of which in 1913 formed 56.3 per cent of the total export values. The classification of the original list of commodities used was given in the July, 1920, BULLETIN. The classification of 11 additional commodities of imports was given in the April, 1921, BULLETIN, and 2 additional commodities in the November, 1921, BULLETIN. Exports of gasoline have been altered to include naphtha.

the only raw material to increase in export volume. An increase in the amount of acetate of lime and sole leather exported caused the rise in producers' goods, and consumers' goods was affected by the rise in lard exports.

From a comparison of the yearly figures, it is evident that exports in 1922 did not average so large in volume as in the preceding three years. Raw materials fell 13 per cent below 1921 and producers' goods 7 per cent below. There was an increase, however, in the volume of consumers' goods exported in 1922.

## SAVINGS DEPOSITS.

During December the volume of savings deposits increased in all Federal reserve districts, and for the entire country the increase was 3 per cent as compared with the preceding month and 7.6 per cent over January 1, 1922. The increases were due in part to the transferring of Christmas club funds to savings accounts and to the increasing of individual accounts through the crediting of proceeds received from the redemption of maturing Government securities.

Comparison of savings deposits on January 1, 1923, with deposits on December 1, 1922, and January 1, 1922, are shown for 880 banks distributed throughout all sections of the United States. The figures for the Boston and New York districts are those of large mutual savings banks, but in all other districts reports of other banks are included to make the figures thoroughly representative. In all districts where reporting commercial banks subdivide their-time deposits, statistics of savings deposits subject to notice (excluding time certificates of deposit) are used. This is in accordance with the definition given in the board's Regulation D, series of 1920.

## SAVINGS DEPOSITS.

[000 omitted.]

District.	Number of banks.	Jan. 1, 1923.	Dec. 1, 1922.	Jan. 1, 1922.
No. 1—Boston.....	64	1,130,998	1,116,546	1,069,106
No. 2—New York.....	30	1,807,550	1,746,127	1,704,936
No. 3—Philadelphia....	80	435,122	419,046	420,123
No. 4—Cleveland.....	18	407,761	393,214	378,702
No. 5—Richmond.....	93	278,891	276,936	250,678
No. 6—Atlanta.....	81	173,355	168,426	154,318
No. 7—Chicago.....	219	828,679	805,040	779,265
No. 8—St. Louis.....	35	124,197	120,589	109,165
No. 9—Minneapolis....	15	83,793	81,246	77,239
No. 10—Kansas City....	58	94,311	91,935	84,139
No. 11—Dallas.....	112	86,686	86,173	76,222
No. 12—San Francisco..	75	831,018	796,128	733,220
Total.....	880	6,283,261	6,102,056	5,837,363

**REPORT OF ASSOCIATED KNIT UNDERWEAR MANUFACTURERS OF AMERICA.**

Production of winter and summer underwear by months since December, 1921, is given in the following table:

Year and month.	Number of mills.			Production (in dozens).		
	Total.	Winter.	Summer.	Total.	Winter.	Summer.
1921.						
December.....	49	37	30	519,231	235,617	283,614
1922.						
January.....	55	36	37	642,400	293,510	348,080
February.....	53	36	32	663,346	332,221	331,122
March.....	54	35	34	756,247	392,595	343,652
April.....	53	38	31	522,035	275,911	246,124
May.....	47	34	28	518,150	298,080	223,070
June.....	47	38	25	564,893	345,605	219,288
July.....	50	41	23	422,872	250,223	153,649
August.....	49	41	24	519,511	311,713	177,798
September.....	52	42	27	513,572	318,220	195,352
October.....	47	38	25	524,486	283,242	241,244
November.....	49	38	28	599,891	321,944	277,947
December.....	52	36	27	461,695	233,459	228,236

Order and production report for the month ending December 31, 1922, follows:

[Number of reporting mills, 42. In dozens.]

Unfilled orders first of month.....	1,286,510
New orders received during month.....	761,233
<b>Total (A).....</b>	<b>2,047,743</b>
Shipments during the month.....	363,481
Cancellations during month.....	5,311
<b>Total (B).....</b>	<b>368,792</b>
Balance orders on hand January 1 (A-B).....	1,678,951

Thirty-seven representative mills which reported for November and December, 1922, furnished the data for the following table:

[In dozens.]

	November.	December.	Loss.	Gain.
Unfilled orders (end of month).....	1,014,665	1,282,832	.....	268,167
New orders.....	712,636	740,833	.....	28,197
Shipments.....	412,108	339,244	72,864	.....
Cancellations.....	14,860	5,311	9,549	.....
Production.....	473,034	355,126	117,908	.....

**INDEX OF OCEAN FREIGHT RATES.**

The accompanying table shows the monthly fluctuations in ocean freight rates prevailing between United States Atlantic ports and the principal European trade regions. The figures are derived from the actual rates quoted on the following commodities: Grain, provisions, cotton, cottonseed oil, and sack flour. Rates

in January, 1920, have been used as a base. For the methods used in constructing the index see the August, 1921, BULLETIN, pages 931-934.

**RELATIVE OCEAN FREIGHT RATES IN UNITED STATES AND EUROPE TRADE.**

Month.	United States Atlantic ports to—					
	United Kingdom.	French Atlantic.	Netherlands and Belgium.	Scandinavia.	Mediterranean.	All Europe.
1920.						
January, 1920.....	100.0	100.0	100.0	100.0	100.0	100.0
January, 1921.....	60.7	30.2	34.1	42.9	43.2	43.3
1922.						
January.....	31.7	22.7	23.3	23.4	32.2	27.1
February.....	34.7	25.7	25.2	23.3	31.8	29.1
March.....	33.4	26.5	24.9	23.4	30.1	28.3
April.....	27.3	24.8	22.7	24.0	27.1	25.4
May.....	27.9	25.5	22.8	23.4	27.4	25.7
June.....	27.5	26.1	23.0	23.4	27.4	25.7
July.....	28.8	25.9	22.6	23.0	26.4	25.9
August.....	29.2	23.4	20.7	22.4	24.0	24.6
September.....	27.0	24.1	19.1	22.6	22.2	23.4
October.....	25.3	22.9	18.9	22.9	21.6	22.7
November.....	28.0	24.4	21.3	22.9	21.3	24.0
December.....	27.1	25.6	22.2	22.7	21.8	24.4
1923.						
January.....	25.3	24.7	19.5	22.3	21.2	22.9

**COMMERCIAL FAILURES REPORTED.**

**FAILURES DURING DECEMBER.**

District.	Number.		Liabilities.	
	1922	1921	1922	1921
First.....	145	190	\$1,610,876	\$6,671,119
Second.....	497	551	9,879,829	36,073,329
Third.....	73	124	4,297,289	4,176,377
Fourth.....	117	180	3,519,347	4,050,490
Fifth.....	108	212	11,236,262	5,679,487
Sixth.....	109	199	1,576,358	6,069,401
Seventh.....	237	302	9,075,862	7,820,313
Eighth.....	84	142	897,491	3,873,516
Ninth.....	94	100	1,224,152	2,158,515
Tenth.....	63	100	1,558,139	2,152,128
Eleventh.....	129	197	2,118,607	4,307,254
Twelfth.....	225	156	5,104,812	3,567,453
<b>Total.....</b>	<b>1,814</b>	<b>2,444</b>	<b>52,069,021</b>	<b>87,502,382</b>

**FAILURES DURING YEAR.**

District.	Number.		Liabilities.	
	1922	1921	1922	1921
First.....	1,950	1,581	\$41,314,886	\$39,314,630
Second.....	4,263	3,614	172,917,462	195,159,800
Third.....	1,000	941	31,311,905	31,335,437
Fourth.....	1,081	1,603	52,001,306	53,075,492
Fifth.....	1,847	1,515	46,617,428	34,380,335
Sixth.....	2,159	1,944	41,320,948	43,477,704
Seventh.....	3,155	2,433	95,231,154	68,904,594
Eighth.....	1,496	1,250	27,821,251	48,742,674
Ninth.....	1,024	723	20,179,985	15,499,078
Tenth.....	984	883	19,686,211	27,347,624
Eleventh.....	1,408	1,491	33,242,896	34,414,726
Twelfth.....	2,204	1,699	35,300,819	35,149,739
<b>Total, United States...</b>	<b>23,676</b>	<b>19,652</b>	<b>917,896,251</b>	<b>627,401,883</b>



## PRODUCTION AND SHIPMENTS OF FINISHED COTTON FABRICS.<sup>1</sup>

	November, 1922.				December, 1922.			
	White goods.	Dyed goods.	Printed goods.	Total.	White goods.	Dyed goods.	Printed goods.	Total.
<b>Total finished yards billed during the month:</b>								
District 1.....	14,758,940	26,833,193	9,618,701	51,441,296	13,046,039	28,881,212	10,623,011	57,085,715
2.....	6,554,248	1,520,420	3,808,807	19,253,733	6,953,704	2,628,987	3,015,175	20,594,298
3.....	8,977,857	7,853,607	16,833,464	16,833,464	9,966,975	8,944,720	.....	18,911,695
5.....	9,103,398	88,065	9,191,463	9,191,463	7,812,100	60,053	.....	7,872,153
6.....	512,534	.....	512,534	512,534	188,260	.....	.....	188,260
8.....	.....	.....	2,665,253	2,665,253	.....	.....	.....	2,064,235
<b>Total.....</b>	<b>39,906,977</b>	<b>36,297,285</b>	<b>13,427,508</b>	<b>102,897,743</b>	<b>37,972,078</b>	<b>40,514,972</b>	<b>13,638,186</b>	<b>106,716,356</b>
<b>Total average per cent of capacity operated:</b>								
District 1.....	65	92	52	71	52	89	54	68
2.....	68	63	59	74	69	59	53	72
3.....	121	94	.....	107	128	102	.....	115
5.....	89	.....	.....	89	63	.....	.....	63
6.....	39	.....	.....	39	14	.....	.....	14
8.....	.....	.....	.....	105	.....	.....	.....	87
<b>Average for all districts.</b>	<b>78</b>	<b>88</b>	<b>54</b>	<b>78</b>	<b>68</b>	<b>87</b>	<b>54</b>	<b>74</b>
<b>Total gray yardage of finishing orders received:</b>								
District 1.....	13,339,949	29,678,591	11,633,667	58,289,242	10,941,366	25,086,918	8,957,364	50,740,413
2.....	5,966,758	5,510,828	5,005,189	22,239,283	5,789,710	5,222,052	4,227,235	19,309,007
3.....	10,535,027	8,512,164	.....	19,047,191	9,932,195	7,903,381	.....	17,835,576
5.....	7,974,982	195,484	.....	8,170,466	6,959,108	134,658	.....	7,093,766
6.....	.....	.....	.....	2,465,306	.....	.....	.....	1,578,184
8.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Total.....</b>	<b>37,816,716</b>	<b>43,897,067</b>	<b>16,638,856</b>	<b>110,211,488</b>	<b>33,622,379</b>	<b>38,347,009</b>	<b>13,184,599</b>	<b>96,557,846</b>
<b>Number of cases of finished goods shipped to customers:</b>								
District 1.....	5,871	8,819	2,647	29,555	5,349	8,199	2,223	28,034
2.....	4,411	412	.....	11,915	4,602	735	.....	12,747
3.....	5,623	3,040	.....	8,563	6,852	3,643	.....	10,495
5.....	2,003	.....	.....	4,328	1,590	.....	.....	3,996
6.....	.....	.....	.....	425	.....	.....	.....	492
8.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Total.....</b>	<b>17,908</b>	<b>12,271</b>	<b>2,647</b>	<b>54,786</b>	<b>18,393</b>	<b>12,577</b>	<b>2,223</b>	<b>55,764</b>
<b>Number of cases of finished goods held in storage at end of month:</b>								
District 1.....	4,982	5,000	2,061	22,216	4,970	5,191	2,549	23,219
2.....	5,020	481	.....	14,614	4,293	676	.....	13,473
3.....	694	405	.....	7,969	482	401	.....	7,505
5.....	.....	.....	.....	951	.....	.....	.....	1,441
6.....	.....	.....	.....	.....	.....	.....	.....	.....
8.....	.....	.....	.....	219	.....	.....	.....	208
<b>Total.....</b>	<b>10,696</b>	<b>5,886</b>	<b>2,061</b>	<b>45,969</b>	<b>9,745</b>	<b>6,268</b>	<b>2,549</b>	<b>45,846</b>
<b>Total average work ahead at end of month (expressed in days):</b>								
District 1.....	3.4	18.0	21.0	13.0	3.0	14.5	20.0	12.0
2.....	9.9	7.5	11.0	11.0	7.0	6.5	6.0	9.0
3.....	17.0	21.0	.....	19.0	13.0	18.0	.....	15.4
5.....	8.9	.....	.....	8.9	6.7	.....	.....	6.7
6.....	0.0	.....	.....	0.0	0.0	.....	.....	0.0
8.....	.....	.....	.....	8.2	.....	.....	.....	4.2
<b>Average for all districts.</b>	<b>7.7</b>	<b>17.0</b>	<b>19.0</b>	<b>13.0</b>	<b>6.0</b>	<b>14.0</b>	<b>17.3</b>	<b>11.0</b>

<sup>1</sup> The National Association of Finishers of Cotton Fabrics at the request of the Federal Reserve Board have arranged for a monthly survey within the industry. The results of the inquiries are herewith presented in tabular form. The secretary of the association makes the following statement concerning the tabulation:

The accompanying figures are compiled from statistics furnished by 32 out of 57 member firms of this association. It is probably fair to state that in the absence of having specific detail at hand, but according to our best estimate it is probably well within the fact that the figures given for the various classes of work would cover, approximately, the following percentages of the entire industry: White goods, 70 per cent; dyed goods, 62 per cent; printed goods, 30 per cent. The figures given represent reports from exactly the same finishers for the two months, both for the totals and for the subdivisions, and, therefore, are strictly comparable.

NOTE.—Many plants were unable to give details under the respective headings of white goods, dyed goods, and printed goods, and reported their totals only; therefore the column headed "Total" does not always represent the total of the subdivisions, but is a correct total for the district.

## PHYSICAL VOLUME OF TRADE.

Complete monthly statistics of commodity movements for the year 1922, together with yearly totals since 1919, are published in this issue of the BULLETIN. A total of 289 series of statistics, divided into general commodity groups, are listed in the tables below.<sup>1</sup> These data cover the field of agricultural movements, mining, manufacturing, fisheries, and transportation. In the manufacturing group it will be noted that not only are statistics of production given, but also of shipments and stocks of many commodities, and, in a few

instances, of new orders booked and unfilled orders on hand.

Indexes of production and movement of goods, computed by the use of certain series, selected from those given in the following pages, are plotted on the accompanying chart. These three indexes, representing respectively the monthly movements of agricultural commodities, the output of mineral products, and the production of manufactured goods, show the outstanding characteristics of business trends since 1919. An analysis of the fluctuations of these indexes and of the important individual series included is made in the following paragraphs.

The year 1922 began with a temporary halt in business activity, following an encouraging upward trend during the fall months of 1921. An increase in the volume of business evidenced in March was checked by the coal strike in April, but the upward movement was resumed in May. This improvement likewise became retarded during the summer by the combined effects of the coal and railway shopmen's strikes. After the settlement of these labor disturbances in September, recovery was rapid, and many new high records in the volume of business were reached during the last three months of 1922. The large production of agricultural commodities during the year was reflected in the record-breaking movement of crops to market. This movement, together with coal shipments, placed a strain upon the the railroad system, already weakened by the shopmen's strike, and the car shortage became acute. Nevertheless car loadings were nearly the largest on record. The year ended with a slight check in manufacturing activity during December and with mineral output greater than at any time since the high point reached in October, 1920.

Agricultural movements fell in April to the lowest point reached in the four years covered by the index, but in August a sharp upward trend became evident and the index rose in October to the highest point on record. Receipts and shipments of live stock exceeded those of a somewhat similar period in the fall of 1919, but for the year they were smaller. Movements of grain and cotton, although they did not attain in any one month to their high records of 1919, were spread out over a longer period and reached larger totals. Cotton receipts, however, fell below figures for

<sup>1</sup> CLASSIFICATION OF PHYSICAL VOLUME OF TRADE STATISTICS.

(289 Series.)

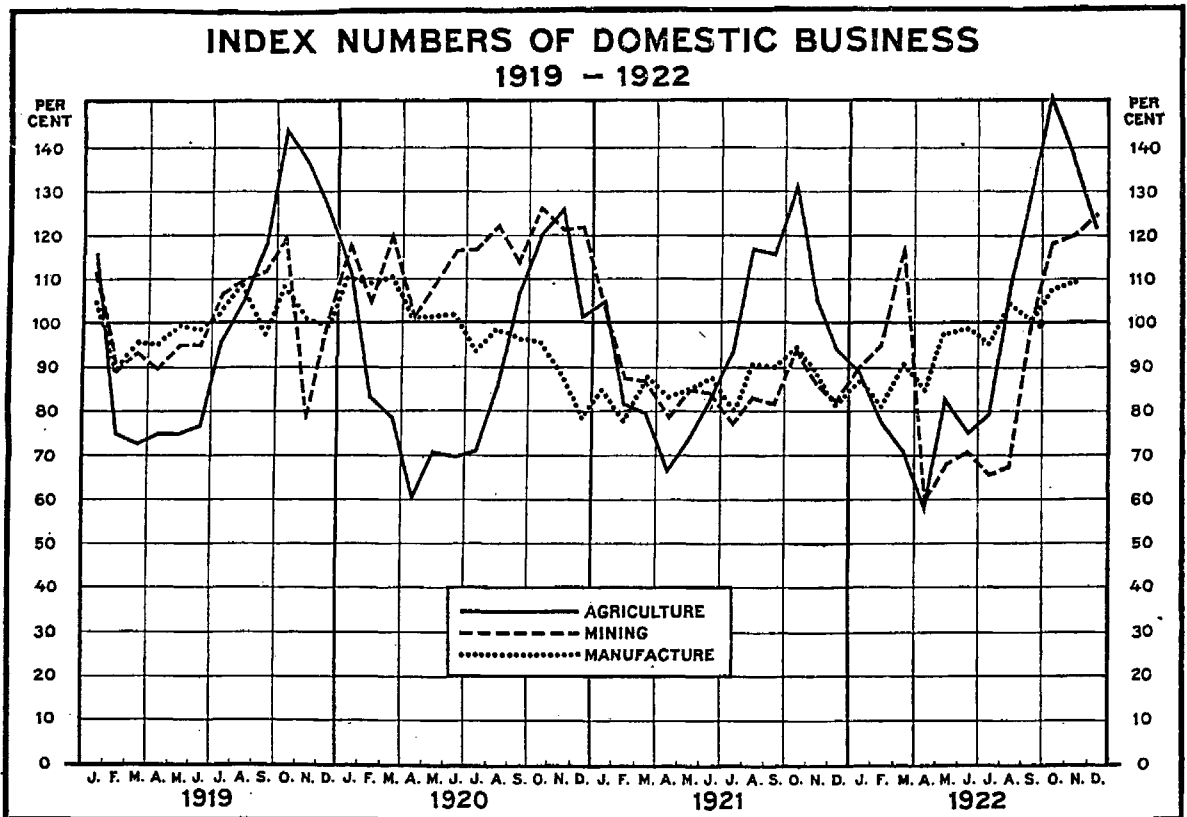
1. GRAIN AND FLOUR (40 series):  
Receipts, shipments, and stocks; visible supply; wheat flour production.
2. LIVE STOCK (22 series):  
Receipts and shipments, animals slaughtered, and cold storage holdings of meats.
3. DAIRY PRODUCTS (6 series):  
Receipts and cold storage holdings.
4. OTHER AGRICULTURAL PRODUCTS (26 series):
  - (a) Cotton seed received, crushed and on hand; cottonseed-oil production and stocks.
  - (b) Oleomargarine consumption.
  - (c) Tobacco—sales at loose-leaf warehouses; sales of revenue stamps on manufactured products.
  - (d) Shipments of certain fruits.
  - (e) Shipments of certain vegetables.
  - (f) Sugar—receipts, meltings, and stocks.
5. FISHERY PRODUCTS (2 series):  
Fish landed and cold-storage holdings.
6. FOREST PRODUCTS (12 series):
  - (a) Lumber production and shipments.
  - (b) Naval stores—receipts and stocks.
7. FUEL AND POWER (21 series):
  - (a) Coal and coke—production of 4 products and shipments of anthracite.
  - (b) Petroleum: Crude petroleum—production and stocks and new wells completed; refined products—production and stocks.
  - (c) Electric power produced.
8. METALS (11 series):
  - (a) Iron and steel—production, unfilled orders, shipments, and sales of various products.
  - (b) Nonferrous metals—production of 5 metals and stocks of zinc.
9. TEXTILES (22 series):
  - (a) Cotton—sight receipts, spinners' takings, stocks at mills, mill consumption, and active spindles.
  - (b) Wool—mill consumption and active machinery.
  - (c) Silk—imports, mill consumption, and stocks.
10. HIDES AND LEATHER (19 series):
  - (a) Hides and skins—sales and stocks.
  - (b) Leather production.
  - (c) Boots and shoes, production.
11. BUILDING MATERIALS (36 series):
  - (a) Brick—production, shipments, stocks and orders.
  - (b) Cement—production, shipments, and stocks.
  - (c) Oak and maple flooring—production, shipments, stocks, orders booked, and unfilled orders.
  - (d) Enameled sanitary ware—shipments, stocks, and orders received.
12. MISCELLANEOUS MANUFACTURES (40 series):
  - (a) Paper and wood pulp—production, consumption, shipments, and stocks of wood pulp; production and stocks of certain grades of paper.
  - (b) Rubber and tires and tubes—imports and consumption of rubber; production, stocks, and shipments of tires and tubes.
  - (c) Automobiles—production and shipments.
  - (d) Locomotives—completions, shipments, and unfilled orders.
  - (e) Vessels built in United States.
13. TRANSPORTATION (32 series):
  - (a) Railroad operating statistics.
  - (b) Railway car loadings, by commodities and districts.
  - (c) Surplus and shortage of freight cars, and bad-order cars.
  - (d) Vessels cleared in foreign trade.
  - (e) Canal traffic—Panama Canal; Sault Ste. Marie.

1921. The index for leaf tobacco sales was abnormally small throughout 1922, owing to the fact that records of monthly sales at co-operative associations, which were of considerable importance during that year, were not available.

Indexes of mineral production during the year reflected the combined effects of the coal strikes, the high rate of building activity, and the enormous production of automobiles. The output of coal was large during the first three months, as operators were attempting to accumulate a surplus in preparation for the impending strikes. At the same time pig iron and nonferrous metals were steadily recovering from the extremely low point to which they fell in 1921. The drastic decline in the mineral index in April and the low levels at which it moved until August were due entirely to the coal strikes, as the output of most of the other products were rising. Pig-iron production was substantially curtailed in August, owing to the deterrent influences of the coal and railway strikes. After the settlement of these

strikes, the composite mineral index rose from 67.5 in August to 124.5 in December. The December figure was the largest in the post-war period with the exception of that of October, 1920. The production of bituminous coal was so large in the first three and last four months of 1922 that the yearly total nearly equaled that of 1921. The output of anthracite, however, has not been so low since 1902 and was less than 60 per cent of the 1921 production. The volume of pig iron produced in December was the largest since October, 1920, and the total production for 1922 was over 60 per cent above that of the preceding year. Crude petroleum output showed a strong upward trend throughout the year and broke all previous records. The consumption of petroleum was large, but did not keep pace with the total of production and imports, and the year ended with enormous stocks on hand. The production of copper was well below that of 1919 and 1920, but was more than double the 1921 figure. Zinc output was nearly 75 per cent greater than in 1921.

**INDEX NUMBERS OF DOMESTIC BUSINESS  
1919 - 1922**



Manufacturing during 1922 continued the recovery begun in the preceding year. A retardation of the upward movement was effected by the strikes in the spring and again in the summer, but activity increased rapidly after the settlement of the strikes, and the manufacturing index in November reached 109.4. This figure has been exceeded only twice in the last four years—by 110 in January, 1920, and by 110.4 in March of the same year. The downward movement evidenced in manufacturing activity during December was largely seasonal. Steel ingot output in November reached the highest point since October, 1920. Lumber production reflected the great building activity and was maintained at high levels throughout the year, and the output was the largest since 1918. Shipments of lumber in December attained the highest point since August, 1918. The production and consumption of cement in 1922 were the largest on record. Textile mills operated during the fall months at around 90 per cent of capacity, and the index for this group of industries reached a high point in November. In that month mills consumed more cotton than in any month since January, 1920; wool consumption was the largest on record; and deliveries of silk to manufacturers were only slightly less than in October, 1922, the record month. The yearly total of cotton consumption exceeded that of all years since 1918. The output of petroleum products moved rapidly upward during the year to new high records. Food products were manufactured at a fairly steady rate during the year, and although below the 1919 levels, the production of these commodities exceeded the figures for 1920 and 1921. Sugar meltings by American refiners broke all previous records. Sole leather production was low throughout the year, ranging between 70 and 88 per cent of the average output in 1919. Wood pulp and paper production remained fairly steady during the year at a level higher than in 1919 and 1921, but lower than in 1920. The output of tobacco products, owing to the increase in production of cigarettes, exceeded all previous records.

INDEXES OF DOMESTIC BUSINESS.

[Monthly average of 1919=100.]

AGRICULTURAL MOVEMENTS.

Date.	Total agricultur- <sup>1</sup>	Total ani- mals.	Total grains.	Cotton.	Fruit.	Leaf to- bacco.
1922.*						
January.....	88.9	91.8	83.8	76.8	96.1	113.2
February.....	77.7	76.5	92.3	43.3	55.5	101.2
March.....	70.7	79.2	73.0	42.8	130.4	27.5
April.....	37.4	71.8	49.6	37.0	103.0	5.5
May.....	82.6	90.2	92.5	50.1	105.7	3.9
June.....	75.1	88.7	77.1	43.0	93.8	1.5
July.....	79.8	81.2	106.4	33.4	59.3	12.3
August.....	106.7	96.5	153.8	48.3	43.1	55.2
September.....	128.8	106.6	150.6	139.5	38.0	85.7
October.....	151.2	132.0	135.7	227.8	40.6	144.7
November.....	137.9	122.2	118.2	204.1	49.0	96.3
December.....	121.3	104.6	128.5	139.2	109.1	97.3

<sup>1</sup> Combination of 14 independent series.

MINERAL PRODUCTS.

Date.	Total min- eral prod- ucts. <sup>1</sup>	Bi- tumi- nous coal.	An- thra- cite coal.	Crude petro- leum.	Iron.	Cop- per.	Zinc.	Lead.
1922.								
January....	91.3	98.5	85.1	137.1	64.3	24.1	60.3	101.0
February...	95.4	107.3	92.0	129.7	63.9	34.8	57.3	93.4
March.....	117.5	131.5	119.1	140.1	78.9	58.0	67.5	93.0
April.....	59.5	41.3	.3	141.9	81.3	71.7	65.6	88.8
May.....	67.9	53.1	.6	147.7	90.5	83.7	69.8	89.0
June.....	70.6	58.4	1.1	143.8	92.6	89.0	72.6	89.1
July.....	65.4	44.5	1.6	148.0	94.2	85.0	61.2	84.4
August.....	67.5	58.3	2.2	147.1	71.1	93.9	79.9	96.7
September..	99.9	107.3	67.7	143.8	79.8	89.8	84.3	95.3
October.....	118.5	118.3	116.1	150.1	103.5	96.7	101.6	108.3
November..	120.1	118.6	114.4	152.1	111.8	95.8	102.3	111.6
December..	124.5	121.7	114.7	159.3	121.1	96.7	109.0	106.6

<sup>1</sup> Combination of 7 independent series.

PRODUCTION OF MANUFACTURED GOODS.

Date.	Total man- ufacture. <sup>1</sup>	Steel.	Lum- ber.	Pa- per.	Petro- leum.	Tex- tiles.	Leath- er.	Food.	To- bacco.
1922.									
January....	87.0	63.4	100.7	95.0	119.0	11.22	88.2	91.3	90.6
February...	80.2	69.3	95.4	90.0	108.6	96.6	78.1	88.5	83.8
March.....	90.9	94.3	102.5	108.4	123.9	107.6	78.5	96.5	98.4
April.....	84.7	97.0	98.1	99.9	124.4	91.3	70.7	81.9	89.6
May.....	98.1	107.8	121.1	112.3	132.2	108.9	70.4	96.8	108.1
June.....	99.1	104.8	104.4	110.6	133.8	107.1	72.4	98.9	119.8
July.....	95.3	98.9	104.3	99.9	146.2	95.0	72.1	97.5	114.8
August.....	104.6	88.1	116.2	110.7	141.2	115.7	80.4	104.5	134.1
September..	100.3	94.4	101.5	107.8	139.1	110.7	79.5	97.8	121.6
October.....	107.5	114.2	115.3	112.8	147.2	120.0	82.7	106.7	115.0
November..	109.4	118.9	112.9	113.4	149.7	125.0	79.1	114.0	112.4
December..	* 99.8	110.5	103.7	106.8	.....	113.3	76.0	108.1	89.4

<sup>1</sup> Combination of 34 independent series.

<sup>2</sup> Partly estimated.

RECEIPTS OF GRAIN AND FLOUR AT 17 INTERIOR CENTERS.

[Compiled from reports of trade organizations at Chicago, Cleveland, Detroit, Duluth, Indianapolis, Kansas City, Little Rock, Louisville, Memphis-Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Spokane, Toledo, Wichita; receipts of flour not available for Cleveland, Detroit, Indiana, anapolis, Louisville, Omaha, Spokane, Toledo, Wichita.]

Year and month.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.	Flour.	Total grain and flour.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Barrels.</i>	<i>Bushels.</i>
1919.....	400,589,032	193,675,010	257,402,057	47,852,768	92,948,306	992,467,173	26,538,141	1,111,889,414
1920.....	354,358,805	226,405,509	235,377,864	44,546,739	46,033,613	906,722,530	22,500,235	1,007,973,586
1921.....	468,810,549	353,470,146	235,617,178	30,910,026	39,852,764	1,130,660,663	27,608,163	1,254,867,354
1922.....	441,696,830	395,835,602	244,774,026	64,232,584	40,414,480	1,186,953,532	30,664,255	1,324,940,337
1921—December.....	24,572,149	41,730,565	14,660,548	2,345,520	1,704,254	85,013,036	1,889,563	93,516,070
1922—January.....	20,341,258	55,068,801	18,323,116	1,266,939	2,265,339	97,265,453	1,768,017	105,221,530
February.....	24,108,900	57,893,227	19,328,477	1,589,053	2,357,884	105,277,631	1,851,913	113,611,240
March.....	20,396,205	30,650,682	16,464,831	3,254,064	3,291,033	74,056,815	2,054,480	83,301,975
April.....	16,892,879	15,356,744	10,810,066	1,417,176	1,850,966	46,357,831	1,992,718	55,322,718
May.....	30,125,977	27,364,113	21,471,265	4,563,686	2,933,440	86,458,301	2,204,240	96,377,381
June.....	21,092,993	32,693,596	19,138,703	1,823,981	3,269,129	78,018,402	2,198,370	80,911,067
July.....	45,407,444	26,365,949	18,442,914	1,433,103	2,233,231	93,932,641	2,611,998	105,665,632
August.....	62,643,648	22,058,396	26,519,128	14,084,516	4,121,223	129,426,911	2,939,508	142,879,697
September.....	59,995,153	34,740,869	22,910,075	11,980,496	5,056,572	154,625,165	3,924,199	152,282,061
October.....	48,986,902	32,577,310	25,092,732	7,367,296	4,600,859	119,181,699	3,337,280	134,148,869
November.....	43,779,365	24,021,799	23,761,350	7,831,568	4,103,612	103,497,694	3,305,454	118,372,237
December.....	48,016,196	37,044,116	22,511,369	7,120,716	4,215,192	118,907,589	2,426,078	129,824,940

SHIPMENTS OF GRAIN AND FLOUR AT 14 INTERIOR CENTERS.

[Compiled from reports of trade organizations at Chicago, Cleveland, Detroit, Duluth, Kansas City, Little Rock, Louisville, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Toledo, Wichita; shipments of flour not available for Cleveland, Detroit, Louisville, Omaha, Toledo, Wichita.]

Year and month.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.	Flour.	Total grain and flour.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Barrels.</i>	<i>Bushels.</i>
1919.....	255,918,478	99,709,408	193,251,608	35,014,155	65,323,816	649,217,465	46,199,235	857,114,026
1920.....	240,776,552	104,639,381	153,225,257	52,688,632	27,604,063	580,933,885	39,972,305	780,809,260
1921.....	305,782,592	224,400,360	142,295,973	25,628,740	27,824,081	725,931,746	44,534,173	926,335,525
1922.....	290,995,034	248,703,894	199,865,001	65,593,384	25,963,555	831,440,868	51,793,171	1,064,509,136
1921—December.....	14,051,336	17,309,782	10,883,191	1,996,283	1,335,179	45,575,821	3,271,638	60,298,192
1922—January.....	12,211,715	29,167,371	12,148,254	359,446	1,434,984	55,321,770	2,895,736	68,352,582
February.....	12,463,161	31,100,281	12,105,321	721,166	1,372,671	57,762,600	3,246,975	72,373,988
March.....	14,719,420	22,999,308	16,825,948	881,600	1,919,626	57,345,902	3,878,090	74,797,307
April.....	11,837,301	15,399,873	13,350,592	1,558,157	1,250,500	43,396,423	3,032,132	57,041,017
May.....	26,297,510	21,987,943	22,838,143	7,783,079	2,800,254	81,676,925	3,623,799	97,984,021
June.....	22,561,755	17,048,313	21,716,147	2,986,170	2,276,602	66,588,987	3,554,452	82,584,021
July.....	28,551,524	23,904,668	14,445,254	11,161,150	1,995,417	80,058,013	3,997,537	98,046,930
August.....	49,633,371	19,963,724	17,846,147	11,902,749	2,152,331	101,498,322	4,845,542	123,303,261
September.....	32,941,634	17,873,044	17,066,341	10,042,557	3,055,417	80,977,993	6,404,388	169,377,739
October.....	28,019,629	22,061,656	17,186,356	4,389,639	2,336,155	73,993,435	5,600,719	99,196,671
November.....	27,399,163	13,166,044	18,654,644	7,459,445	3,145,516	69,824,812	6,470,578	98,942,413
December.....	24,388,851	14,031,669	15,681,854	6,645,226	2,244,082	62,994,682	4,243,223	82,089,186

STOCKS OF GRAIN AT 11 INTERIOR CENTERS.

[Compiled from reports of trade organizations at Chicago, Detroit, Duluth, Indianapolis, Kansas City, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Toledo.]

Year and month.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
1919, monthly average.....	46,538,036	2,440,746	12,066,929	11,710,818	4,717,284	77,473,864
1920, monthly average.....	19,948,415	4,020,417	5,268,716	13,118,611	1,837,112	44,193,271
1921, monthly average.....	17,273,969	13,268,555	39,522,289	1,515,116	1,806,912	73,386,843
1922, monthly average.....	19,655,439	15,016,859	38,741,766	3,986,507	1,214,661	78,615,231
1921—December.....	29,868,649	15,596,902	53,917,618	3,181,584	1,831,526	104,396,279
1922—January.....	26,671,028	16,836,422	52,899,920	3,854,482	1,620,025	101,881,877
February.....	27,831,885	26,177,919	56,563,708	4,336,629	1,475,501	116,385,642
March.....	26,561,407	29,882,939	54,040,764	6,665,832	1,316,790	118,467,732
April.....	23,840,728	23,911,302	50,329,333	6,295,562	1,476,349	105,853,274
May.....	17,562,663	15,819,484	40,369,045	1,746,478	641,455	76,139,125
June.....	10,487,068	21,356,267	34,857,107	643,271	855,384	68,199,097
July.....	10,365,075	11,803,748	30,328,533	634,352	398,138	53,529,846
August.....	11,851,760	4,390,263	32,047,612	2,213,121	979,948	51,482,704
September.....	18,708,396	8,071,633	29,562,429	3,735,582	1,295,147	61,373,187
October.....	20,715,811	5,153,013	30,014,052	6,093,577	1,755,138	63,733,591
November.....	19,796,279	4,854,358	26,999,324	5,965,563	1,325,846	58,941,370
December.....	21,473,183	11,944,964	26,889,379	5,651,633	1,436,209	67,395,368

**TOTAL VISIBLE SUPPLY OF GRAIN IN THE UNITED STATES EAST OF THE ROCKY MOUNTAINS.**

[Bradstreet.]

Year and month.	Wheat.	Corn.	Oats.	Year and month.	Wheat.	Corn.	Oats.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>		<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
1921—December.....	53,278,000	25,670,000	71,323,000	1922—July.....	21,533,000	20,561,000	38,224,000
1922—January.....	47,221,000	29,068,000	71,602,000	August.....	30,586,000	8,229,000	40,073,000
February.....	44,388,000	43,801,000	74,384,000	September.....	36,610,000	13,041,000	37,458,000
March.....	38,258,000	50,036,000	68,920,000	October.....	37,410,000	9,678,000	36,461,000
April.....	33,337,000	37,593,000	59,538,000	November.....	37,128,000	12,034,000	34,887,000
May.....	28,061,000	29,463,000	50,917,000	December.....	41,027,000	17,706,000	34,725,000
June.....	18,943,000	31,534,000	44,610,000				

**RECEIPTS OF GRAIN AND FLOUR AT 9 SEABOARD CENTERS.**

[Compiled from reports of trade organizations at Boston, New York, Philadelphia, Baltimore, New Orleans, San Francisco, Portland (Oreg.), Seattle, Tacoma; receipts of flour not available from Seattle and Tacoma.]

Year and month.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.	Flour.	Total grain and flour.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
1919.....	158,774,444	10,550,817	67,074,150	29,381,953	37,845,481	303,599,845	23,827,751	410,824,627
1920.....	208,026,929	19,342,436	30,619,818	49,886,226	20,121,922	327,997,133	22,036,839	427,162,910
1921.....	256,135,821	71,980,240	26,075,256	20,619,236	29,914,800	404,825,413	26,306,239	524,263,521
1922.....	223,593,945	123,470,580	53,605,557	35,253,894	26,514,332	462,441,008	22,132,502	502,037,271
1921—December.....	27,304,398	11,340,896	1,940,717	2,094,442	1,116,188	43,796,641	1,745,873	51,653,070
1922—January.....	18,036,854	17,531,852	2,305,553	1,104,388	647,802	39,626,749	1,601,377	46,832,946
February.....	13,792,442	22,246,072	2,341,997	912,179	639,690	39,932,380	1,659,759	47,401,296
March.....	14,218,753	21,395,140	3,930,661	865,497	1,296,062	41,706,113	2,089,808	51,110,219
April.....	5,369,675	8,573,808	3,536,813	1,330,550	1,292,761	20,103,607	1,559,214	27,120,070
May.....	12,703,557	6,223,167	8,730,498	3,771,377	2,062,615	33,491,214	1,870,151	41,906,907
June.....	13,390,546	5,264,047	7,279,521	4,278,532	1,493,798	31,706,764	1,579,413	39,814,123
July.....	17,501,424	6,478,017	4,018,166	2,453,932	3,072,577	33,524,116	1,375,657	39,714,573
August.....	32,479,727	6,260,510	3,846,055	3,808,232	2,827,133	49,222,257	1,705,039	56,894,933
September.....	18,578,445	3,943,198	5,406,228	4,451,617	4,500,144	37,179,632	1,778,074	45,180,965
October.....	17,717,455	8,791,904	4,937,482	2,909,313	4,429,996	38,786,140	1,955,357	47,585,217
November.....	32,738,729	7,074,515	4,385,684	5,052,862	2,002,061	52,153,851	2,267,341	62,356,886
December.....	26,766,038	8,788,350	2,888,999	4,315,395	2,249,403	45,008,185	2,691,309	57,119,076

**STOCKS OF GRAIN AT 8 SEABOARD CENTERS AT CLOSE OF MONTH.**

[Compiled from reports of trade organizations at Boston, New York, Philadelphia, Baltimore, New Orleans, Newport News, Galveston, and San Francisco.]

Year and month.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
1919, monthly average.....	13,458,791	303,842	3,902,685	1,307,318	4,274,279	23,246,864
1920, monthly average.....	11,922,628	878,182	1,645,118	1,970,072	2,705,630	19,121,630
1921, monthly average.....	11,407,453	2,205,477	1,477,221	1,270,098	2,530,482	18,880,732
1922, monthly average.....	9,117,365	4,345,141	2,452,536	1,528,987	2,244,026	19,688,064
1921—December.....	3,486,041	2,136,128	1,058,652	157,397	1,664,674	8,502,892
1922—January.....	18,156,671	3,059,463	1,751,492	2,608,598	2,229,565	23,705,789
February.....	10,367,415	8,250,719	1,692,107	2,342,534	2,058,183	24,710,958
March.....	8,359,957	10,510,358	2,086,709	1,840,059	1,731,211	24,528,354
April.....	6,411,933	7,187,436	1,278,926	1,404,612	1,395,079	17,676,006
May.....	5,020,070	5,907,270	2,744,936	760,787	1,382,129	15,815,192
June.....	5,919,430	3,402,447	3,199,146	363,643	1,224,295	14,108,961
July.....	7,235,245	3,402,447	2,026,868	257,619	2,901,734	13,357,271
August.....	11,207,518	935,805	2,813,764	339,509	3,414,888	18,557,373
September.....	10,277,131	781,604	2,788,174	558,245	2,355,872	16,966,200
October.....	10,026,274	1,006,778	2,170,644	2,170,157	2,638,475	19,631,436
November.....	11,781,202	2,619,886	3,255,200	3,006,548	2,880,748	24,438,356
December.....	9,645,563	3,514,688	3,633,483	2,695,511	2,716,149	22,760,939

**WHEAT FLOUR PRODUCTION.**

[January, 1919, to June, 1920, U. S. Grain Corporation: since July, 1920, estimated by Russell's Commercial News (Inc.), New York.]

Year and month.	Barrels.	Year and month.	Barrels.	Year and month.	Barrels.
1919.....	132,334,000	1922—February.....	9,232,000	1922—August.....	12,271,000
1920.....	109,879,000	March.....	9,658,000	September.....	12,540,000
1921.....	121,225,000	April.....	7,823,000	October.....	13,581,000
1922.....	128,596,000	May.....	8,073,000	November.....	13,424,000
1921—December.....	8,856,000	June.....	8,136,000	December.....	11,041,000
1922—January.....	9,496,000	July.....	10,321,000		

RECEIPTS OF CATTLE AND CALVES, HOGS, AND SHEEP AT 59 MARKETS, HORSES AND MULES AT 43 MARKETS.

[Bureau of Agricultural Economics, Department of Agriculture.]

Year and month.	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Total.
	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>
1919.....	24,441,185	44,588,653	26,374,086	1,012,133	96,416,057
1920.....	21,993,521	41,775,457	22,963,585	694,004	87,425,567
1921.....	19,644,730	40,751,653	23,725,966	306,322	84,428,671
1922.....	23,027,898	43,723,423	21,890,081	415,419	89,056,821
1921—December.....	1,405,719	3,893,485	1,622,315	23,776	6,945,295
1922—January.....	1,611,090	4,216,385	1,797,881	44,903	7,670,259
February.....	1,401,555	3,553,080	1,374,002	35,107	6,303,744
March.....	1,607,604	3,371,041	1,438,666	44,823	6,462,134
April.....	1,456,438	3,047,317	1,205,385	27,224	5,736,364
May.....	1,867,079	3,720,176	1,646,445	19,511	7,253,211
June.....	1,749,620	3,763,697	1,675,900	14,192	7,203,409
July.....	1,701,760	2,964,368	1,653,224	15,097	6,334,449
August.....	2,137,531	3,015,587	1,912,786	23,346	7,089,250
September.....	2,358,953	3,042,783	2,216,708	39,174	7,657,618
October.....	2,916,609	3,657,249	3,253,216	55,952	9,883,026
November.....	2,407,632	4,397,285	2,240,739	52,374	9,098,030
December.....	1,812,027	4,974,455	1,475,129	43,716	8,305,327

SHIPMENTS OF CATTLE AND CALVES, HOGS, AND SHEEP AT 59 MARKETS; HORSES AND MULES AT 43 MARKETS.

[Bureau of Agricultural Economics, Department of Agriculture.]

Year and month.	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Total.
	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>
1919.....	10,594,676	14,108,742	13,893,040	991,152	39,587,610
1920.....	9,709,290	15,120,652	12,208,979	699,341	37,738,262
1921.....	8,527,179	14,524,928	11,093,763	296,084	34,441,954
1922.....	8,689,400	14,439,006	10,920,414	314,644	34,363,464
1921—December.....	677,571	1,734,096	841,946	23,600	3,277,213
1922—January.....	663,064	1,746,289	869,625	44,161	3,323,139
February.....	576,758	1,287,590	646,104	34,488	2,544,940
March.....	624,497	1,158,913	664,438	44,868	2,492,716
April.....	555,169	1,056,939	557,624	26,455	2,185,187
May.....	774,847	1,114,523	803,665	19,248	2,712,283
June.....	698,675	1,109,823	770,154	14,794	2,593,346
July.....	664,543	1,018,277	710,791	14,171	2,407,782
August.....	1,030,591	1,052,355	884,555	22,460	2,959,961
September.....	1,234,320	1,142,668	1,232,724	36,490	3,646,192
October.....	1,557,431	1,287,491	2,153,460	54,622	5,058,004
November.....	1,332,968	1,494,597	1,435,617	52,190	4,315,372
December.....	839,792	1,648,174	668,597	42,160	3,198,723

SHIPMENTS OF STOCKERS AND FEEDERS AT 34 MARKETS.

[Bureau of Agricultural Economics, Department of Agriculture.]

Year and month.	Cattle and calves.	Hogs.	Sheep.	Total.	Year and month.	Cattle and calves.	Hogs.	Sheep.	Total.
	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>		<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>
1919.....	5,225,917	857,504	6,927,408	13,010,829	1922—May.....	359,391	66,256	145,156	570,803
1920.....	3,999,058	666,668	5,115,962	9,781,687	June.....	306,712	54,843	181,819	543,374
1921.....	3,453,853	456,836	3,085,765	6,996,454	July.....	221,055	28,737	202,649	452,441
1922.....	4,799,593	553,862	4,142,814	9,496,269	August.....	446,170	29,539	350,201	825,910
1921—December.....	242,334	33,397	205,291	481,022	September.....	598,779	32,218	514,584	1,145,581
1922—January.....	231,294	25,146	182,739	439,179	October.....	832,972	47,703	1,136,453	2,017,128
February.....	241,325	56,641	168,564	466,530	November.....	700,299	53,063	756,596	1,509,958
March.....	278,420	66,668	143,154	488,242	December.....	351,671	40,639	263,761	656,271
April.....	231,305	52,409	97,138	380,852					

**ANIMALS SLAUGHTERED UNDER FEDERAL INSPECTION.**

[Bureau of Animal Industry, Department of Agriculture.]

Year and month.	Cattle.	Calves.	Hogs.	Sheep.	Total.
	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>	<i>Head.</i>
1919.....	10,090,984	3,969,027	41,811,830	12,691,117	68,562,958
1920.....	8,608,691	4,058,370	38,018,684	10,982,180	61,667,925
1921.....	7,598,258	3,807,568	38,982,378	13,004,905	63,393,109
1922.....	8,677,807	4,182,569	43,093,629	10,928,941	66,881,946
1921—December.....	586,192	259,045	3,800,798	889,981	5,542,016
1922—January.....	611,513	288,487	3,984,701	954,329	5,869,033
February.....	569,153	279,359	3,479,907	775,841	5,104,260
March.....	673,701	391,439	3,340,214	837,216	5,242,670
April.....	589,916	367,323	2,945,757	739,116	4,640,113
May.....	702,203	401,340	3,716,170	872,069	5,691,782
June.....	724,418	388,919	4,046,304	1,028,136	6,187,777
July.....	697,303	329,445	3,094,322	904,109	5,085,179
August.....	761,125	314,968	2,887,755	1,023,787	5,017,635
September.....	796,377	353,095	2,747,467	1,013,281	4,910,220
October.....	883,949	382,837	3,304,516	981,232	5,552,534
November.....	859,413	347,711	4,345,076	882,213	6,434,413
December.....	778,738	308,646	5,201,437	857,611	7,146,430

**MEATS—COLD STORAGE HOLDINGS ON FIRST OF MONTH.**

[Bureau of Agricultural Economics, Department of Agriculture.]

[000 omitted.]

Year and month.	Beef.	Pork products.	Lamb and mutton.	Year and month.	Beef.	Pork products.	Lamb and mutton.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1921—December.....	80,333	355,589	7,520	1922—July.....	59,706	861,638	3,720
1922—January.....	84,808	462,637	6,444	August.....	47,030	826,535	3,308
February.....	78,295	546,100	3,914	September.....	48,291	739,425	3,376
March.....	73,782	608,747	2,863	October.....	53,572	565,146	3,539
April.....	69,516	677,254	2,878	November.....	67,814	395,171	3,458
May.....	64,507	690,296	2,071	December.....	96,118	418,280	3,708
June.....	56,852	759,453	2,310	1923—January.....	116,222	567,312	4,528

**EXPORTS OF CERTAIN MEAT PRODUCTS.**

[Bureau of Foreign and Domestic Commerce, Department of Commerce.]

Year and month.	Beef.			Hog products.			
	Canned.	Fresh.	Pickled and other cured.	Bacon.	Hams and shoulders.	Lard.	Pork, pickled.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1921.....	6,114,568	10,441,590	24,543,982	415,251,197	232,380,427	868,932,966	32,980,680
1922.....	2,526,570	3,665,006	26,243,916	341,825,633	289,613,175	766,950,112	38,667,581
1921—December.....	154,646	274,250	1,325,056	21,309,729	15,538,070	61,533,032	2,021,706
1922—January.....	155,061	490,563	1,764,743	26,095,093	22,012,003	73,194,123	3,772,083
February.....	193,148	303,736	2,069,015	30,703,688	25,209,136	75,519,631	2,816,260
March.....	280,496	274,322	2,797,515	31,180,274	23,583,142	64,377,381	2,953,442
April.....	132,258	153,168	2,036,083	20,490,130	22,763,549	42,450,089	1,899,627
May.....	265,238	216,674	1,927,751	19,069,743	24,988,328	50,516,583	2,312,019
June.....	238,766	189,048	2,596,966	21,067,301	31,553,329	57,249,301	3,005,883
July.....	272,594	192,449	2,016,409	32,584,106	26,667,582	66,057,686	3,243,875
August.....	258,006	300,117	2,621,108	32,591,199	18,761,349	68,906,810	3,383,745
September.....	287,351	209,413	2,840,933	30,447,613	20,591,900	61,119,667	4,008,769
October.....	199,022	370,411	2,368,825	28,849,896	22,090,140	66,332,524	4,219,543
November.....	100,918	530,214	1,888,492	26,170,438	25,236,859	62,321,394	3,802,342
December.....	142,712	424,891	1,346,070	39,496,112	26,155,858	78,593,915	3,219,993



## DAIRY PRODUCTS.

[Bureau of Agricultural Economics, Department of Agriculture.]

[000 omitted.]

	Butter (pounds).		Cheese (pounds).		Eggs (cases).	
	Receipts at five principal markets. <sup>1</sup>	Cold-storage holdings. <sup>2</sup>	Receipts at five principal markets. <sup>1</sup>	Cold-storage holdings. <sup>2</sup>	Receipts at five principal markets. <sup>1</sup>	Cold-storage holdings. <sup>2</sup>
1921.....	569,367	.....	178,625	.....	14,748	.....
1922.....	650,482	.....	203,493	.....	16,288	.....
1921—December.....	37,172	65,129	11,237	34,055	538	2,403
1922—January.....	41,697	48,391	10,684	27,642	805	886
February.....	38,894	35,047	11,319	21,430	1,026	179
March.....	44,919	22,582	14,586	15,006	1,947	13
April.....	42,694	9,024	15,757	10,731	2,911	949
May.....	68,893	3,830	18,809	10,867	2,587	4,648
June.....	93,139	67,410	22,756	33,130	1,929	9,811
July.....	92,829	103,329	23,940	46,287	1,561	10,225
August.....	62,494	103,151	19,819	46,580	1,028	10,161
September.....	46,419	112,039	17,729	53,625	815	9,608
October.....	41,351	96,680	18,238	49,473	702	7,924
November.....	38,678	73,857	16,107	40,852	491	5,726
December.....	38,476	47,807	13,749	37,169	486	3,257

<sup>1</sup> Boston, New York, Philadelphia, Chicago, and San Francisco.<sup>2</sup> Holdings on first day of month.

## FISHERY PRODUCTS LANDED BY AMERICAN FISHING VESSELS.

[Boston, Gloucester, Portland, Me., and Seattle. Bureau of Fisheries, Department of Commerce.]

[000 omitted.]

Year and month.	Pounds.	Year and month.	Pounds.	Year and month.	Pounds.
1921.....	163,294	1922—March.....	18,623	1922—August.....	20,107
1922.....	195,117	April.....	13,160	September.....	17,671
1921—December.....	9,065	May.....	15,168	October.....	17,602
1922—January.....	13,539	June.....	15,757	November.....	13,715
February.....	21,472	July.....	18,738	December.....	9,505

## COLD STORAGE HOLDINGS OF FROZEN AND CURED FISH, ON 15TH OF EACH MONTH.

[Bureau of Agricultural Economics, Department of Agriculture.]

[000 omitted.]

Year and month.	Pounds.	Year and month.	Pounds.	Year and month.	Pounds.
1921—December.....	79,708	1922—May.....	31,654	1922—October.....	86,081
1922—January.....	67,062	June.....	36,349	November.....	84,738
February.....	.....	July.....	42,890	December.....	75,653
March.....	40,112	August.....	54,136	1923—January.....	67,781
April.....	32,348	September.....	72,342		

## COTTONSEED.

[Bureau of the Census, Department of Commerce.]

Year and month.	Received at mills.	Crushed.	On hand at mills, close of month.	Year and month.	Received at mills.	Crushed.	On hand at mills, close of month.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1919.....	4,227,321	4,713,471	.....	1922—May.....	13,559	36,210	23,319
1920.....	3,656,727	3,695,453	.....	June.....	17,935	21,823	19,431
1921.....	4,057,889	3,982,147	.....	July.....	14,979	20,530	13,880
1922.....	3,203,685	3,031,904	.....	August.....	90,931	48,816	55,995
1921—December.....	270,190	415,533	620,117	September.....	680,841	332,281	403,223
1922—January.....	130,373	329,961	418,349	October.....	959,340	590,235	771,197
February.....	135,641	297,118	256,872	November.....	696,748	609,679	857,734
March.....	65,107	214,911	107,058	December.....	376,860	447,685	784,386
April.....	21,371	82,455	45,970				

**COTTONSEED OIL.**

[Bureau of the Census, Department of Commerce.]

[000 omitted.]

Year and month.	Production.	Stocks.	Year and month.	Production.	Stocks.
	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>
1921.....	1,284,517		1922—June.....	7,116	12,194
1922.....	931,662		July.....	5,625	6,807
1921—December.....	131,336	100,167	August.....	13,354	10,038
1922—January.....	100,706	98,295	September.....	98,608	54,906
February.....	91,321	69,932	October.....	178,406	96,872
March.....	72,237	60,089	November.....	183,522	115,247
April.....	27,610	31,682	December.....	140,569	100,988
May.....	12,389	29,801			

**OLEOMARGARINE.**

[Commissioner of Internal Revenue.]

Year and month.	Consumption.	Year and month.	Consumption.	Year and month.	Consumption.
	<i>Pounds.</i>		<i>Pounds.</i>		<i>Pounds.</i>
1919.....	350,138,000	1922—February.....	12,195,000	1922—August.....	11,751,000
1920.....	359,966,000	March.....	15,263,000	September.....	16,113,000
1921.....	210,211,000	April.....	13,686,000	October.....	16,806,000
1922.....	179,628,000	May.....	12,765,000	November.....	19,806,000
1921—December.....	19,412,000	June.....	10,040,000	December.....	19,705,000
1922—January.....	16,887,000	July.....	14,974,000		

**TOBACCO SALES AT LOOSE-LEAF WAREHOUSES.**

[Reports of State authorities.]

Year and month.	Dark belt, Virginia.	Bright belt.			Burley, Kentucky.	Western dark, Kentucky.
		Virginia.	North Carolina.	South Carolina.		
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1921.....	58,259,000	98,368,216	336,624,650	48,190,139	248,317,241	100,347,746
1922.....	24,547,710	65,280,209	210,420,665	42,586,756	100,561,332	64,977,547
1921—December.....	7,040,530	11,895,342	29,912,346		11,069,994	21,679,557
1922—January.....	5,306,046	9,543,411	16,718,383		27,575,373	20,991,776
February.....	6,380,556	10,643,662	11,333,316		34,519,924	12,108,979
March.....	862,395	2,712,491	4,302,126		4,570,860	7,189,410
April.....	49,921				2,138,705	2,393,460
May.....	49,080				2,264,675	943,425
June.....					832,655	363,500
July.....					1,546,675	406,125
August.....			18,159,580	17,994,553	1,161,500	178,190
September.....		1,585,313	45,246,946	8,011,661	1,009,310	120,805
October.....	1,850,109	19,153,008	61,578,030	1,223,593	881,835	315,500
November.....	3,154,192	13,476,616	35,465,132		4,866,022	1,278,800
December.....	6,895,461	8,174,708	17,617,152		19,184,798	18,687,577

**SALE OF REVENUE STAMPS FOR MANUFACTURERS OF TOBACCO IN THE UNITED STATES (EXCLUDING PORTO RICO AND THE PHILIPPINE ISLANDS).**

[Bureau of Internal Revenue, Treasury Department.]

Year and month.	Large cigars.	Small cigars.	Small cigarettes.	Manu- factured tobacco.	Year and month.	Large cigars.	Small cigars.	Small cigarettes.	Manu- factured tobacco.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Pounds.</i>		<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Pounds.</i>
1921.....	6,758,749,826	675,936,879	50,835,068,919	350,705,049	1922—June.....	615,253,023	57,382,293	5,301,643,020	35,009,269
1922.....	6,892,597,657	706,371,847	53,529,180,520	382,070,512	July.....	585,874,114	114,041,287	5,210,962,010	32,590,617
1921—December.....	463,663,809	44,288,700	2,995,934,873	22,057,104	August.....	641,164,181	60,498,280	6,373,590,453	35,020,972
1922—January.....	443,260,802	61,495,000	3,705,516,463	30,938,009	September.....	625,771,966	55,496,500	5,554,301,097	35,507,020
February.....	447,225,986	46,430,800	3,125,819,197	29,215,614	October.....	693,947,778	53,788,100	4,497,685,107	32,740,287
March.....	529,162,382	59,535,560	3,636,032,443	34,395,743	November.....	679,306,302	50,966,800	4,524,272,177	30,640,668
April.....	501,393,545	49,720,007	3,453,060,850	28,564,591	December..	561,041,853	40,514,020	3,544,623,820	23,546,925
May.....	569,208,725	56,503,200	4,601,372,883	32,610,797					

**FRUIT SHIPMENTS.**

[Bureau of Markets and Crop Estimates, Department of Agriculture.]

Year and month.	Grape-fruit.	Lemons.	Oranges.	Apples.	Year and month.	Grape-fruit.	Lemons.	Oranges.	Apples.
	<i>Carloads.</i>	<i>Carloads.</i>	<i>Carloads.</i>	<i>Carloads.</i>		<i>Carloads.</i>	<i>Carloads.</i>	<i>Carloads.</i>	<i>Carloads.</i>
1921.....	12,275	11,837	65,895	96,498	1922—June.....	166	1,678	2,011	1,150
1922.....	14,418	9,884	45,778	92,959	July.....	57	833	1,561	2,385
1921—December.....	1,116	500	7,562	5,991	August.....	11	796	1,173	4,315
1922—January.....	1,929	595	6,292	4,270	September.....	219	496	1,173	13,903
February.....	1,818	677	4,443	4,731	October.....	1,645	314	2,560	29,313
March.....	2,079	925	5,945	2,987	November.....	1,934	383	4,779	18,740
April.....	2,208	963	4,236	1,773	December.....	1,549	368	8,047	8,229
May.....	803	1,821	3,558	1,163					

**SUGAR.**

[Seven ports—New York, Boston, Philadelphia, San Francisco, Galveston, Savannah, and New Orleans. Willet and Grey, Weekly Statistical Trade Journal.]

Year and month.	Receipts.	Meltings.	Stocks.	Year and month.	Receipts.	Meltings.	Stocks.
	<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>		<i>Long tons.</i>	<i>Long tons.</i>	<i>Long tons.</i>
1921.....	3,557,648	5,095,457	.....	1922—June.....	508,299	532,052	277,150
1922.....	3,603,248	5,109,894	.....	July.....	507,623	530,334	309,413
1921—December.....	222,773	264,941	62,419	August.....	501,203	540,024	262,959
1922—January.....	320,773	290,791	85,602	September.....	243,571	312,909	180,577
February.....	519,522	415,723	163,817	October.....	222,485	280,003	94,043
March.....	657,700	535,357	275,811	November.....	312,725	309,274	69,185
April.....	557,186	531,962	316,973	December.....	188,859	254,135	44,829
May.....	556,511	577,330	276,890				

**VEGETABLE SHIPMENTS.**

[Bureau of Agricultural Economics, Department of Agriculture.]

Year and month.	White potatoes.	Onions.	Rice.	Year and month.	White potatoes.	Onions.	Rice.
	<i>Carloads.</i>	<i>Carloads.</i>	<i>100-lb. pockets.</i>		<i>Carloads.</i>	<i>Carloads.</i>	<i>100-lb. pockets.</i>
1919.....	.....	20,880	7,339,932	1922—May.....	20,322	2,325	481,812
1920.....	.....	25,956	6,656,676	June.....	21,845	945	283,198
1921.....	218,450	21,881	11,491,062	July.....	18,381	1,298	267,552
1922.....	237,934	25,990	.....	August.....	17,530	2,201	519,652
1921—December.....	10,496	1,054	759,564	September.....	23,795	4,361	790,466
1922—January.....	15,399	1,781	862,554	October.....	33,711	4,687	1,424,930
February.....	13,596	1,022	1,020,375	November.....	19,547	2,018	1,287,210
March.....	22,104	724	1,198,126	December.....	11,589	1,526	.....
April.....	20,115	3,102	499,480				

**LUMBER.**

Year and month.	National Lumber Manufacturers Association.			Southern Pine Association.		
	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.
		<i>Board feet.</i>	<i>Board feet.</i>		<i>Board feet.</i>	<i>Board feet.</i>
1919.....	.....	12,711,300,000	12,639,300,000	.....	4,610,856,000	4,606,500,000
1920.....	.....	11,858,800,000	11,324,400,000	.....	4,530,506,000	4,171,858,000
1921.....	.....	9,509,900,000	9,323,100,000	.....	4,458,745,000	4,685,549,000
1922.....	.....	12,927,893,000	12,551,366,000	.....	4,655,931,000	.....
1921—December.....	439	655,400,000	691,300,000	.....	377,332,000	348,178,000
1922—January.....	462	835,400,000	781,500,000	174	373,231,000	320,152,000
February.....	452	775,500,000	738,600,000	173	352,717,000	326,003,000
March.....	480	885,600,000	899,900,000	169	394,992,000	398,599,000
April.....	445	915,200,000	932,200,000	171	369,008,000	422,424,000
May.....	465	1,184,900,000	1,253,600,000	172	437,479,000	507,707,000
June.....	443	1,060,600,000	1,100,600,000	157	379,838,000	413,617,000
July.....	477	1,091,800,000	1,052,100,000	176	406,958,000	405,139,000
August.....	535	1,326,684,000	1,230,050,000	153	401,340,000	.....
September.....	551	1,207,220,000	1,066,742,000	150	367,891,000	301,046,000
October.....	564	1,306,047,000	1,065,678,000	175	401,975,000	335,553,000
November.....	572	1,235,748,000	1,149,736,000	174	405,488,000	416,883,000
December.....	583	1,103,194,000	1,280,660,000	174	365,014,000	409,941,000

LUMBER—Continued.

Year and month.	Western Pine Association.			West Coast Lumber Manufacturers Association (Douglas fir).		
	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.
		<i>Board feet.</i>	<i>Board feet.</i>		<i>Board feet.</i>	<i>Board feet.</i>
1919.....		1,367,481,000	1,330,237,000		3,608,297,000	3,420,877,000
1920.....		1,646,715,000	1,340,595,000		3,847,459,000	3,388,616,000
1921.....		896,129,000	933,390,000		2,759,761,000	2,789,801,000
1922.....		1,445,524,000	1,477,342,000		4,258,789,000	4,000,107,000
1921—December.....	56	38,901,000	83,350,000	108	238,036,000	207,162,000
1922—January.....	54	35,385,000	82,874,000	119	320,588,000	308,817,000
February.....	55	41,793,000	89,272,000	124	310,753,000	266,755,000
March.....	54	66,509,000	116,551,000	129	306,618,000	280,203,000
April.....	53	107,892,000	131,108,000	125	308,318,000	320,609,000
May.....	52	158,153,000	160,809,000	119	411,529,000	431,975,000
June.....	51	163,127,000	172,205,000	120	350,281,000	371,418,000
July.....	50	147,490,000	133,865,000	119	303,437,000	324,276,000
August.....	52	169,000,000	156,305,000	120	420,215,000	385,017,000
September.....	50	155,673,000	133,325,000	116	342,403,000	298,032,000
October.....	50	167,813,000	109,316,000	112	417,083,000	319,552,000
November.....		141,623,000	100,646,000	135	387,866,000	291,046,000
December.....		50,536,000	91,066,000	135	367,695,000	402,401,000

NAVAL STORES AT THREE SOUTHERN PORTS.

[Savannah, Jacksonville, Pensacola.]

Year and month.	Turpentine.		Rosin.		Year and month.	Turpentine.		Rosin.	
	Receipts.	Stocks close of month.	Receipts.	Stocks close of month.		Receipts.	Stocks close of month.	Receipts.	Stocks close of month.
	<i>Casks.</i>	<i>Casks.</i>	<i>Barrels.</i>	<i>Barrels.</i>		<i>Casks.</i>	<i>Casks.</i>	<i>Barrels.</i>	<i>Barrels.</i>
1919.....	186,057	670,155	648,501	2,685,344	1922—May.....	29,295	4,795	59,712	253,787
1920.....	253,318	333,168	836,399	1,895,320	June.....	28,823	13,359	90,588	293,063
1921.....	268,494	569,399	812,469	3,807,001	July.....	38,167	16,726	107,822	303,588
1922.....	263,062	322,937	951,118	3,707,522	August.....	30,000	26,041	83,737	329,189
1921—December.....	23,136	66,965	115,181	336,680	September.....	29,954	28,444	92,487	334,785
1922—January.....	7,119	53,423	62,186	327,932	October.....	30,519	30,681	93,604	320,213
February.....	3,240	33,204	38,533	299,305	November.....	25,092	40,161	99,591	352,465
March.....	3,301	19,280	44,069	282,428	December.....	24,513	45,742	105,574	355,421
April.....	13,139	11,087	58,015	255,326					

COAL AND COKE.

[Production figures from Geological Survey, Department of the Interior. Anthracite shipments from Anthracite Bureau of Information.]

Year and month.	Coal.			Coke.	
	Bituminous production.	Anthracite:		Bechive production.	By-product production.
		Production.	Shipments.		
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
1919.....	465,890,000	88,092,000	66,855,462	19,650,000	25,138,000
1920.....	568,667,000	89,598,000	66,871,156	20,846,000	30,834,000
1921.....	415,922,000	90,473,000	67,617,713	5,561,000	19,750,000
1922.....	407,894,000	52,523,000		8,037,000	28,454,000
1921—December.....	30,975,000	5,984,000	4,635,922	514,000	1,844,000
1922—January.....	37,604,000	6,258,000	4,848,053	496,000	1,879,000
February.....	40,980,000	6,762,000	5,239,014	549,000	1,795,000
March.....	50,167,000	8,757,000	6,778,667	732,000	2,137,000
April.....	15,779,000	26,000	( <sup>1</sup> )	528,000	2,208,000
May.....	20,290,000	35,000	( <sup>1</sup> )	432,000	2,537,000
June.....	22,309,000	84,000	( <sup>1</sup> )	458,000	2,580,000
July.....	17,003,000	116,000	( <sup>1</sup> )	450,000	2,486,000
August.....	27,358,000	161,000	( <sup>1</sup> )	539,000	1,794,000
September.....	39,510,000	4,979,000	( <sup>1</sup> )	606,000	2,244,000
October.....	46,141,000	8,530,000	6,567,928	876,000	2,806,000
November.....	45,303,000	8,385,000	6,420,102	1,138,000	2,925,000
December.....	46,450,000	8,430,000	6,454,876	1,233,000	3,063,000

<sup>1</sup> No figures issued during months of coal strike, April to September, 1922.

## CRUDE PETROLEUM.

[Geological Survey,, Department of the Interior.]

Year and month.	Production.	Stocks at close of month.	Producing oil wells completed.	Year and month.	Production.	Stocks at close of month.	Producing oil wells completed.
	<i>Barrels.</i>	<i>Barrels.</i>	<i>Number.</i>		<i>Barrels.</i>	<i>Barrels.</i>	<i>Number.</i>
1919.....	377,719,000		20,966	1922—May.....	46,456,000	247,093,000	1,511
1920.....	433,759,000		24,222	June.....	45,559,000	255,817,000	1,654
1921.....	469,866,000		14,612	July.....	46,593,000	261,395,000	1,793
1922.....	551,197,000			August.....	46,521,000	262,707,000	1,709
1921—December.....	41,957,000	185,623,000	1,108	September.....	45,291,000	263,761,000	1,572
1922—January.....	43,141,000	196,228,000	1,151	October.....	47,885,000	265,073,000	1,388
February.....	40,814,000	208,851,000	1,143	November.....	47,531,000	265,017,000	1,450
March.....	46,634,000	221,588,000	1,323	December.....	50,137,000	264,578,000	1,197
April.....	44,635,000	235,962,000	1,442				

## TOTAL OUTPUT OF OIL REFINERIES IN THE UNITED STATES.

[Bureau of Mines, Department of Interior.]

Year and month.	Crude oil run.	Gasoline.	Kerosene.	Gas and fuel oil.	Lubricating oil.
	<i>Barrels.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1919.....	361,520,153	3,957,857,097	2,341,632,164	7,627,288,566	846,760,017
1920.....	433,915,029	4,882,546,699	2,320,095,413	8,861,451,931	1,046,708,349
1921.....	443,362,657	5,153,549,018	1,945,126,156	9,663,516,135	877,859,074
1922.....					
1921—December.....	39,222,875	439,031,398	170,315,279	865,769,078	82,572,662
1922—January.....	38,581,810	444,622,783	172,917,141	858,110,877	74,313,831
February.....	34,423,441	398,223,146	167,220,226	761,083,329	69,123,390
March.....	39,093,958	472,277,870	178,785,027	849,105,582	73,391,253
April.....	38,364,034	472,920,182	188,809,385	791,642,710	72,945,168
May.....	42,561,635	513,658,966	173,824,113	936,742,331	79,848,372
June.....	41,804,633	525,940,600	173,049,592	903,056,578	80,138,257
July.....	44,378,405	509,711,415	192,924,420	959,028,518	91,714,987
August.....	43,816,996	549,953,376	184,382,897	944,289,105	88,824,133
September.....	42,534,498	536,491,988	197,935,102	917,857,786	82,056,712
October.....	44,233,795	566,278,689	215,203,459	921,606,114	87,340,814
November.....	44,203,471	567,100,921	234,436,275	891,590,171	89,270,847
December.....					

## TOTAL STOCKS AT OIL REFINERIES AT CLOSE OF MONTH.

[Bureau of Mines, Department of Interior.]

Year and month.	Crude oil run.	Gasoline.	Kerosene.	Gas and fuel oil.	Lubricating oil.
	<i>Barrels.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>	<i>Gallons.</i>
1919, monthly average.....	14,935,067	472,411,119	300,531,792	778,395,398	161,491,337
1920, monthly average.....	16,953,849	464,484,812	379,471,438	687,857,086	137,211,877
1921, monthly average.....	20,650,536	630,756,902	402,522,022	1,164,925,822	231,171,628
1922, monthly average.....					
1921—December.....	26,562,424	586,097,132	341,008,555	1,331,265,439	216,765,516
1922—January.....	30,635,766	705,711,191	327,484,281	1,319,481,359	245,230,522
February.....	25,580,397	807,379,261	331,423,125	1,321,589,479	253,567,850
March.....	31,297,836	854,231,655	321,427,757	1,250,277,761	236,866,381
April.....	32,751,669	892,267,766	325,336,126	1,282,800,569	237,229,814
May.....	35,475,522	856,607,102	318,890,131	1,321,437,972	226,293,334
June.....	36,178,308	824,966,456	317,574,464	1,326,939,662	226,903,812
July.....	35,286,798	772,908,949	324,586,128	1,355,870,284	226,600,749
August.....	34,029,919	703,738,310	285,520,131	1,366,611,611	220,668,498
September.....	33,615,478	690,050,809	270,576,864	1,364,957,165	214,727,811
October.....	32,765,842	723,584,062	256,259,432	1,335,748,880	217,775,124
November.....	32,765,362	776,723,619	257,878,898	1,352,347,667	226,429,537
December.....					

**ELECTRIC POWER PRODUCED BY PUBLIC UTILITY PLANTS.**

[Geological Survey, Department of the Interior.]

[In thousand kilowatt-hours.]

Year and month.	Produced by water power.	Produced by fuels.	Total.	Year and month.	Produced by water power.	Produced by fuels.	Total.
1919.....	24,348,671	14,601,751	38,950,422	1922—May.....	1,648,450	2,176,917	3,825,367
1920.....	16,494,910	27,444,991	43,939,901	June.....	1,569,628	2,247,487	3,817,115
1921.....	14,932,809	26,001,779	40,934,588	July.....	1,536,936	2,314,368	3,851,304
1922.....	17,238,803	30,437,246	47,676,049	August.....	1,494,766	2,580,142	4,074,908
1921—December.....	1,322,101	2,497,591	3,819,692	September.....	1,358,292	2,690,912	4,049,204
1922—January.....	1,297,311	2,512,309	3,809,620	October.....	1,352,495	2,879,910	4,232,405
February.....	1,222,825	2,246,924	3,469,749	November.....	1,296,988	3,042,892	4,339,880
March.....	1,470,424	2,352,980	3,823,404	December.....	1,300,381	3,184,190	4,484,571
April.....	1,490,254	2,108,215	3,598,469				

**IRON AND STEEL.**

[Pig-iron production, Iron Age; steel-ingot production, American Iron and Steel Institute; unfilled orders, United States Steel Corporation; structural steel sales, Bureau of the Census, Department of Commerce; steel barrels, Steel Barrel Manufacturers' Association.]

Year and month.	Pig-iron production.	Steel-ingot production.	Unfilled orders, U. S. Steel Corporation.	Structural steel sales.	Steel barrels.	
					Shipments.	Unfilled orders.
					Tons.	Tons.
1919.....	30,582,878	29,191,400				
1920.....	36,414,114	34,432,252				
1921.....	16,543,686	16,826,946			1,314,498	
1922.....	26,880,383	29,116,453			2,308,655	
1921—December.....	1,649,086	1,427,093	4,268,414	71,500	124,006	193,814
1922—January.....	1,644,951	1,593,482	4,241,678	72,100	89,216	204,204
February.....	1,629,991	1,745,022	4,141,069	78,700	101,830	248,315
March.....	2,035,920	2,370,751	4,494,148	139,300	168,476	281,704
April.....	2,072,114	2,444,513	5,096,917	198,529	200,214	350,445
May.....	2,306,679	2,711,141	5,254,228	180,558	225,372	416,477
June.....	2,361,028	2,634,477	5,635,531	162,139	269,914	427,739
July.....	2,405,365	2,487,104	5,776,161	152,023	220,992	334,881
August.....	1,816,170	2,214,582	5,950,105	150,700	244,291	309,044
September.....	2,033,720	2,373,779	6,691,607	141,418	206,448	322,632
October.....	2,637,844	2,872,415	6,902,287	126,535	189,484	287,141
November.....	2,849,703	2,889,297	6,840,242	106,315	194,069	385,881
December.....	3,086,898	2,779,890	6,745,703	125,479	201,319	424,107

**NONFERROUS METALS.**

[Copper and silver, American Bureau of Metal Statistics; zinc, American Zinc Institute; tin deliveries, New York Metal Exchange.]

Year and month.	Copper production.	Silver production.	Zinc.		Tin deliveries.
			Production.	Stocks.	
			Pounds.	Pounds.	
1919.....	1,209,284,000		943,112,000		73,254,240
1920.....	1,270,496,000		959,544,000		114,508,800
1921.....	472,026,310	53,727,891	431,228,000		58,051,840
1922.....	990,739,198	55,468,836	747,356,000		128,876,400
1921—December.....	18,595,182	3,896,952	44,026,000	133,216,000	8,310,400
1922—January.....	25,848,284	3,937,784	47,412,000	131,356,000	9,576,000
February.....	37,415,808	3,878,498	45,026,000	128,248,000	7,201,600
March.....	62,305,403	4,189,042	53,064,000	120,524,000	13,507,200
April.....	77,025,860	4,138,580	51,012,000	103,456,000	11,188,800
May.....	92,048,036	4,257,973	54,838,000	80,818,000	10,617,600
June.....	95,222,358	4,760,160	57,094,000	59,152,000	11,491,200
July.....	93,486,402	4,340,574	63,834,000	57,236,000	10,281,600
August.....	100,320,483	5,561,523	62,846,000	43,258,000	9,462,000
September.....	96,494,873	5,324,873	66,268,000	37,612,000	11,312,000
October.....	103,891,233	5,160,732	79,850,000	36,086,000	12,550,720
November.....	102,845,152	4,869,905	80,400,000	38,994,000	10,778,880
December.....	103,845,306	5,052,192	85,682,000	36,504,000	10,908,800

**COTTON.**

[Sight receipts, American Spinners' Takings, New Orleans Cotton Exchange; all other figures, Bureau of the Census, Department of Commerce.]

Year and month.	Sight receipts.	American spinners' takings.	Stocks at mills.	Stocks at warehouses.	Consumption by mills.	Spindles active during month.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Number.</i>
1919.....	11,611,833	5,227,332			5,919,520	
1920.....	10,903,821	3,928,330			5,843,200	
1921.....	11,934,628	6,384,556			5,407,375	
1922.....	11,667,825	6,362,025			6,089,540	
1921—December.....	1,483,719	953,765	1,738,000	5,207,000	510,925	34,439,142
1922—January.....	865,281	623,117	1,675,000	4,618,000	526,552	34,457,509
February.....	462,383	307,990	1,597,000	4,222,000	473,073	33,797,380
March.....	485,865	250,474	1,554,000	3,766,000	518,450	31,874,496
April.....	433,627	212,103	1,458,000	3,214,000	446,843	31,389,256
May.....	593,752	366,547	1,420,000	2,561,000	495,674	31,653,061
June.....	506,575	371,910	1,332,000	1,936,000	507,869	31,877,015
July.....	392,922	322,037	1,215,000	1,488,000	458,875	31,975,269
August.....	540,895	403,803	1,025,000	1,550,000	527,404	32,499,324
September.....	1,389,011	366,864	1,065,000	3,218,000	495,344	33,296,513
October.....	2,331,478	788,272	1,380,000	4,330,000	533,950	33,859,076
November.....	2,155,597	1,149,965	1,721,000	4,198,000	577,561	34,664,630
December.....	1,510,439	1,189,943	1,921,000	4,075,000	527,945	34,968,440

**WOOL.**

[Bureau of the Census, Department of Commerce. Total grease equivalent in pounds.]

Year and month.	Consumption.	Year and month.	Consumption.	Year and month.	Consumption.
1921.....	529,495,000	1922—March.....	60,368,000	1922—August.....	57,339,994
1922.....	654,125,999	April.....	42,574,000	September.....	54,770,612
1921—December.....	49,441,000	May.....	52,533,091	October.....	59,281,774
1922—January.....	52,280,000	June.....	52,620,985	November.....	63,813,170
February.....	53,774,000	July.....	46,902,071	December.....	59,366,980

**ACTIVE WOOL MACHINERY.**

[Bureau of the Census, Department of Commerce.]

	Percentage of active wool machinery to total reported.						Percentage of active hours to total reported.						Number of firms reporting.
	Looms.		Sets of cards.	Combs.	Spinning spindle.		Looms.		Sets of cards.	Combs.	Spinning spindles.		
	Wider than 50-inch reed space.	50-inch reed space or less.			Woolen.	Worsted.	Wider than 50-inch reed space.	50-inch reed space or less.			Woolen.	Worsted.	
1921—December.....	69.7	78.8	74.1	81.5	74.9	87.0	67.1	72.2	72.9	98.6	74.4	86.2	1,001
1922—January.....	65.7	72.8	74.0	81.7	73.0	85.7	64.8	68.0	75.4	96.3	74.6	86.1	1,002
February.....	68.5	72.9	81.9	86.4	79.9	85.6	65.9	68.1	84.4	97.2	81.6	82.7	992
March.....	65.1	72.2	83.6	76.3	82.5	74.7	63.1	63.5	88.4	82.3	85.9	70.8	990
April.....	60.3	64.0	83.6	70.3	82.7	61.6	58.4	53.4	86.2	72.7	84.8	62.1	988
May.....	62.7	64.7	86.1	72.9	85.5	66.8	62.4	55.2	89.7	79.2	88.6	65.3	948
June.....	63.6	66.6	85.8	75.0	85.7	68.1	63.8	59.9	91.0	81.2	89.9	68.5	959
July.....	64.1	71.5	85.2	73.1	83.7	68.0	62.8	62.5	88.2	80.4	86.0	66.1	959
August.....	64.7	67.5	84.3	76.0	82.9	74.8	63.6	58.3	88.8	85.5	86.2	71.4	954
September.....	72.4	76.4	86.2	78.3	84.7	81.4	72.4	71.3	91.3	93.2	88.1	84.0	928
October.....	77.1	79.1	85.8	86.8	84.4	89.1	78.6	77.7	93.8	106.4	90.6	94.0	994
November.....	80.8	82.0	85.7	87.0	84.4	90.0	80.0	72.7	93.7	111.4	89.7	93.7	993
December.....	69.7	78.8	74.1	81.5	74.9	87.0	67.1	72.2	72.9	98.6	74.4	86.2	987

**SILK.**

[Silk imports, Bureau of Foreign and Domestic Commerce, Department of Commerce; consumption and stocks, Silk Association of America.]

Year and month.	Imports.	Consumption.	Stocks.	Year and month.	Imports.	Consumption.	Stocks.
	<i>Pounds.</i>	<i>Bales.</i>	<i>Bales.</i>		<i>Pounds.</i>	<i>Bales.</i>	<i>Bales.</i>
1921.....	45,361,663	322,189		1922—June.....	5,076,655	29,529	26,895
1922.....		367,620		July.....	3,592,508	24,996	27,474
1921—December.....	5,824,202	20,930	19,601	August.....	5,547,496	34,772	32,515
1922—January.....	3,880,877	33,842	31,139	September.....	3,837,400	34,212	36,795
February.....	2,963,976	22,107	28,982	October.....	7,152,404	37,471	45,893
March.....	2,508,430	26,651	22,077	November.....		35,467	47,159
April.....	2,574,262	24,247	19,268	December.....		31,042	49,174
May.....	4,217,137	33,284	20,826				

**SALES OF RAWHIDES AND SKINS.**  
[Bureau of the Census, Department of Commerce.]

Year and month.	Cattle hides.	Calfskins.	Kipskins.	Goat and kid.	Cabretta.	Sheep and lamb.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
1921.....	17,167,721	8,700,250	2,225,690	11,732,810	566,642	18,304,720
1922.....	18,043,642	11,326,987	25,400,035	16,265,333	588,338	20,160,916
1921—December.....	1,527,894	781,476	292,166	1,333,202	48,800	2,064,223
1922—January.....	1,293,937	677,462	250,010	985,503	41,345	1,613,144
February.....	1,365,564	642,723	208,702	813,032	69,878	1,481,741
March.....	1,504,655	607,710	136,849	1,230,319	69,254	1,276,286
April.....	1,314,385	811,129	165,624	1,401,159	25,080	1,607,611
May.....	1,492,349	1,001,155	151,743	1,069,211	61,125	2,131,002
June.....	1,507,601	1,019,279	182,634	1,234,299	27,650	2,737,603
July.....	1,635,489	1,157,287	206,533	1,534,823	21,311	2,892,308
August.....	1,541,770	1,144,433	214,925	1,113,730	21,865	2,545,863
September.....	1,565,934	1,358,013	209,055	1,580,403	46,530	3,185,917
October.....	1,732,779	1,121,087	253,507	1,996,846	60,615	3,875,648
November.....	1,541,574	906,230	335,578	1,508,126	52,382	3,000,996
December.....	1,547,595	880,449	230,875	1,788,792	91,261	2,815,767

**STOCKS OF RAWHIDES AND SKINS AT CLOSE OF MONTH.**  
[Bureau of the Census, Department of Commerce.]

Year and month.	Cattle hides.	Calfskins.	Kipskins.	Goat and kid.	Cabretta.	Sheep and lamb.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
1919, monthly average.....	5,721,125	1,895,308	636,357	14,198,420	1,872,640	8,401,793
1920, monthly average.....	5,472,995	2,331,671	917,337	17,738,605	1,802,629	8,986,703
1921, monthly average.....	6,859,669	3,368,612	1,079,195	9,984,153	1,176,892	13,174,074
1922, monthly average.....	5,692,633	3,338,832	952,101	8,769,245	747,958	10,916,949
1921—December.....	5,819,219	2,965,237	1,025,169	10,379,703	547,335	12,061,438
1922—January.....	6,053,212	2,897,465	1,046,018	8,998,462	500,933	12,260,851
February.....	5,761,394	2,820,076	950,505	7,627,048	455,972	13,044,644
March.....	5,662,097	2,964,773	916,091	8,044,079	361,463	11,940,723
April.....	5,553,031	3,131,270	832,453	9,404,784	704,787	11,836,259
May.....	5,362,607	3,319,190	903,229	9,838,941	918,792	11,142,150
June.....	5,347,279	3,597,722	876,226	10,799,335	878,239	10,971,445
July.....	5,366,414	3,624,769	917,007	9,067,516	876,883	9,896,733
August.....	5,342,607	3,582,905	948,543	9,196,731	662,534	11,294,354
September.....	5,515,420	3,674,356	989,661	8,640,858	810,088	10,474,740
October.....	5,838,412	3,463,296	1,088,715	8,680,967	540,855	9,501,304
November.....	6,163,387	3,691,767	1,153,228	8,202,000	1,036,126	9,408,641
December.....	6,345,676	3,298,399	1,163,547	8,730,219	927,670	9,151,484

**PRODUCTION OF LEATHER.**

[Prior to July, 1922, Tanners' Council; since July, 1922, Bureau of the Census, Department of Commerce.]

Year and month.	Sole leather.	Skivers.	Oak and union harness.	Year and month.	Sole leather.	Skivers.	Oak and union harness.
	<i>Sides.</i>	<i>Dozens.</i>	<i>Sides stuffed.</i>		<i>Sides.</i>	<i>Dozens.</i>	<i>Sides stuffed.</i>
1919.....	22,515,418	180,384	1,142,923	1922—May.....	1,320,635	16,099	90,813
1920.....	18,392,740	159,284	1,153,690	June.....	1,358,973	16,815	95,953
1921.....	17,990,697	199,836	675,195	July.....	1,397,594	125,238	115,561
1922.....	17,456,360	300,156	1,261,460	August.....	1,509,364	135,468	133,268
1921—December.....	1,733,755	20,149	62,515	September.....	1,490,938	135,895	130,944
1922—January.....	1,654,744	17,950	59,851	October.....	1,550,790	134,594	133,146
February.....	1,466,165	17,021	65,067	November.....	1,482,074	133,797	134,889
March.....	1,472,528	19,451	78,100	December.....	1,425,512	131,743	129,606
April.....	1,327,037	16,065	94,598				

<sup>1</sup> Reports from 13 additional contributors included.

**OUTPUT OF BOOTS AND SHOES.**

[Bureau of the Census, Department of Commerce.]

Year and month.	Men's.	Women's.	All other.	Total.	Year and month.	Men's.	Women's.	All other.	Total.
	<i>Pairs.</i>	<i>Pairs.</i>	<i>Pairs.</i>	<i>Pairs.</i>		<i>Pairs.</i>	<i>Pairs.</i>	<i>Pairs.</i>	<i>Pairs.</i>
1922.....	89,684,005	105,367,667	128,124,726	323,476,488	1922—June.....	6,317,625	7,652,553	8,715,569	22,685,747
1921—December.....	7,455,213	7,747,926	9,038,629	24,241,773	July.....	7,049,367	9,061,844	10,664,775	27,675,986
1922—January.....	6,697,276	8,665,019	9,188,958	24,551,253	August.....	8,514,043	8,741,449	11,032,677	28,288,169
February.....	7,731,519	10,529,465	11,089,322	29,350,306	September.....	8,536,846	9,530,755	12,268,047	30,365,648
March.....	6,802,149	8,921,962	10,927,401	26,651,512	October.....	8,700,335	8,937,732	12,438,061	30,076,123
April.....	6,495,060	8,714,277	11,018,125	26,227,462	November.....	8,235,090	8,379,200	11,238,978	27,853,268
May.....					December.....				



**CLAY FIRE BRICK.**

[Refractories Manufacturers' Association.]

Year and month.	Production.	Shipments.	Stocks.	New orders.	Unfilled orders.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
1919.....	608,975,000	607,598,000	.....	617,446,000	.....
1920.....	728,577,000	749,260,000	.....	741,708,000	.....
1921.....	384,347,000	349,362,000	.....	275,496,000	.....
1922.....	558,149,000	554,231,000	.....	588,201,000	.....
1921—December.....	34,000,000	30,596,000	145,406,000	27,915,000	23,108,000
1922—January.....	30,121,000	31,301,000	138,574,000	31,222,000	23,751,000
February.....	34,683,000	30,043,000	146,911,000	35,941,000	30,357,000
March.....	42,626,000	38,694,000	149,031,000	43,098,000	31,537,000
April.....	41,446,000	38,458,000	150,292,000	45,815,000	39,402,000
May.....	46,794,000	44,120,000	152,259,000	51,041,000	45,300,000
June.....	48,367,000	45,772,000	153,517,000	57,805,000	56,861,000
July.....	47,266,000	45,851,000	158,236,000	55,681,000	67,557,000
August.....	51,828,000	49,075,000	162,876,000	52,300,000	74,399,000
September.....	48,839,000	52,093,000	156,899,000	59,771,000	79,511,000
October.....	55,996,000	59,299,000	152,101,000	51,120,000	70,860,000
November.....	56,546,000	54,423,000	155,876,000	54,187,000	71,096,000
December.....	53,637,000	54,502,000	155,011,000	50,884,000	67,400,000

**SILICA AND FACE BRICK.**

[Silica brick, Refractories Manufacturers' Association; face brick, American Face Brick Association.]

Year and month.	Silica brick.			Face brick.		
	Production.	Shipments.	Stocks close of month.	Production.	Shipments.	Stocks in sheds and kilns.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
1919.....	168,744,000	168,096,000	.....	542,202,000	.....	.....
1920.....	178,850,000	186,960,000	.....	541,830,000	.....	.....
1921.....	66,228,000	66,624,000	.....	428,174,000	.....	.....
1922.....	133,143,000	126,260,000	.....	547,684,000	476,331,000	.....
1921—December.....	4,754,000	7,321,000	38,812,000	38,444,000	23,151,000	160,961,000
1922—January.....	6,581,000	8,246,000	36,344,000	25,331,000	14,902,000	152,485,000
February.....	6,663,000	7,263,000	35,743,000	22,926,000	18,392,000	151,760,000
March.....	9,120,000	7,837,000	36,944,000	42,133,000	37,491,000	156,906,000
April.....	9,830,000	10,485,000	36,316,000	46,767,000	47,326,000	144,223,000
May.....	12,293,000	10,704,000	37,845,000	54,867,000	56,433,000	121,540,000
June.....	11,578,000	10,676,000	38,747,000	59,756,000	56,762,000	118,756,000
July.....	11,332,000	12,533,000	37,572,000	50,578,000	50,578,000	109,545,000
August.....	9,666,000	11,687,000	35,743,000	46,849,000	46,716,000	91,339,000
September.....	12,861,000	11,332,000	37,108,000	51,674,000	43,621,000	100,569,000
October.....	15,755,000	13,161,000	39,730,000	57,185,000	41,062,000	101,782,000
November.....	13,871,000	11,359,000	42,269,000	47,587,000	32,900,000	93,209,000
December.....	13,653,000	10,977,000	45,081,000	45,181,000	30,633,000	118,626,000

**CEMENT.**

[United States Geological Survey.]

Year and month.	Production.	Shipments.	Stocks.	Year and month.	Production.	Shipments.	Stocks.
	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>		<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>
1919.....	80,769,378	85,596,616	.....	1922—May.....	11,176,000	12,749,000	12,893,000
1920.....	100,302,000	96,329,000	.....	June.....	11,245,000	13,470,000	10,718,000
1921.....	98,293,000	95,051,000	.....	July.....	11,557,000	13,850,000	8,433,000
1922.....	113,870,000	116,563,000	.....	August.....	11,664,000	14,361,000	5,746,000
1921—December.....	6,559,000	3,697,000	11,938,000	September.....	11,424,000	12,444,000	4,724,000
1922—January.....	4,291,000	2,931,000	13,316,000	October.....	12,287,000	12,854,000	4,149,000
February.....	4,278,000	3,285,000	14,142,000	November.....	11,349,000	10,167,000	5,320,000
March.....	6,685,000	7,002,000	13,848,000	December.....	8,671,000	4,853,000	9,134,000
April.....	9,243,000	8,592,000	14,470,000				

**OAK FLOORING.**

[Oak Flooring Manufacturers' Association.]

Year and month.	Production.	Shipments.	Orders booked.	Stocks.	Unfilled orders.
	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>
1919.....	121,215,000	132,842,000	141,381,000		
1920.....	128,935,000	93,598,000	76,115,000		
1921.....	148,929,000	163,131,000	168,690,000		
1922.....	274,524,000	287,335,000	281,671,000		
1921—December.....	17,510,000	18,065,000	13,070,000	21,763,000	20,888,000
1922—January.....	19,252,000	14,970,000	13,606,000	27,467,000	21,230,000
February.....	17,282,000	16,455,000	16,063,000	28,856,000	21,967,000
March.....	20,367,000	22,690,000	23,479,000	28,060,000	24,935,000
April.....	19,822,000	22,227,000	20,951,000	26,615,000	33,501,000
May.....	21,914,000	25,251,000	30,608,000	23,534,000	40,417,000
June.....	23,495,000	28,610,000	24,472,000	20,245,000	38,434,000
July.....	24,082,000	24,261,000	21,340,000	21,712,000	35,637,000
August.....	27,669,000	27,637,000	25,971,000	21,654,000	37,173,000
September.....	23,063,000	25,672,000	21,991,000	20,120,000	35,957,000
October.....	20,357,000	23,185,000	23,973,000	19,014,000	32,290,000
November.....	20,825,000	26,431,000	29,269,000	19,132,000	35,269,000
December.....	23,473,000	24,510,000	23,948,000	21,239,000	40,925,000

**MAPLE FLOORING.**

[Maple Flooring Manufacturers' Association.]

Year and month.	Production.	Shipments.	Stocks.	Orders booked.	Unfilled orders.
	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>	<i>Board feet.</i>
1919.....	120,468,000	142,170,000		169,855,000	
1920.....	124,596,000	99,108,000		61,272,000	
1921.....	100,534,000	97,451,000		107,896,000	
1922.....	137,020,000	143,203,000		146,565,000	
1921—December.....	11,713,000	9,012,000	30,865,000	6,927,000	13,894,000
1922—January.....	11,024,000	8,533,000	33,329,000	7,051,000	12,225,000
February.....	9,274,000	7,947,000	34,248,000	8,105,000	11,818,000
March.....	9,218,000	10,545,000	33,632,000	11,023,000	14,282,000
April.....	9,033,000	10,631,000	32,174,000	13,853,000	17,539,000
May.....	10,701,000	13,600,000	28,793,000	19,076,000	25,098,000
June.....	11,866,000	14,280,000	20,719,000	13,920,000	20,339,000
July.....	10,434,000	12,956,000	24,525,000	11,078,000	25,076,000
August.....	13,047,000	14,002,000	23,272,000	11,950,000	22,668,000
September.....	12,518,000	12,705,000	23,111,000	12,063,000	22,397,000
October.....	13,442,000	12,243,000	24,344,000	11,791,000	21,872,000
November.....	12,765,000	13,010,000	23,908,000	11,281,000	20,580,000
December.....	13,648,000	12,752,000	25,156,000	14,444,000	22,324,000

**ENAMELED SANITARY WARE.**

[Enameled Sanitary Ware Manufacturers' Association.]

Year and month.	Baths.			Lavatories.			Sinks.			Miscellaneous.		
	Orders shipped.	Stocks.	Orders received.	Orders shipped.	Stocks.	Orders received.	Orders shipped.	Stocks.	Orders received.	Orders shipped.	Stocks.	Orders received.
	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>	<i>Number.</i>
1919.....	415,296		338,464	549,210		883,344	635,008		1,056,216	340,596		502,800
1920.....	617,292		441,288	617,256		641,256	722,772		690,024	372,744		332,292
1921.....	498,137		490,034	698,033		678,780	797,493		774,922	403,083		351,641
1922.....	866,733		1,081,639	1,071,973		1,374,800	1,124,850		1,469,205	531,447		712,043
1921—December.....	38,818	53,140	41,993	45,176	111,834	49,961	57,430	133,014	62,222	27,518	91,643	29,879
1922—January.....	48,425	53,422	58,420	63,047	102,190	80,124	73,877	129,585	84,791	38,831	83,242	54,545
February.....	52,575	56,759	49,134	70,654	101,566	68,414	73,660	129,505	71,434	35,446	60,742	35,240
March.....	65,243	70,537	63,815	91,039	126,228	95,891	90,764	152,980	95,137	44,012	85,334	48,062
April.....	78,130	60,260	107,566	101,482	104,543	138,757	98,905	135,071	140,620	49,402	85,528	63,010
May.....	82,100	47,694	150,475	107,708	78,062	192,546	109,377	102,747	193,563	50,644	77,788	80,341
June.....	82,378	37,846	128,876	102,345	68,558	162,788	107,671	82,831	160,095	48,507	66,636	74,150
July.....	70,700	29,758	99,235	84,077	62,349	111,455	87,492	70,789	123,938	40,187	62,981	61,491
August.....	78,435	22,775	82,536	94,219	58,483	98,765	95,235	59,400	102,617	42,634	69,088	56,516
September.....	75,766	21,195	79,722	88,161	52,826	99,232	90,456	58,034	112,951	47,450	49,975	57,813
October.....	78,834	26,799	76,737	87,325	56,340	93,800	97,379	55,512	103,089	43,669	50,101	51,832
November.....	74,943	33,126	89,690	90,324	59,645	108,976	96,645	61,183	139,373	42,429	50,451	62,935
December.....	79,204	34,517	95,633	91,592	59,595	124,052	103,418	64,908	132,847	47,336	56,284	65,199

## WOOD PULP.

[Federal Trade Commission.]

Year and month.	Production.	Consumption.	Shipments.	Stocks, end of month.	Year and month.	Production.	Consumption.	Shipments.	Stocks, end of month.
	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>		<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>
1919.....	3,384,768	2,609,822	763,598	.....	1922—May.....	331,694	257,986	54,151	232,453
1920.....	3,807,656	2,973,456	840,666	.....	June.....	313,259	250,978	48,662	246,072
1921.....	2,801,438	2,297,978	506,191	.....	July.....	279,308	238,173	47,987	239,220
1922.....	3,464,258	2,907,565	603,817	.....	August.....	282,570	258,871	52,962	209,957
1921—December.....	272,835	213,571	47,896	.....	September.....	272,679	239,801	54,318	178,517
1922—January.....	266,921	220,054	40,667	176,113	October.....	284,642	261,320	64,908	136,931
February.....	243,310	202,449	38,265	178,709	November.....	300,746	254,314	58,520	124,843
March.....	314,591	249,204	47,839	196,257	December.....	277,071	237,568	51,046	113,301
April.....	297,467	236,837	43,991	212,896					

## PAPER PRODUCTION.

[Federal Trade Commission.]

Year and month.	Newsprint.	Book.	Paper board.	Wrapping.	Fine.	Total.
	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>
1919.....	1,374,517	914,823	1,950,037	694,207	343,762	5,277,346
1920.....	1,511,968	1,101,164	2,313,449	831,889	389,322	6,150,792
1921.....	1,226,189	725,992	1,664,931	651,605	242,485	4,511,202
1922.....	1,447,688	893,430	1,970,716	761,449	330,118	5,403,401
1921—December.....	107,877	70,798	149,047	64,850	25,843	418,415
1922—January.....	105,808	73,466	145,198	65,791	27,405	417,668
February.....	97,786	69,408	153,704	62,035	26,663	409,596
March.....	117,507	77,889	192,308	70,141	29,346	487,191
April.....	111,861	70,507	164,327	61,562	27,420	435,677
May.....	129,950	82,574	176,790	71,494	30,129	490,937
June.....	127,230	83,517	183,759	68,371	31,291	494,188
July.....	120,839	74,435	165,551	65,481	27,767	451,073
August.....	133,236	87,922	195,115	74,315	33,081	523,669
September.....	125,402	87,782	198,248	70,329	31,576	513,337
October.....	130,632	92,865	196,769	74,630	33,774	528,720
November.....	127,933	83,065	198,947	77,300	31,666	528,961
December.....	119,404	88,489	185,397	74,822	30,932	499,044

## PAPER STOCKS ON HAND AT CLOSE OF MONTH.

[Federal Trade Commission.]

Year and month.	Newsprint.	Book.	Paper board.	Wrapping.	Fine.	Total.
	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>	<i>Short tons.</i>
1921—December.....	23,934	38,757	63,018	48,848	34,000	208,557
1922—January.....	26,550	38,463	62,173	54,506	35,331	217,023
February.....	27,815	39,334	63,908	59,251	35,804	226,112
March.....	28,180	38,367	71,986	64,931	35,123	238,587
April.....	24,874	37,367	69,756	68,401	35,806	236,204
May.....	24,781	39,491	65,702	70,906	36,985	237,865
June.....	23,367	41,456	67,079	71,259	38,674	241,835
July.....	21,156	38,520	64,033	69,368	37,621	230,698
August.....	19,902	37,473	59,627	62,444	37,899	217,335
September.....	18,810	36,717	57,899	54,343	36,213	204,482
October.....	19,745	38,458	52,968	48,661	36,490	196,322
November.....	19,651	36,770	55,864	45,539	36,850	191,704
December.....	19,208	36,231	54,693	64,625	36,742	211,499

**RUBBER AND AUTOMOBILE TIRES AND TUBES.**

India-rubber imports, Bureau of Foreign and Domestic Commerce, Department of Commerce; all other figures, Rubber Association of America.]

Year and month.	India-rubber imports.	Pneumatic tires.			Inner tubes.			Solid tires.			Consumption of crude rubber by tire manufacturers.
		Production.	Stocks.	Shipments, domestic.	Production.	Stocks.	Shipments, domestic.	Production.	Stocks.	Shipments, domestic.	
	Pounds.	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.	Thousands.	Pounds.
1921.....	415,274,280	21,820		22,817	27,102		27,517	421		528	
1922.....		30,699	58,399	20,222	37,567		36,659	785	2,321	687	337,612,810
1922—December.....	58,644,821	1,810	3,697	1,980	2,070	4,731	2,323	40	169	40	18,019,077
1922—January.....	54,010,916	2,055	4,174	1,597	2,343	5,217	1,890	40	182	33	21,180,446
February.....	66,744,210	2,084	4,691	1,562	2,597	6,142	1,703	39	183	37	18,460,916
March.....	64,215,222	2,616	5,183	2,071	3,019	6,991	2,091	49	182	48	26,771,245
April.....	43,407,359	2,401	5,461	2,087	2,651	7,230	2,329	47	174	52	21,125,450
May.....	35,727,058	2,722	5,523	2,639	2,970	7,190	2,939	57	171	61	29,068,462
June.....	50,952,024	2,839	5,042	3,133	3,131	6,187	3,974	66	179	63	39,654,934
July.....	56,851,758	2,477	4,834	2,695	3,068	5,676	3,631	72	176	60	28,180,511
August.....	51,332,275	2,905	4,629	3,030	3,808	5,207	4,220	84	190	69	33,738,981
September.....	44,344,862	2,505	4,612	2,502	3,501	5,164	3,559	83	209	67	28,051,063
October.....		2,675	4,683	2,589	3,788	5,488	3,421	85	214	71	30,891,000
November.....		2,733	4,965	2,380	3,851	6,210	3,075	86	235	61	28,671,502
December.....											

**AUTOMOBILES.**

[Automobile Chamber of Commerce and Federal Reserve Bank of Chicago.]

Year and month.	Production.		Shipments.			Year and month.	Production.		Shipments.		
	Passenger cars (number).	Trucks (number).	By train (car-loads).	Drive-aways (machines).	By boat (machines).		Passenger cars (number).	Trucks (number).	By train (car-loads).	Drive-aways (machines).	By boat (machines).
1920.....			251,064	470,867	32,883	1922—May.....	231,829	23,189	34,418	28,827	7,406
1921.....	1,435,161	147,009	195,477	144,446	22,310	June.....	261,924	25,274	34,230	31,857	7,737
1922.....	2,316,641	236,432	331,226	304,758	58,212	July.....	223,057	20,973	29,116	28,100	7,030
1922—December.....	70,435	8,183	12,310	7,501	188	August.....	247,316	23,787	32,817	36,768	10,104
1922—January.....	81,614	9,162	15,357	7,479	143	September.....	186,163	18,353	26,335	30,177	8,118
February.....	98,487	12,861	19,636	10,173	180	October.....	214,090	20,591	27,100	35,203	7,605
March.....	152,647	19,449	27,753	16,917	500	November.....	215,225	21,291	27,232	27,370	5,070
April.....	196,788	21,862	31,334	22,381	2,960	December.....	206,650	19,610	26,900	27,500	1,300

**LOCOMOTIVES.**

[Compiled from reports of three largest locomotive companies.]

Year and month.	Output.			Unfilled orders.			Year and month.	Output.			Unfilled orders.		
	Domes-tic, shipped.	For-ign, com-pleted.	Total.	Domes-tic.	For-ign.	Total.		Domes-tic, shipped.	For-ign, com-pleted.	Total.	Domes-tic.	For-ign.	Total.
1919.....	1,862	904	2,766				1922—May.....	64	16	80	497	124	621
1920.....	1,316	966	2,282				June.....	67	47	114	495	101	596
1921.....	830	563	1,393				July.....	122	6	128	712	99	811
1922.....	1,066	218	1,284				August.....	130	21	151	926	109	1,035
1922—December.....	30	59	89	143	122	265	September.....	113	6	119	1,317	116	1,463
1922—January.....	11	63	74	147	62	209	October.....	133	12	145	1,420	118	1,538
February.....	40	4	44	173	66	239	November.....	144	15	159	1,501	118	1,619
March.....	35	4	39	255	75	330	December.....	194	16	210	1,498	94	1,592
April.....	13	8	21	515	102	617							

**VESSELS BUILT IN THE UNITED STATES AND OFFICIALLY NUMBERED BY THE BUREAU OF NAVIGATION.**

Year and month.	Number.	Gross tonnage.	Year and month.	Number.	Gross tonnage.
1919.....	2,363	4,258,141	1922—May.....	133	21,419
1920.....	1,783	2,860,725	June.....	129	16,959
1921.....	1,094	1,263,984	July.....	108	19,356
1922.....	1,014	321,512	August.....	95	11,511
1922—December.....	45	46,105	September.....	76	15,834
1922—January.....	71	52,764	October.....	71	33,815
February.....	39	38,359	November.....	89	27,720
March.....	62	6,203	December.....	65	43,294
April.....	106	34,308			

## RAILROAD OPERATING STATISTICS.

[Interstate Commerce Commission.]

Year and month.	Net ton-miles revenue and nonrevenue.	Net tons per train.	Net tons per loaded car.	Year and month	Net ton-miles revenue and nonrevenue.	Net tons per train.	Net tons per loaded car.
1919.....	395,904,574,000	.....	.....	1922—May.....	27,855,386,000	635	25.0
1920.....	448,457,325,000	.....	.....	June.....	29,048,643,000	655	25.4
1921.....	344,592,802,000	.....	.....	July.....	27,073,021,000	645	25.0
1922.....	.....	.....	.....	August.....	30,452,607,000	690	26.3
1921—December.....	25,706,855,000	609	26.8	September.....	34,270,263,000	721	27.3
1922—January.....	27,105,158,000	632	27.6	October.....	39,260,029,000	732	27.7
February.....	28,348,199,000	673	28.2	November.....	38,046,185,000	719	28.2
March.....	32,904,832,000	691	27.8	December.....	.....	.....	.....
April.....	24,727,919,000	614	24.4	.....	.....	.....	.....

## RAILWAY CAR LOADINGS.

[American Railway Association.]

## LOADINGS BY COMMODITIES.

[Number of cars.]

Year and month.	Grain and grain products.	Live stock.	Coal.	Coke.	Forest products.	Ore.	Merchandise, L. C. L.	Miscellaneous.	Total.
1919.....	2,036,634	1,727,012	8,747,329	457,006	2,971,347	1,946,468	6,344,839	17,662,013	41,892,654
1920.....	1,857,557	1,566,383	9,966,963	652,767	3,076,118	2,417,589	9,067,627	16,616,976	45,422,080
1921.....	2,293,974	1,496,928	7,974,147	318,289	2,486,681	906,841	11,010,090	12,836,306	39,323,165
1922.....	2,468,587	1,637,923	7,447,131	490,774	2,939,046	1,586,398	11,877,812	15,265,776	43,713,427
1921—December.....	186,458	128,444	582,010	30,623	197,640	24,483	942,819	940,823	3,033,500
1922—January.....	210,243	135,707	703,001	31,560	203,997	18,386	875,296	881,887	3,060,167
February.....	206,005	116,449	759,294	31,542	200,495	16,606	863,973	880,599	3,074,965
March.....	185,330	123,108	885,057	40,090	237,322	23,642	1,068,781	1,159,881	3,723,211
April.....	136,975	112,963	302,209	34,007	233,559	40,215	1,010,168	1,161,095	3,031,191
May.....	189,845	132,967	371,230	39,587	273,204	82,735	1,084,292	1,348,151	3,522,011
June.....	171,658	126,535	406,190	40,873	271,358	234,236	1,060,194	1,379,654	3,690,698
July.....	217,649	115,797	327,763	41,558	239,119	275,285	1,004,797	1,366,156	3,588,124
August.....	252,795	133,492	443,244	37,639	260,282	298,190	1,037,350	1,467,169	3,930,161
September.....	222,336	151,783	738,885	37,529	246,441	227,275	984,917	1,441,702	4,050,868
October.....	225,942	174,861	845,630	45,987	258,503	202,956	998,361	1,549,248	4,301,488
November.....	229,997	168,381	848,857	54,416	267,857	125,612	975,379	1,434,716	4,105,195
December.....	219,792	145,900	815,771	55,986	246,909	41,260	914,304	1,195,518	3,635,440

## LOADINGS BY DISTRICTS.

[Number of cars.]

Year and month.	Eastern.	Alleghany.	Pocahontas.	Southern.	Northwestern.	Central western.	Southwestern.	Total, all districts.
1919.....	10,188,290	8,903,134	1,729,973	6,031,779	6,528,238	5,714,496	2,834,735	41,930,645
1920.....	10,827,596	9,528,224	1,759,867	6,581,995	7,004,570	6,432,272	3,287,556	45,422,080
1921.....	9,556,407	7,938,557	1,503,047	5,835,770	5,477,324	5,909,533	3,102,527	39,323,165
1922.....	10,570,095	8,957,508	1,726,267	6,437,813	6,537,428	6,329,971	3,154,436	43,713,518
1921—December.....	757,049	624,966	104,577	462,897	379,491	457,056	247,464	3,033,500
1922—January.....	742,168	607,982	130,402	468,543	411,724	468,712	230,636	3,060,167
February.....	760,593	637,285	141,456	479,530	379,033	450,752	226,336	3,074,965
March.....	938,796	793,295	164,527	588,655	461,098	513,496	263,343	3,723,211
April.....	711,865	605,759	147,508	511,154	421,240	408,909	224,756	3,031,991
May.....	833,405	664,281	183,278	577,888	528,288	478,354	256,517	3,522,011
June.....	830,063	712,923	188,196	563,910	648,497	485,431	261,673	3,690,698
July.....	826,084	713,608	134,719	503,153	648,291	502,794	259,475	3,588,124
August.....	921,683	811,662	133,388	510,707	697,519	585,954	209,248	3,930,161
September.....	865,550	716,719	116,719	523,151	658,485	614,644	291,808	4,050,868
October.....	1,060,446	889,410	129,542	592,336	663,171	656,226	310,357	4,301,488
November.....	1,040,970	874,350	131,270	589,632	563,716	610,508	294,749	4,105,195
December.....	919,511	781,398	125,282	529,154	456,366	554,191	269,538	3,635,440

**FREIGHT-CAR SURPLUS, FREIGHT-CAR SHORTAGE, AND BAD-ORDER CARS.**

[American Railway Association.]

	Surplus.			Shortage.			Bad-order cars.
	Total.	Box.	Coal.	Total.	Box.	Coal.	
1921—December.....	398,371	154,403	192,854	167	110	19	320,292
1922—January.....	415,053	172,568	186,160	513	203	23	313,190
February.....	271,263	108,845	109,593	562	414	53	331,050
March.....	216,684	88,568	81,149	437	246	90	354,628
April.....	334,075	96,034	193,811	473	229	162	320,083
May.....	332,940	80,123	212,218	1,148	588	431	327,704
June.....	261,990	62,425	165,238	2,935	1,184	1,581	340,822
July.....	212,609	42,315	142,792	12,131	7,296	3,396	345,013
August.....	121,387	9,603	95,134	42,919	28,251	8,654	321,624
September.....	20,818	1,389	15,701	97,949	51,879	28,914	291,654
October.....	4,475	119	1,993	160,787	80,237	44,833	249,960
November.....	5,209	739	2,108	154,771	79,818	43,722	226,288
December.....	9,719	2,245	2,704	99,934	47,045	39,750	216,011

**VESSELS CLEARED IN FOREIGN TRADE.**

[Bureau of Foreign and Domestic Commerce, Department of Commerce.]

	Total.	American.	Foreign.		Total.	American.	Foreign.
1921.....	62,635,864	30,086,277	32,549,587	1922—June.....	5,653,486	2,625,434	3,028,052
1922.....	64,739,689	31,665,690	33,074,029	July.....	6,338,652	3,052,711	3,285,941
1921—December.....	5,020,610	2,434,309	2,586,301	August.....	6,177,511	2,903,423	3,274,088
1922—January.....	3,986,331	2,050,856	1,935,475	September.....	6,478,757	3,049,976	3,428,781
February.....	4,025,327	1,855,956	2,169,371	October.....	6,136,008	3,358,360	2,777,648
March.....	4,864,463	2,180,868	2,683,595	November.....	6,214,882	3,446,003	2,768,879
April.....	4,884,090	2,388,705	2,495,385	December.....	4,775,471	2,132,162	2,643,309
May.....	5,174,711	2,621,206	2,553,505				

**PANAMA CANAL TRAFFIC AND COMMERCE AT SAULT STE. MARIE CANALS.**

[Panama Canal and United States War Department, Engineer Corps.]

[Tons, 000 omitted.]

	Panama Canal traffic.			Commerce at Sault Ste. Marie Canals.		
	Total cargo traffic.	American vessels.	British vessels.	Total freight.	Eastbound.	Westbound.
1919.....	7,468	2,756	1,877	102,348		
1920.....	10,809	5,511	3,306	105,798		
1921.....	10,648	4,561	3,431	64,332	32,113,248	16,146,006
1922.....				66,067	55,020	11,047
1921—December.....	953	343	349	48,269,254	938,271	1,031,180
1922—January.....	807	360	277			
February.....	838	380	270			
March.....	960	459	287			
April.....	1,046	499	297	639	497	142
May.....	1,159	609	319	3,317	2,946	371
June.....	978	480	268	8,066	7,507	469
July.....	1,211	582	367	10,235	9,827	408
August.....	1,166	564	336	10,286	9,809	477
September.....	1,138	548	372	10,986	8,451	2,535
October.....	1,446	649	432	11,233	7,996	3,237
November.....				9,468	6,559	2,909
December.....				1,838	1,337	501

**BUILDING STATISTICS.**

**BUILDING PERMITS IN 163 SELECTED CITIES.**

[Collected by the 12 Federal Reserve Banks.]  
NUMBER OF PERMITS ISSUED.

	District No. 1 (14 cities).	District No. 2 (22 cities).	District No. 3 (14 cities).	District No. 4 (12 cities).	District No. 5 (14 cities).	District No. 6 (14 cities).	District No. 7 (19 cities).	District No. 8 (4 cities).	District No. 9 (9 cities).	District No. 10 (14 cities).	District No. 11 (9 cities).	District No. 12 (20 cities).	Total (166 cities).
1922—January.....	878	4,176	1,623	1,724	2,188	2,155	3,695	1,141	523	1,336	1,653	8,298	29,590
February.....	1,024	4,210	2,081	2,619	2,305	2,566	4,852	1,434	617	1,758	2,114	7,600	33,090
March.....	2,364	13,284	3,557	4,986	4,101	3,211	8,951	2,218	1,493	2,711	3,623	11,196	60,695
April.....	3,023	9,056	4,385	6,149	4,397	3,215	11,546	2,650	3,542	3,103	2,586	10,966	64,419
May.....	3,446	10,136	3,991	6,666	5,321	3,443	13,799	2,955	3,991	3,554	2,794	11,268	70,762
June.....	2,943	9,572	3,624	5,839	4,509	3,085	11,898	2,507	2,422	2,888	2,545	10,156	61,988
July.....	2,597	7,761	3,029	4,690	3,756	2,978	10,385	2,291	2,125	2,467	2,238	9,415	53,722
August.....	2,873	7,825	3,044	5,093	4,018	3,130	11,112	2,354	2,244	2,778	2,534	11,596	58,604
September.....	2,734	8,424	3,860	4,789	3,997	3,114	10,553	2,373	1,932	2,629	2,223	11,291	57,919
October.....	2,911	9,672	3,169	5,064	3,930	3,335	11,938	2,492	2,029	2,906	2,470	12,254	62,230
November.....	2,301	9,022	2,504	4,150	3,433	3,010	9,437	2,048	1,437	2,669	2,184	10,490	52,635
December.....	1,285	7,456	1,639	2,666	2,458	2,070	6,620	1,633	698	1,601	1,510	7,767	37,453

**VALUE OF PERMITS ISSUED.**

	District No. 1 (14 cities).	District No. 2 (22 cities).	District No. 3 (14 cities).	District No. 4 (12 cities).	District No. 5 (15 cities).	District No. 6 (14 cities).	District No. 7 (19 cities).
1922—January.....	7,380,701	50,145,296	6,878,523	5,713,209	8,352,615	3,734,262	18,931,956
February.....	9,280,821	50,372,553	8,275,338	7,829,585	7,513,542	4,630,052	20,500,535
March.....	11,089,077	119,964,783	14,116,292	13,814,868	11,329,049	6,021,211	33,998,714
April.....	14,921,509	54,704,292	17,020,500	15,693,183	11,971,471	4,951,558	35,089,303
May.....	13,104,967	57,843,555	13,844,813	22,614,084	13,348,592	7,262,167	53,806,499
June.....	10,600,450	73,352,564	18,177,759	22,428,251	15,736,766	6,498,677	49,934,583
July.....	9,174,687	47,144,023	15,898,696	26,558,680	15,514,625	7,510,036	38,151,182
August.....	16,633,819	49,210,637	15,352,655	22,036,882	11,605,153	7,085,212	40,452,972
September.....	8,656,459	56,670,108	15,868,676	25,076,766	12,969,812	6,326,074	31,550,169
October.....	9,159,731	66,062,790	13,806,295	14,906,540	11,291,705	8,048,880	34,088,484
November.....	8,387,694	60,683,756	15,357,321	14,712,598	9,519,324	5,124,802	41,424,978
December.....	7,251,931	80,400,468	10,639,801	13,050,152	14,486,238	5,156,056	53,131,532

	District No. 8 (4 cities).	District No. 9 (9 cities).	District No. 10 (14 cities).	District No. 11 (9 cities).	District No. 12 (20 cities).	Total (166 cities).
1922—January.....	2,579,894	2,110,424	5,023,603	4,960,078	22,872,876	138,683,337
February.....	4,150,487	1,569,774	4,330,011	4,419,789	18,917,868	141,795,961
March.....	5,012,607	4,526,209	7,165,925	5,630,336	27,432,286	260,001,357
April.....	6,076,684	8,196,110	8,384,552	6,228,385	30,185,052	213,322,599
May.....	7,443,855	9,913,853	10,807,084	4,762,642	28,271,238	243,013,379
June.....	5,855,459	6,020,186	8,894,131	5,276,819	29,598,278	252,373,923
July.....	5,698,792	7,683,443	8,040,606	5,861,650	22,391,016	209,613,436
August.....	5,815,805	8,264,659	9,793,352	5,010,204	29,424,332	221,605,682
September.....	5,384,042	4,761,065	8,352,440	4,980,057	23,068,073	204,563,735
October.....	6,353,637	4,716,802	8,989,079	4,765,340	29,338,159	211,627,532
November.....	5,811,979	5,273,142	8,277,871	3,859,909	26,200,472	210,633,946
December.....	10,114,761	3,685,882	6,922,598	9,570,337	22,034,644	236,446,400

**VALUE OF BUILDING CONTRACTS AWARDED, BY FEDERAL RESERVE DISTRICTS.**

[F. W. Dodge Co.]

**VALUE OF CONTRACTS FOR ALL CLASSES OF BUILDINGS.**

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	District No. 5.	District No. 7.	District No. 9.	Total (7 districts).
1922—January.....	15,302,453	54,962,847	12,128,900	21,066,282	14,002,399	29,182,324	3,613,148	150,258,353
February.....	14,799,476	60,152,424	11,828,700	20,602,823	16,518,079	32,344,424	5,192,824	161,438,750
March.....	26,212,330	90,088,870	24,558,100	29,661,058	24,116,011	58,081,526	11,933,270	264,651,165
April.....	42,196,915	117,814,585	24,795,800	38,089,764	25,618,120	64,236,566	9,878,501	322,630,241
May.....	31,589,783	91,441,141	25,739,294	58,432,714	32,268,767	71,117,055	12,455,410	323,044,184
June.....	36,259,420	81,614,205	26,630,900	46,801,800	30,668,191	77,580,940	12,153,061	311,688,517
July.....	24,910,926	79,819,084	28,768,377	52,224,001	25,362,187	83,169,795	9,304,325	303,548,695
August.....	26,780,103	80,810,922	43,818,911	50,811,596	20,983,619	56,954,434	8,249,905	288,409,490
September.....	29,245,087	64,298,556	24,917,916	34,634,723	22,997,450	62,219,681	5,868,200	244,261,613
October.....	25,305,051	65,060,956	20,439,852	35,164,630	19,684,627	52,048,241	4,623,126	222,226,483
November.....	25,297,599	77,700,081	16,929,289	29,337,240	19,848,004	45,428,673	4,810,120	191,351,006
December.....	19,739,632	58,684,871	18,706,115	23,041,621	15,677,542	45,128,035	5,285,253	219,263,069
1923—January.....	21,806,227	65,232,664	16,770,003	25,691,021	17,632,808	43,137,028	4,624,178	194,793,929

**VALUE OF CONTRACTS FOR RESIDENTIAL BUILDINGS.**

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	District No. 5.	District No. 7.	District No. 9.	Total (7 districts).
1922—January.....	4,767,597	35,652,203	6,280,200	6,279,459	6,587,861	10,601,761	1,049,594	71,228,675
February.....	4,179,944	39,057,156	5,647,700	5,545,073	7,299,608	9,388,615	962,757	71,680,853
March.....	11,897,086	51,116,514	9,552,500	10,641,177	9,796,405	17,226,201	2,348,511	112,577,397
April.....	13,624,827	53,677,473	10,408,700	16,127,627	10,297,280	17,661,598	4,176,963	125,873,466
May.....	14,018,303	39,943,547	11,163,868	19,121,798	13,009,760	24,574,835	4,240,047	126,077,188
June.....	12,518,840	40,483,063	11,275,517	17,434,095	16,036,790	28,206,838	2,677,134	128,032,327
July.....	12,644,574	33,364,787	7,826,581	15,406,301	8,074,163	20,333,345	2,415,438	100,365,189
August.....	11,945,451	29,091,738	8,828,667	13,409,258	6,320,030	18,833,050	2,535,590	90,963,784
September.....	11,509,627	34,536,710	8,142,367	12,736,605	8,595,717	15,011,664	2,453,723	92,986,413
October.....	13,552,663	33,237,936	10,072,260	13,729,840	7,416,108	20,291,379	2,227,614	100,527,800
November.....	13,667,239	51,891,842	7,397,453	11,405,407	7,997,513	22,307,994	2,847,452	117,514,900
December.....	13,962,708	42,981,478	11,526,372	17,809,202	5,002,996	17,949,393	2,046,342	111,278,491
1923—January.....	14,469,214	47,701,735	5,721,565	11,802,697	7,814,783	14,567,012	2,071,631	104,148,637

<sup>1</sup> Montana not included.

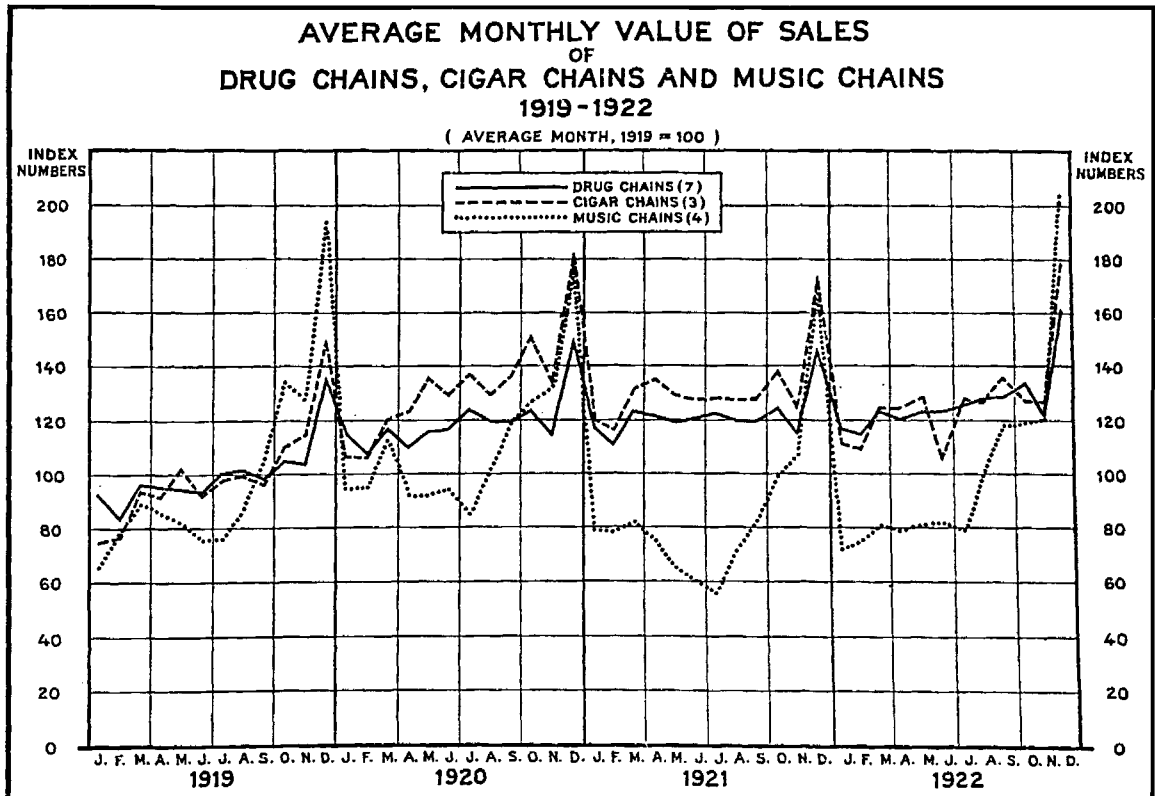
**RETAIL TRADE.**

Sales of all reporting retailers increased very substantially during December as a result of the heavy Christmas trade. Department stores, grocery stores, 5 and 10 cent stores, drug stores, shoe stores, and music stores all reported the largest monthly sales for the last four years. The accompanying chart illustrates the heavy Christmas buying at chain stores dealing in musical instruments and cigars, as well as at drug stores which do a large novelty business. Mail-order houses report a slightly smaller volume of sales than in November, but business in December was much better sustained than is usual at that time of the year.

The following tables are a summary of the data obtained from 474 representative department stores in the 12 Federal reserve districts. In districts Nos. 1, 2, 3, 5, 6, 7, 9, 11, and 12 the data were received in (and averages computed from) actual dollar amounts. In districts Nos. 4, 8, and 10 most of the material was received in the form of percentages, and the averages for the cities and districts computed from such percentages were weighted according to volume of business done during the calendar year 1921.

The tables for the month of December are based on reports from 25 stores in district No. 1 (Boston), 64 stores in district No. 2 (New York), 133 stores in district No. 3 (Philadelphia), 35 stores in district No. 4 (Cleveland), 22 stores in district No. 5 (Richmond), 36 stores in district No. 6 (Atlanta), 52 stores in district No. 7 (Chicago), 20 stores in district No. 8 (St. Louis), 21 stores in district No. 9 (Minneapolis), 13 stores in district No. 10 (Kansas City), 21 stores in district No. 11 (Dallas), and 32 stores in district No. 12 (San Francisco).

A comparison of monthly changes in activity of different types of retail business since January, 1921, is shown in the second of the following tables. The 176 department stores are located in districts Nos. 1, 2, 3, 5, 6, 9, 11, and 12, while the mail-order houses do business in all parts of the United States. The United States index for department stores is computed by weighing the districts according to the buying power, as measured by population and banking resources. Chain-store figures are based upon the total sales of the same reporting chains for each month, but the actual number of stores in these chains varies slightly.





## CONDITION OF RETAIL TRADE IN THE FEDERAL RESERVE DISTRICTS.

[Minus sign (-) denotes decrease.]

	Percentage of increase in net sales compared with corresponding period previous year.				Percentage of increase in stocks at close of month compared with—				Percentage of average stocks at close of each month to average sales for same month.		Percentage of outstanding orders at close of month to total purchases during previous calendar year.		
	December.	November.	July 1, 1922, to close of—		Same month previous year.		Previous month.		July 1, 1922, to close of—		December, 1922.	November, 1922.	
			December, 1922.	November, 1922.	December, 1922.	November, 1922.	December, 1922.	November, 1922.	December, 1922.	November, 1922.			
<b>District No. 1:</b>													
Boston.....	4.7	8.3	7.8	9.0	5.1	5.4	-14.0	3.8	284.6	324.2	5.6	6.6	
Outside.....	4.7	6.7	4.4	4.3	2.1	-1.1	-16.3	4.6	366.2	422.5	4.6	6.5	
District.....	4.7	7.9	7.0	7.8	4.3	3.6	-14.6	4.0	302.8	345.3	5.5	6.5	
<b>District No. 2:</b>													
New York and Brooklyn...	4.1	7.3	6.6	7.6	1.3	1.3	-14.4	7.0	302.0	345.5	5.5	7.7	
Bridgeport.....	4.7	9.5	5.4	5.6	3.2	2.9	-11.8	3.8	364.3	410.9	6.4	8.7	
Buffalo.....	0.7	4.3	3.7	4.8	-6.2	-2.9	-25.2	5.1	343.6	392.3	9.8	6.1	
Newark.....	10.9	14.1	8.4	7.5	10.0	6.4	-15.8	11.7	293.7	342.7	4.4	2.3	
Rochester.....	15.2	2.8	8.0	5.6	5.3	-1.5	-6.3	4.0	315.3	357.0	2.7	4.0	
Syracuse.....	8.2	3.3	3.6	1.9	-4.8	-1.0	-15.9	4.2	318.5	374.7	4.2	.....	
Outside.....	-0.4	6.6	1.2	1.8	-15.8	-8.1	-21.9	-0.5	461.3	544.7	6.0	7.5	
District.....	5.0	8.1	6.4	6.9	1.3	1.1	-16.0	5.6	304.1	348.6	5.8	6.7	
<b>District No. 3:</b>													
Philadelphia.....	8.2	10.9	7.6	7.5	-0.6	-2.1	-17.5	0.2	297.9	337.0	8.0	8.7	
Allentown.....	13.8	24.1	12.5	12.4	4.3	-4.1	-18.2	1.9	500.8	589.3	7.4	5.0	
Altoona.....	5.9	16.2	3.6	3.0	-9.7	-9.5	-22.5	2.3	394.5	477.7	.....	12.8	
Chester.....	37.7	55.6	31.2	28.9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harrisburg.....	13.6	15.0	12.1	12.0	18.2	10.1	-16.0	1.9	421.0	488.6	.....	.....	
Johannstown.....	15.3	18.1	1.9	-1.2	-3.5	1.2	-13.5	1.3	381.4	446.9	.....	.....	
Lancaster.....	13.0	8.9	3.6	0.7	11.5	-0.4	-20.2	3.6	442.6	514.7	9.8	10.6	
Reading.....	9.5	11.4	8.6	8.2	3.8	0.1	-10.9	-0.4	495.1	590.1	4.1	5.0	
Scranton.....	6.8	3.9	-7.2	-11.2	17.4	15.4	-23.2	5.3	325.4	409.6	.....	.....	
Tranton.....	2.3	12.7	8.5	8.9	-7.6	-0.1	-16.9	2.1	352.6	435.3	.....	.....	
Wilkes-Barre.....	4.8	1.1	-3.9	-4.7	6.3	-8.1	-14.0	0.3	379.5	459.9	.....	.....	
Williamsport.....	4.9	5.3	-1.1	-2.0	14.9	2.6	-29.0	-1.8	355.4	501.3	.....	.....	
Wilmington.....	19.0	19.2	18.9	12.9	0.8	-5.7	-13.5	4.0	575.1	680.1	5.3	5.6	
York.....	.....	5.3	.....	3.4	.....	-7.3	.....	-1.8	488.1	.....	.....	3.3	
Outside.....	9.2	6.4	4.9	3.8	13.2	12.0	-15.3	2.1	487.1	579.1	6.1	7.5	
District.....	8.9	11.4	6.7	6.1	2.4	-0.5	-17.2	-0.9	352.0	413.0	7.7	8.1	
<b>District No. 4:</b>													
Cleveland.....	14.5	17.5	16.7	16.8	9.3	4.6	-14.7	4.6	300.5	330.6	7.9	9.8	
Akron.....	12.0	18.1	14.4	14.0	9.2	5.6	-16.1	2.2	370.7	358.4	7.6	9.2	
Canton.....	20.3	11.4	12.7	10.3	4.9	1.8	-9.2	1.1	669.1	903.8	.....	6.7	
Cincinnati.....	5.4	11.5	1.7	4.1	-11.3	-12.5	-19.1	-0.8	382.7	448.6	11.3	6.7	
Pittsburgh.....	15.5	17.5	12.4	11.4	-9.3	-7.3	-14.9	2.0	324.3	364.6	9.2	7.3	
Toledo.....	13.2	9.5	9.9	8.8	1.1	-3.3	-18.4	2.9	319.2	365.9	6.9	6.7	
Outside.....	31.0	21.5	27.8	24.6	20.5	12.3	-19.4	11.1	327.0	404.0	8.2	12.4	
District.....	14.1	16.3	12.6	12.6	-1.0	-2.5	-15.8	2.9	351.0	372.8	8.7	8.2	
<b>District No. 5:</b>													
Richmond.....	12.2	12.8	12.7	12.9	-4.5	10.3	-17.0	4.6	299.3	350.3	.....	9.7	
Baltimore.....	7.9	8.1	5.4	4.6	7.2	1.8	-18.1	-2.8	344.3	399.1	5.6	6.5	
Washington.....	0.5	-0.4	-1.4	-2.1	8.8	-1.9	-17.2	-6.4	382.5	454.6	5.1	6.5	
Outside.....	-0.7	5.9	-2.6	-0.9	-15.1	-7.7	-22.2	1.1	421.3	514.2	5.4	5.5	
District.....	5.0	5.7	3.1	2.6	3.6	-2.1	-18.2	-2.6	358.6	426.0	5.3	6.6	
<b>District No. 6:</b>													
Atlanta.....	12.2	-0.6	5.9	3.3	1.9	9.5	-16.8	-1.1	474.6	468.1	4.8	4.4	
Birmingham.....	15.6	23.1	17.5	18.2	-9.7	-8.8	-24.9	1.5	361.9	428.4	5.6	6.0	
Chattanooga.....	-0.1	7.1	-3.5	-4.9	-0.0	-0.7	-16.2	-1.1	697.5	812.0	.....	.....	
Nashville.....	3.4	-3.3	4.3	1.0	-3.6	-7.7	-19.4	-2.4	367.3	515.5	6.4	6.4	
New Orleans.....	0.1	-1.5	-3.9	-5.4	1.8	-4.8	-17.3	3.4	420.4	484.2	10.0	11.0	
Savannah.....	-10.8	-16.4	-18.4	-18.1	-14.9	-18.4	-14.0	3.5	563.0	662.4	1.9	3.8	
Outside.....	12.2	12.0	3.1	-1.2	-11.2	-7.1	-15.2	-0.9	459.1	456.5	4.8	3.2	
District.....	4.9	3.9	1.3	-0.2	-3.1	-5.1	-13.5	1.1	428.4	497.2	7.0	7.3	
<b>District No. 7:</b>													
Chicago.....	16.4	11.9	8.4	9.5	8.7	4.7	-23.2	-2.3	267.6	277.4	.....	.....	
Des Moines.....	11.2	-1.9	7.8	6.8	1.5	13.2	-19.7	3.5	286.3	322.0	7.7	5.0	
Detroit.....	25.1	28.2	23.7	23.3	3.9	1.5	-16.4	2.5	281.3	310.9	13.8	12.8	
Indianapolis.....	.....	33.3	.....	9.9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Milwaukee.....	5.9	-1.3	-0.5	-2.0	.....	-0.9	.....	-2.4	.....	563.2	.....	4.9	.....
Outside.....	11.1	3.4	3.9	-1.4	-1.6	-5.0	-15.0	0.0	436.6	508.2	5.7	5.9	
District.....	17.0	15.7	12.6	10.6	1.2	0.1	-16.3	1.3	340.0	394.5	9.4	8.9	

CONDITION OF RETAIL TRADE IN THE FEDERAL RESERVE DISTRICTS—Continued.

[Minus sign (-) denotes decrease.]

	Percentage of increase in net sales compared with corresponding period previous year.				Percentage of increase in stocks at close of month compared with—				Percentage of average stocks at close of each month to average sales for same month.		Percentage of 'outstanding' orders at close of month to total purchases during previous calendar year.		
	December.	November.	July 1, 1922, to close of—		Same month previous year.		Previous month.		July 1, 1922, to close of—		December, 1922.	November, 1922.	
			December, 1922.	November, 1922.	December, 1922.	November, 1922.	December, 1922.	November, 1922.	December, 1922.	November, 1922.			
District No. 8:													
St. Louis.....	6.2	4.1	5.0	4.7	-0.7	0.2	-15.3	2.3	326.9	366.6	5.4	6.0	
Little Rock.....	8.3	1.8	-2.6	-6.0	0.2	5.7	-17.0	2.9	472.1	443.2	4.6	5.3	
Louisville.....	1.5	6.6	0.9	1.7	-16.8	-15.4	-27.7	1.2	303.1	364.0	3.0	3.8	
Memphis.....	13.4	15.7	11.9	11.2	-6.4	-2.7	-15.6	6.3	402.4	468.0	5.5	12.4	
Outside.....	5.3	3.1	1.1	-5.3	18.1	-7.5	-1.8	4.5	468.3	538.5	5.0	3.2	
District.....	6.8	6.1	4.8	4.3	-1.8	-1.9	-16.3	2.7	349.3	392.8	5.0	6.4	
District No. 9.....	11.7	-0.5	3.8	-2.7	5.8	1.7	-15.6	2.1	282.5	306.3	7.0	4.6	
District No. 10:													
Kansas City.....	10.0	10.5	-0.8	-3.6	-13.9	-4.1	-24.7	-0.2	394.4	460.4	2.0	2.7	
Denver.....		1.3		-2.1		-1.5		2.3		533.3		11.9	
Outside.....	8.9	-2.6	-1.1	0.5	4.3	4.0	-16.6	3.3	457.2	478.3	7.7	6.2	
District.....	8.9	2.3	-0.9	-1.4	-3.7	-0.1	-20.2	-0.8	426.0	490.1	4.9	6.8	
District No. 11:													
Dallas.....	3.4	2.4	2.9	2.8	-3.7	-8.1	-18.1	-2.0	387.2	437.6	8.5	8.5	
Fort Worth.....	1.6	6.4	1.5	1.5	-5.1	-7.4	-10.7	0.6	417.2	491.2	6.5	5.8	
Houston.....	0.8	2.8	0.3	0.1	-8.3	-11.4	-18.2	-0.9	441.1	510.0	6.4	3.7	
Outside.....	-5.9	-6.8	-9.1	-10.2	-7.5	-15.9	-20.7	1.6	402.3	458.4	6.2	6.6	
District.....	-0.1	0.4	-1.3	-1.8	-5.8	-10.9	-17.1	-0.4	405.7	464.3	7.5	7.2	
District No. 12:													
San Francisco.....	12.0	12.3	8.4	6.9	4.4	-0.8	-12.2	2.7	383.4	431.0	8.0	10.6	
Los Angeles.....	14.8	18.4	11.7	10.6	6.2	-7.0	-5.5	8.4	347.6	356.9	9.3	10.8	
Oakland.....	8.7	7.8	4.4	0.7	-1.9	-3.9	-10.9	0.7	457.2	545.7		3.6	
Salt Lake City.....	4.2	2.1	1.5	1.1	-1.4	0.9	-16.9	2.3	471.4	538.0		8.2	
Seattle.....	12.3	22.3	12.7	12.8	7.7	3.2	-17.9	2.5	324.7	393.2	8.1	8.9	
Spokane.....	5.0	5.1	-1.1	-2.6	-1.4	-0.8	-14.1	-2.1	517.8	582.5	7.9	8.9	
District.....	12.0	14.5	8.9	7.7	3.8	-2.5	-11.3	3.5	379.1	431.0	8.6	9.8	
United States.....	8.8	9.0	6.5	6.0	0.7	-0.7	-16.0	2.2	349.7	397.9	6.6	7.4	

AVERAGE MONTHLY VALUE OF RETAIL TRADE.

[Average monthly sales, 1919=100.]

	Department stores (176 stores).	Mail-order houses (4 houses).	Chain stores.					
			Grocery (21 chains).	Five and ten (4 chains).	Drug (8 chains).	Cigar (3 chains).	Shoe (5 chains).	Misc (4 chains).
1919.								
January.....	75.7	86.1	89.7	70.2	92.3	74.8	68.0	65.3
February.....	68.9	73.1	86.4	72.3	83.5	77.1	59.6	78.2
March.....	85.4	82.6	95.6	90.8	96.4	93.7	76.1	89.7
April.....	98.3	91.5	93.1	93.9	95.1	91.7	107.5	86.1
May.....	98.1	81.3	95.4	96.4	94.3	102.1	103.2	81.6
June.....	93.1	74.5	90.3	88.3	93.1	92.2	92.3	75.7
July.....	77.2	76.2	100.9	87.9	100.9	98.2	88.5	76.2
August.....	77.6	82.1	93.4	91.6	101.8	99.9	103.9	87.0
September.....	96.4	102.1	99.4	92.5	98.7	96.2	108.5	105.7
October.....	124.6	155.9	118.8	107.9	104.7	110.2	128.6	133.7
November.....	122.1	148.2	112.0	112.1	103.9	114.9	127.1	127.3
December.....	182.7	146.4	120.0	195.1	135.3	149.0	136.7	193.5
1920.								
January.....	104.9	120.2	131.6	85.6	115.3	103.8	90.0	94.7
February.....	85.4	122.2	127.8	82.6	108.2	106.2	76.1	95.0
March.....	120.0	130.7	146.4	111.1	117.8	120.4	121.5	112.9
April.....	117.5	107.5	154.9	110.6	110.6	123.2	133.4	91.3
May.....	124.0	90.4	152.1	112.9	116.5	135.6	146.4	91.9
June.....	118.0	87.3	148.7	108.9	117.6	129.6	128.1	93.9
July.....	92.2	80.7	159.2	112.0	124.9	137.3	119.7	84.7
August.....	90.9	80.2	142.2	111.1	121.1	129.2	91.5	101.6
September.....	106.9	90.5	142.9	111.7	120.6	136.6	111.6	107.7
October.....	131.9	103.7	144.9	129.9	124.5	151.0	143.0	126.6
November.....	135.9	125.5	140.7	125.7	115.5	133.9	135.1	132.1
December.....	190.7	97.9	139.9	214.6	150.5	180.5	154.8	179.1

AVERAGE MONTHLY VALUE OF RETAIL TRADE—Continued.

[Average monthly sales, 1919=100.]

	Department stores (176 stores).	Mail-order houses (4 houses).	Chain stores.					
			Grocery (21 chains).	Five and ten (4 chains).	Drug (8 chains).	Cigar (3 chains).	Shoe (5 chains).	Music (4 chains).
1921.								
January	101.6	69.2	126.0	86.1	118.1	119.9	85.7	79.0
February	87.3	64.8	120.2	92.9	111.7	116.5	82.4	78.3
March	116.3	95.1	131.5	121.1	125.0	131.8	140.8	81.9
April	111.7	77.5	122.9	111.9	123.1	134.7	139.5	75.1
May	111.3	60.2	120.2	112.2	120.5	129.5	136.3	65.1
June	108.5	62.1	119.1	109.7	121.7	127.8	127.5	59.9
July	79.7	49.3	116.0	108.0	123.5	128.5	100.8	55.1
August	83.2	56.4	122.4	116.0	121.0	127.6	86.5	71.6
September	62.7	72.7	121.7	113.4	120.3	128.0	103.0	82.3
October	127.8	88.6	137.5	141.9	125.1	138.0	135.3	99.2
November	121.3	83.3	135.8	134.1	116.0	124.8	119.0	107.0
December	175.8	80.3	148.6	241.6	146.8	172.7	149.4	172.6
1922.								
January	87.2	65.3	137.5	94.6	117.4	111.0	79.9	71.8
February	80.0	59.4	130.3	100.8	114.8	109.3	80.6	75.0
March	101.5	83.5	149.2	118.4	123.4	124.3	103.8	80.6
April	111.9	77.1	139.2	134.9	120.5	124.5	156.1	78.9
May	113.9	69.9	137.9	129.6	123.2	128.8	126.9	80.9
June	105.8	63.8	136.7	127.0	123.8	123.4	121.7	81.3
July	78.4	58.4	135.1	126.3	126.2	127.3	101.2	83.0
August	84.8	57.2	139.1	130.4	128.2	126.9	86.7	99.1
September	102.5	*76.1	141.0	136.1	128.7	135.4	117.7	118.2
October	131.2	*110.0	148.6	156.6	133.1	127.1	121.1	118.8
November	129.4	*112.5	162.4	152.3	122.4	126.9	121.9	120.7
December	188.2	*108.7	*165.5	279.2	161.0	178.7	164.7	203.7

CONDITION OF WHOLESALE TRADE.

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN DECEMBER, 1922, AS COMPARED WITH THE PRECEDING MONTH OF NOVEMBER, 1922.

District.	Groceries.		Dry goods.		Hardware.		Shoes.		Furniture.		Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.	-5.1	42	-14.1	8	-11.7	11	-12.7	10	.....	.....	-2.8	6	.....	.....	22.8	6	.....	.....	.....	.....
No. 3.	-7.7	61	-23.0	22	-4.2	34	-14.4	13	.....	.....	-0.8	16	.....	.....	.....	.....	.....	.....	.....	.....
No. 4.	-12.7	25	-11.7	12	-10.0	10	.....	.....	.....	.....	-0.3	10	.....	.....	.....	.....	.....	.....	.....	.....
No. 5.	-9.0	42	-30.5	15	-16.8	18	-22.9	20	-23.3	9	-13.7	13	.....	.....	.....	.....	.....	.....	.....	.....
No. 6.	-7.4	35	-34.6	22	-0.4	22	-30.8	11	-11.0	14	-2.4	5	.....	.....	-22.8	4	39.0	6	.....	.....
No. 7.	-12.3	33	-16.6	10	-12.1	14	-5.4	9	.....	.....	-1.6	10	-1.8	4	.....	.....	.....	.....	.....	.....
No. 8.	-10.7	15	-22.6	6	-4.1	6	20.4	9	.....	.....	3.2	3	.....	.....	.....	.....	.....	.....	.....	.....
No. 9.	-13.7	49	-23.2	6	-13.0	12	-13.4	6	.....	.....	.....	.....	.....	.....	.....	.....	22.6	8	.....	.....
No. 10.	-14.0	7	-21.0	3	2.0	9	.....	.....	-0.7	3	-1.8	2	.....	.....	.....	.....	-56.6	3	.....	.....
No. 11.	-9.9	12	-44.2	11	-15.6	10	.....	.....	-15.5	2	-9.8	7	.....	.....	.....	.....	23.4	5	.....	.....
No. 12.	-22.1	31	-36.2	17	-10.1	21	-8.7	14	-7.9	15	-9.5	9	-2.1	20	-11.2	28	10.7	24	40.8	15

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN DECEMBER, 1922, AS COMPARED WITH DECEMBER, 1921.

District.	Groceries.		Dry goods.		Hardware.		Shoes.		Furniture.		Drugs.		Auto supplies.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 2.	26.0	42	-6.9	8	20.1	11	16.2	10	.....	.....	22.6	6	.....	.....	20.1	6	.....	.....	.....	.....
No. 3.	14.9	61	16.7	22	18.8	34	35.9	13	.....	.....	9.3	16	.....	.....	.....	.....	.....	.....	.....	.....
No. 4.	11.3	25	19.9	12	37.4	10	.....	.....	.....	.....	6.5	10	.....	.....	.....	.....	.....	.....	.....	.....
No. 5.	9.8	42	41.6	15	23.5	18	27.3	20	18.8	9	13.0	13	.....	.....	.....	.....	.....	.....	.....	.....
No. 6.	10.4	35	41.5	22	27.6	22	1.7	11	30.4	14	12.8	5	.....	.....	44.7	4	41.3	6	.....	.....
No. 7.	8.2	33	35.5	10	34.8	14	24.3	9	.....	.....	13.0	10	45.4	4	.....	.....	.....	.....	.....	.....
No. 8.	4.8	15	29.6	6	37.4	6	25.0	9	.....	.....	-2.5	3	.....	.....	.....	.....	.....	.....	.....	.....
No. 9.	11.4	49	3.5	6	36.5	12	74.9	6	.....	.....	.....	.....	.....	.....	.....	.....	194.4	8	.....	.....
No. 10.	8.2	7	17.4	3	22.3	9	.....	.....	36.3	3	4.0	2	.....	.....	.....	.....	115.5	3	.....	.....
No. 11.	22.9	12	4.0	11	1.9	10	.....	.....	3.8	2	2	7	.....	.....	.....	.....	159.0	5	.....	.....
No. 12.	15.9	31	18.3	15	22.3	21	22.7	14	31.4	15	3.5	9	18.6	20	8.8	28	27.5	24	11.4	15

# BANKING AND FINANCIAL STATISTICS.

## DISCOUNT AND OPEN MARKET OPERATIONS OF FEDERAL RESERVE BANKS.

### VOLUME OF OPERATIONS DURING DECEMBER, 1922.

Federal reserve bank.	Bills discounted for member banks.	Bills bought in open market.	United States securities purchased.		Municipal warrants purchased.	Total.	
			Bonds and notes.	Certificates of indebtedness.		December, 1922.	December, 1921.
Boston.....	\$238,750,400	\$23,185,453	\$4,777,370	\$30,267,950		\$301,081,173	\$356,636,577
New York.....	1,853,415,414	83,358,524	76,916,500	277,746,503		2,291,436,839	2,762,980,107
Philadelphia.....	246,951,464	9,681,197	747,800	85,232,500		342,632,961	339,714,281
Cleveland.....	152,581,501	10,070,022	45,200	54,019,000		216,715,723	260,689,790
Richmond.....	225,477,323	170,000	50,000	32,000,000		255,697,323	217,518,152
Atlanta.....	41,979,297	7,639,319	1,050,950	149,000	\$8,000	50,826,566	122,650,132
Chicago.....	193,691,021	21,508,005	16,017,500	190,405,000		421,621,526	308,820,183
St. Louis.....	132,224,339	5,479,488	8,800	70,000,000		207,712,627	125,667,289
Minneapolis.....	15,990,638		3,466,900	14,522,500	15,490	33,995,529	46,980,917
Kansas City.....	54,758,830	275,000	864,250	25,767,500		81,665,600	61,590,925
Dallas.....	11,494,495	5,870,822		369,000		17,734,317	45,052,713
San Francisco.....	150,277,549	30,329,001		63,000,000		243,606,550	222,097,653
<b>Total—December, 1922..</b>	<b>3,315,592,291</b>	<b>202,566,831</b>	<b>103,945,270</b>	<b>843,498,950</b>	<b>23,490</b>	<b>4,465,626,832</b>	<b>.....</b>
December, 1921..	4,168,565,865	230,101,353	36,348,600	435,107,000	311,901	.....	4,870,434,719
12 months ending Dec. 31, 1922..	22,082,887,025	1,954,687,529	1,230,162,770	3,402,677,160	176,322	28,670,591,406	.....
12 months ending Dec. 31, 1921..	57,759,127,585	1,534,400,760	104,431,850	3,742,663,557	984,996	.....	63,141,603,748

### VOLUME OF BILLS DISCOUNTED DURING DECEMBER, 1922, BY CLASSES OF PAPER; ALSO NUMBER OF MEMBER BANKS ACCOMMODATED.

Federal reserve bank.	Customers' paper secured by Government obligations.	Member bank collateral notes.		Commercial paper n. e. s.	Agricultural paper.	Live-stock paper.	Bankers' acceptances.		
		Secured by Government obligations.	Otherwise secured.				Foreign.	Domestic.	Dollar exchange.
Boston.....	\$276,440	\$112,827,500	.....	\$125,069,098	\$505,275	\$28,000			
New York.....	539,492	1,725,654,250	.....	126,202,665	416,919	10,031	\$71,396		
Philadelphia.....	1,718,025	155,679,450	.....	89,193,850	318,711				
Cleveland.....	392,804	111,564,850	\$70,000	38,291,867	203,079	192,178			
Richmond.....	528,488	195,980,934	3,871,200	20,153,830	2,302,792	16,288			
Atlanta.....	210,870	10,448,600	388,237	26,941,764	3,430,937	139,329			
Chicago.....	241,336	121,712,575	245,148	63,654,486	7,763,836				
St. Louis.....	304,716	109,081,000	.....	21,092,488	1,367,710	59,794			
Minneapolis.....	7,853	6,153,950	724,114	4,567,266	3,502,464	1,034,991			
Kansas City.....	145,740	42,991,025	.....	6,552,179	1,412,572	3,667,334			
Dallas.....	12,925	3,353,050	350,560	4,167,206	1,666,005	1,839,626			
San Francisco.....	32,311	74,391,322	15,399,237	57,646,960	1,424,416	1,172,745	50,849	\$19,870	
<b>Total: December, 1922..</b>	<b>4,411,000</b>	<b>2,669,818,506</b>	<b>21,078,496</b>	<b>583,531,235</b>	<b>24,314,716</b>	<b>8,160,516</b>	<b>122,245</b>	<b>19,870</b>	<b>.....</b>
November, 1922....	2,681,427	2,408,641,651	19,794,940	685,308,062	26,253,638	7,558,456	518,187	488,943	.....
December, 1921....	34,494,036	2,643,303,761	38,970,549	1,370,207,221	52,253,709	17,040,568		2,238,395	.....
November, 1921....	41,791,530	1,888,859,330	35,352,233	1,177,681,766	56,521,118	22,574,635		640,322	.....

**VOLUME OF BILLS DISCOUNTED DURING DECEMBER, 1922, BY CLASSES OF PAPER; ALSO NUMBER OF MEMBER BANKS ACCOMMODATED—Continued.**

Federal reserve bank.	Trade acceptances.		Total, all classes.	Total reduced to a common maturity basis. <sup>1</sup>		Member banks.		
	Foreign.	Domestic.		Amount.	Per cent of total.	Number in district Dec. 31.	Accommodated.	
							Number.	Per cent.
Boston.....		\$43,487	\$238,750,400	\$285,535,202	8.6	427	233	54.6
New York.....	\$19,000	501,661	1,853,415,414	829,246,275	25.0	808	370	45.8
Philadelphia.....		41,422	246,951,464	228,454,464	6.9	716	365	51.0
Cleveland.....		1,866,723	152,581,501	205,327,042	6.2	831	327	37.1
Richmond.....		623,791	223,477,323	203,300,133	6.1	632	288	45.6
Atlanta.....		41,979,297	41,979,297	189,341,994	5.7	543	237	43.6
Chicago.....		73,640	193,691,021	602,253,993	18.2	1,443	742	51.4
St. Louis.....		132,224,339	132,224,339	181,874,234	5.5	610	221	36.2
Minneapolis.....		15,990,638	15,990,638	109,289,135	3.3	1,014	343	33.8
Kansas City.....		54,758,850	54,758,850	177,682,235	5.4	1,153	297	25.8
Dallas.....		74,923	11,494,495	76,953,744	2.3	861	181	21.0
San Francisco.....		149,839	150,277,549	226,333,840	6.8	826	269	32.6
<b>Total: December, 1922.....</b>	<b>19,000</b>	<b>4,113,677</b>	<b>3,315,592,291</b>	<b>3,315,592,291</b>	<b>100.0</b>	<b>9,914</b>	<b>3,873</b>	<b>39.1</b>
November, 1922.....	822,140	3,708,172	3,155,775,616			9,916	3,859	38.9
December, 1921.....		10,057,626	4,168,565,865			9,855	5,676	57.6
November, 1921.....		7,849,920	3,231,270,854			9,836	5,622	57.2

<sup>1</sup> Total discounts multiplied by ratio of average maturity of bills discounted by each bank to average maturity (9.00) for system.

**VOLUME OF BILLS DISCOUNTED DURING DECEMBER, 1922, BY RATES OF DISCOUNT CHARGED; ALSO AVERAGE RATES AND MATURITIES.**

Federal reserve bank.	4 per cent.	4½ per cent.	Total.	Average rate (365-day basis).	Average maturity.
				<i>Per cent.</i>	<i>Days.</i>
Boston.....	\$238,750,400		\$238,750,400	4.00	10.76
New York.....	1,853,415,414		1,853,415,414	4.00	4.02
Philadelphia.....		\$246,951,464	246,951,464	4.50	8.32
Cleveland.....		152,581,501	152,581,501	4.50	12.11
Richmond.....		223,477,323	223,477,323	4.50	8.18
Atlanta.....		41,979,297	41,979,297	4.50	40.57
Chicago.....		193,691,021	193,691,021	4.50	27.97
St. Louis.....		132,224,339	132,224,339	4.50	12.37
Minneapolis.....		15,990,638	15,990,638	4.50	61.48
Kansas City.....		54,758,850	54,758,850	4.50	29.19
Dallas.....		11,494,495	11,494,495	4.50	60.22
San Francisco.....		150,277,549	150,277,549	4.00	13.55
<b>Total: December, 1922.....</b>	<b>2,242,443,363</b>	<b>1,073,148,928</b>	<b>3,315,592,291</b>	<b>4.30</b>	<b>9.00</b>
November, 1922.....	2,168,771,726	987,003,890	3,155,775,616	4.29	8.43

**VOLUME OF BANKERS' AND TRADE ACCEPTANCES PURCHASED DURING DECEMBER 1922, BY CLASSES.**

Federal reserve bank.	Bankers' acceptances.				Trade acceptances.			Total bills purchased.	Total reduced to a common maturity basis. <sup>1</sup>	
	Foreign.	Domestic.	Dollar exchange.	Total.	Foreign.	Domestic.	Total.		Amount.	Per cent of total.
New York.....	60,866,416	17,578,871	4,520,000	82,965,287	\$393,237		\$393,237	83,358,524	43,927,050	21.7
Philadelphia.....	7,253,837	2,077,360	350,000	9,681,197				9,681,197	17,620,588	8.7
Cleveland.....	8,630,929	1,399,093	40,000	10,070,022				10,070,022	16,617,422	8.2
Richmond.....		170,000		170,000				170,000	208,018	.1
Atlanta.....	4,432,226	3,207,093		7,639,319				7,639,319	10,824,557	5.3
Chicago.....	13,565,888	7,237,117	705,000	21,508,005				21,508,005	40,207,947	19.9
St. Louis.....	4,150,509	1,103,979	225,000	5,479,488				5,479,488	9,152,616	4.5
Minneapolis.....		275,000		275,000				275,000	606,793	.3
Kansas City.....		966,902	445,000	5,870,822				5,870,822	9,927,290	4.9
Dallas.....	4,458,920		1,167,300	30,283,466	45,535			30,329,001	35,643,948	17.6
San Francisco.....	19,301,663	9,814,503								
<b>Total: Dec., 1922.....</b>	<b>139,502,677</b>	<b>54,613,082</b>	<b>8,012,300</b>	<b>202,128,059</b>	<b>438,772</b>		<b>438,772</b>	<b>202,566,831</b>	<b>202,566,831</b>	<b>100.0</b>
Nov., 1922.....	123,739,665	45,448,684	5,275,816	174,464,165	859,466	54,420	913,886	175,378,051		
Dec., 1921.....	155,482,374	53,331,146	21,079,169	229,892,689	208,664		208,664	230,101,353		
Nov., 1921.....	114,452,173	37,061,462	10,307,071	161,820,706	177,845		177,845	161,998,551		

<sup>1</sup> Total purchases multiplied by ratio of average maturity of bills purchased by each bank to average maturity (39.14) for system.

VOLUME OF ACCEPTANCES PURCHASED DURING DECEMBER, 1922, BY RATES OF DISCOUNT CHARGED; ALSO AVERAGE RATES AND MATURITIES.

Federal reserve bank.	3½ per cent.	3¼ per cent.	3⅓ per cent.	3½ per cent.	3¼ per cent.	3⅓ per cent.	4 per cent.	4½ per cent.
Boston.....					\$1,089,887	\$3,268,385	\$19,074,189	\$3,930,349
New York.....	\$39,857	\$15,678	\$81,381			6,975,372	73,232,865	1,911,186
Philadelphia.....							8,592,955	775,154
Cleveland.....				\$3,915		2,557,686	4,329,249	2,956,037
Richmond.....								170,000
Atlanta.....						1,367,460	2,020,080	973,397
Chicago.....						843,639	12,156,879	8,327,036
St. Louis.....							5,300,419	148,096
Minneapolis.....								
Kansas City.....								
Dallas.....							5,616,157	173,821
San Francisco.....						3,389,959	12,248,698	13,382,428
Total: December, 1922..	39,857	15,678	81,381	3,915	1,089,887	18,402,501	142,571,491	32,747,504
November, 1922..	10,366	16,483	105,928	42,540	1,564,151	12,701,158	123,204,175	30,395,375

Federal reserve bank.	4⅞ per cent.	4½ per cent.	4¼ per cent.	4½ per cent.	4⅓ per cent.	5½ per cent.	Total.	Average rate (365-day basis).	Average maturity.
Boston.....		\$782,259	\$10,000	\$15,115	\$15,269		\$28,185,453	Per cent. 4.04	Days. 24.76
New York.....		547,769	156,489	393,031	4,896		83,358,524	4.07	20.63
Philadelphia.....	\$147,493	165,505					9,681,197	4.06	71.24
Cleveland.....		205,635	17,500				10,070,022	4.11	64.59
Richmond.....							170,000	4.18	47.90
Atlanta.....				3,217,235		\$61,147	7,039,319	4.35	55.47
Chicago.....		180,451					21,508,065	4.12	73.18
St. Louis.....		30,973					5,479,488	4.06	65.38
Minneapolis.....									
Kansas City.....				275,000			275,000	4.56	86.37
Dallas.....		80,844					5,570,822	4.06	66.19
San Francisco.....		1,214,139	82,267	11,510			30,329,001	4.12	46.00
Total: December, 1922..	147,493	3,207,665	266,256	3,011,891	20,165	61,147	202,566,831	4.11	39.14
November, 1922..		3,608,593	253,547	3,157,957			175,378,051	4.10	43.41

<sup>1</sup> Includes \$120,679 and \$197,099 of acceptances purchased at 3 and 3¼ per cent, respectively.

NOTE.—All Federal reserve banks use 360 days to the year in calculating interest on bills bought in open market.

**HOLDINGS OF EARNING ASSETS, BY CLASSES.**

**AVERAGE DAILY HOLDINGS OF EACH CLASS OF EARNING ASSETS, EARNINGS THEREON, AND ANNUAL RATES OF EARNINGS DURING DECEMBER, 1922.**

Federal reserve bank.	Average daily holdings of—				Earnings on—				Annual rate of earnings on—			
	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.	All classes of earning assets.	Discounted bills.	Purchased bills.	United States securities.
Boston.....	\$119,468,211	\$67,280,853	\$27,429,042	\$24,758,316	\$398,086	\$228,757	\$88,203	\$81,126	Per ct. 3.92	Per ct. 4.00	Per ct. 3.79	Per ct. 3.86
New York.....	324,025,628	171,608,632	50,053,650	102,363,340	1,067,066	532,476	156,437	328,153	3.89	4.00	3.63	3.77
Philadelphia.....	110,653,723	56,293,716	21,114,533	33,275,474	395,015	215,031	67,504	112,480	4.20	4.50	3.76	3.97
Cleveland.....	139,316,840	61,696,539	58,768,201	28,852,100	454,574	197,656	195,059	91,859	4.09	4.50	3.91	3.75
Richmond.....	56,611,477	50,575,139	1,876,729	4,159,609	208,205	193,294	6,674	8,237	4.33	4.50	4.19	2.33
Atlanta.....	47,853,019	32,931,366	11,766,328	3,153,519	175,464	125,861	40,866	8,730	4.32	4.50	4.09	3.26
Chicago.....	159,338,674	93,587,481	10,851,509	54,899,684	556,785	357,677	34,568	164,540	4.11	4.50	3.75	3.53
St. Louis.....	65,564,840	29,330,510	12,752,972	23,481,358	233,040	112,108	43,179	77,753	4.18	4.50	3.99	3.90
Minneapolis.....	34,164,809	21,479,510	.....	12,656,361	126,011	83,750	.....	42,120	4.34	4.59	.....	3.92
Kansas City.....	72,113,391	30,791,599	421,355	40,900,437	258,359	118,011	1,633	138,715	4.22	4.51	4.56	3.99
Dallas.....	50,816,955	14,641,960	24,106,665	12,068,330	171,192	57,256	79,712	34,224	3.97	4.60	3.89	3.34
San Francisco.....	124,505,072	43,373,122	41,935,056	39,196,894	418,911	147,455	138,311	133,145	3.96	4.00	3.88	4.00
Total: Dec., 1922..	1,304,432,639	663,560,427	261,076,046	379,765,422	4,492,708	2,419,362	852,146	1,221,082	4.06	4.29	3.84	3.79
Nov., 1922..	1,210,125,593	623,825,598	259,978,591	326,294,504	3,980,435	2,198,846	767,268	1,014,220	4.00	4.29	3.59	3.78
Dec., 1921..	1,517,194,027	1,185,431,602	105,499,127	226,005,008	6,109,243	5,144,494	402,917	560,640	4.74	5.11	4.50	2.92
Nov., 1921..	1,520,283,245	1,232,575,771	78,867,348	208,579,059	6,237,929	5,459,506	318,528	458,803	4.99	5.39	4.91	2.68

NOTE.—The figures in the first, fifth, and ninth columns include average daily holdings of municipal warrants, earnings, and annual rate of earnings thereon, as follows: Atlanta, \$1,806, \$7, and 4.56 per cent; Minneapolis, \$23,933, \$111, and 4.50 per cent; total, \$30,744, \$118, and 4.52 per cent.

**HOLDINGS OF DISCOUNTED BILLS, BY CLASSES.**

[End of December figures. In thousands of dollars.]

Federal reserve bank.	Total.	Customers' paper secured by Government obligations.	Member banks' collateral notes.		Commercial paper n. e. s.	Agricultural paper.	Live-stock paper.	Bankers' acceptances.			Trade acceptances.	
			Secured by Government obligations.	Otherwise secured.				Foreign.	Domes-tic.	Dollar ex-change.	Foreign.	Domes-tic.
Boston.....	61,584	781	22,894	.....	36,778	951	38	.....	.....	.....	.....	142
New York.....	184,289	338	167,898	.....	15,186	477	.....	99	.....	.....	19	272
Philadelphia.....	49,610	268	38,604	.....	10,135	489	.....	.....	.....	.....	.....	114
Cleveland.....	38,541	782	19,125	31	15,778	639	607	.....	.....	.....	.....	1,579
Richmond.....	53,285	533	21,559	1,708	23,965	4,566	139	.....	.....	.....	.....	815
Atlanta.....	26,332	120	1,996	187	16,555	6,539	255	.....	.....	.....	.....	680
Chicago.....	73,871	302	24,573	120	21,975	26,499	.....	.....	.....	.....	.....	402
St. Louis.....	30,082	207	14,342	.....	12,629	2,340	148	.....	10	.....	.....	406
Minneapolis.....	21,916	13	2,526	401	4,167	9,529	5,085	.....	.....	.....	.....	195
Kansas City.....	26,544	187	7,165	.....	6,253	4,801	8,134	.....	.....	.....	.....	4
Dallas.....	14,422	12	698	290	4,734	3,619	5,030	.....	.....	.....	.....	39
San Francisco.....	37,304	75	6,792	7,298	17,461	3,061	2,219	101	120	.....	.....	177
Total: Dec. 30, 1922..	617,780	3,618	328,172	10,035	185,616	63,510	21,655	200	130	.....	19	4,825
Nov. 29, 1922..	650,096	3,535	311,745	9,506	225,250	69,047	25,485	282	193	.....	75	4,978
Dec. 31, 1921..	1,144,346	41,511	443,722	17,752	452,331	129,037	49,670	50	288	.....	5	9,980
Nov. 30, 1921..	1,182,301	48,896	427,464	17,350	486,313	139,164	51,715	55	392	.....	16	10,936

**HOLDINGS OF BANKERS' AND TRADE ACCEPTANCES PURCHASED OR DISCOUNTED BY CLASSES OF ACCEPTANCES.**

[End of December figures. In thousands of dollars.]

Federal reserve bank.	All classes.			Bankers' acceptances.				Trade acceptances.		
	Total.	Purchased in open market.	Discounted for member banks.	Total.	Foreign.	Domestic.	Dollar exchange.	Total.	Foreign.	Domestic.
Boston.....	25,549	25,407	142	25,407	13,890	9,337	2,180	142		142
New York.....	61,254	60,864	390	59,865	49,006	9,364	1,495	1,389	1,099	320
Philadelphia.....	23,494	23,380	114	23,380	14,064	7,796	620	114		114
Cleveland.....	52,586	51,007	1,579	51,007	42,297	7,245	1,465	1,579		1,579
Richmond.....	2,549	1,734	815	1,734	454	1,280		815		815
Atlanta.....	12,102	11,422	680	11,422	6,441	4,981		680		680
Chicago.....	14,967	14,565	402	14,565	9,715	4,602	245	402		402
St. Louis.....	13,444	13,028	416	13,038	9,673	2,940	425	406		406
Minneapolis.....	195		195					195		195
Kansas City.....	406	402	4	402				4		4
Dallas.....	26,866	26,827	39	26,827	17,648	6,987	2,192	39		39
San Francisco.....	43,884	43,486	398	43,627	32,033	10,476	1,118	257	80	177
Total: Dec. 30, 1922.....	277,296			271,274	196,121	65,410	9,743	6,022	1,149	4,873
Nov. 29, 1922.....	284,754			258,103	183,786	65,684	8,633	6,651	1,424	5,227
Dec. 31, 1921.....	155,586			145,383	99,069	34,250	11,164	10,203	223	9,980
Purchased in open market:										
Dec. 30, 1922.....		272,122		270,914	195,921	65,280	9,743	1,178	1,130	48
Nov. 29, 1922.....		259,226		257,628	183,504	65,491	8,633	1,598	1,349	249
Dec. 31, 1921.....		145,263		145,045	99,919	33,962	11,164	218	218	
Discounted for member banks:										
Dec. 30, 1922.....			5,174	330	200	130		4,614	19	4,625
Nov. 29, 1922.....			5,528	475	282	193		5,053	75	4,978
Dec. 31, 1921.....			10,323	338	50	288		9,985	5	9,980

**HOLDINGS OF BANKERS' ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTING INSTITUTIONS.**

[End of December figures. In thousands of dollars.]

Federal reserve bank.	Total.	Member banks.		Non-member banks and banking corporations.	Private banks.	Branches and agencies of foreign banks.
		National.	Non-national.			
Boston.....	25,407	12,986	6,906	3,036	914	665
New York.....	59,865	17,361	17,705	9,454	8,718	4,627
Philadelphia.....	23,380	9,390	8,425	2,462	1,048	1,155
Cleveland.....	51,007	15,553	18,636	6,761	7,237	2,820
Richmond.....	1,734	1,063	526		145	
Atlanta.....	11,422	1,596	6,387	3,439		
Chicago.....	14,565	6,759	6,787	883	116	20
St. Louis.....	13,038	4,580	4,435	2,101	912	1,010
Minneapolis.....						
Kansas City.....	402	402				
Dallas.....	26,827	10,162	10,361	3,157	1,717	1,430
San Francisco.....	43,627	15,416	11,897	5,843	5,350	5,121
Total: Dec. 30, 1922.....	271,274	97,268	92,065	38,036	27,057	16,848
Nov. 29, 1922.....	258,103	94,069	91,805	32,778	24,634	14,817
Dec. 31, 1921.....	145,383	60,210	50,342	13,706	12,319	8,806
Purchased in open market:						
Dec. 30, 1922.....	270,944	97,128	92,048	38,036	27,012	16,720
Nov. 29, 1922.....	257,628	93,736	91,790	32,778	24,629	14,695
Dec. 31, 1921.....	145,045	60,173	50,091	13,656	12,319	8,806
Discounted for member banks:						
Dec. 30, 1922.....	330	140	17		45	128
Nov. 29, 1922.....	475	333	15		5	122
Dec. 31, 1921.....	338	37	251	50		



CONDITION OF FEDERAL RESERVE BANKS.

CASH RESERVES, TOTAL DEPOSITS, FEDERAL RESERVE NOTE CIRCULATION, AND RESERVE PERCENTAGES FOR JANUARY, 1923, AND DECEMBER, 1922.

[Daily averages. Amounts in thousands of dollars.]

Federal reserve banks.	Total cash reserves.		Total deposits.		Federal reserve notes in circulation.		Reserve percentages.	
	January.	December.	January.	December.	January.	December.	January.	December.
Boston.....	237,419	217,540	132,490	126,313	198,919	205,408	71.6	65.6
New York.....	991,720	1,040,668	733,291	717,518	564,187	600,336	76.4	79.0
Philadelphia.....	240,788	240,579	117,858	111,717	204,597	218,185	74.7	72.9
Cleveland.....	305,503	277,021	165,489	148,009	233,168	245,797	76.6	70.3
Richmond.....	113,331	110,658	65,245	60,257	93,373	101,149	71.4	68.6
Atlanta.....	145,320	140,169	60,829	54,870	121,482	126,993	79.7	77.1
Chicago.....	552,392	540,243	279,846	269,748	400,054	416,250	81.3	78.8
St. Louis.....	119,503	111,677	77,426	71,494	89,133	95,770	71.7	66.8
Minneapolis.....	87,109	81,772	55,175	50,267	57,660	58,661	77.2	75.1
Kansas City.....	101,314	89,825	91,558	85,357	67,743	70,460	63.6	57.7
Dallas.....	45,421	53,184	56,334	55,819	35,714	39,559	49.3	55.8
San Francisco.....	262,149	262,683	146,176	140,083	222,497	236,947	71.1	69.7
Total.....	3,201,969	3,166,019	1,981,717	1,891,457	2,288,527	2,415,515	75.0	73.5
1922-21.....	3,043,984	2,994,982	1,800,959	1,755,226	2,272,057	2,416,096	74.7	71.8
1921-20.....	2,098,498	2,221,573	2,027,861	1,821,746	2,887,846	3,342,520	144.9	144.7
1920-19.....	2,164,167	2,149,653	1,825,147	1,990,221	2,540,642	2,955,476	152.0	145.7

<sup>1</sup> Calculated on basis of net deposits and Federal reserve notes in circulation.

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, JANUARY 3 TO JANUARY 24, 1923.

RESOURCES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco
Gold and gold certifi- cates:													
Jan. 3.....	272,504	16,174	117,648	19,601	13,349	6,861	5,635	51,085	2,706	7,514	2,689	10,114	19,035
Jan. 10.....	281,300	16,731	123,104	19,928	13,625	5,925	5,742	51,130	2,990	7,575	2,735	11,152	20,663
Jan. 17.....	296,840	16,852	137,326	20,498	13,814	6,167	5,828	51,412	2,876	7,652	2,816	11,155	20,444
Jan. 24.....	298,207	17,002	137,169	20,840	13,874	6,404	5,879	51,788	3,045	7,690	2,836	11,176	20,504
Gold settlement fund—F. R. Board:													
Jan. 3.....	550,126	33,345	198,387	23,005	65,848	22,000	18,549	58,636	28,675	24,541	30,963	8,799	37,288
Jan. 10.....	543,591	29,122	204,557	15,826	72,153	20,843	19,771	51,933	22,760	23,789	37,991	10,409	34,437
Jan. 17.....	535,229	42,393	161,205	20,685	76,038	25,577	21,949	59,639	21,143	27,184	35,441	10,897	35,078
Jan. 24.....	556,642	36,210	158,883	26,100	93,531	31,155	23,489	62,146	14,733	31,709	34,209	11,787	32,690
Gold with F. R. agents:													
Jan. 3.....	2,165,627	158,528	658,892	180,438	192,314	63,359	108,568	411,802	75,492	46,372	51,655	19,684	198,523
Jan. 10.....	2,186,194	169,452	658,705	185,004	192,576	66,314	107,624	411,660	79,670	47,424	53,145	18,680	195,940
Jan. 17.....	2,195,474	169,523	648,474	181,943	197,944	69,249	106,919	415,863	81,608	48,314	58,448	18,473	198,716
Jan. 24.....	2,181,121	166,427	645,604	176,644	198,279	67,348	105,134	415,183	81,409	47,673	60,375	15,319	201,726
Gold redemption fund:													
Jan. 3.....	61,194	10,058	9,588	7,565	6,195	4,872	2,097	5,010	2,734	3,323	2,476	1,600	5,676
Jan. 10.....	51,873	8,180	8,060	3,845	6,017	3,771	1,768	3,772	3,761	3,836	2,401	1,883	4,579
Jan. 17.....	49,949	6,807	10,677	6,240	3,211	1,836	1,560	4,680	3,632	2,495	2,483	1,868	4,460
Jan. 24.....	44,167	8,547	8,324	3,172	2,476	2,005	2,179	3,540	2,860	2,661	2,764	1,562	4,077
Total gold reserves:													
Jan. 3.....	3,049,451	218,105	984,515	230,609	277,700	97,182	134,849	526,536	109,697	81,750	87,783	40,197	260,522
Jan. 10.....	3,062,958	223,485	994,426	224,603	284,371	96,853	134,905	518,495	109,181	82,624	96,272	42,124	255,619
Jan. 17.....	3,077,492	235,575	957,682	229,366	291,007	102,529	136,256	531,594	109,259	85,645	97,188	42,393	258,698
Jan. 24.....	3,080,137	228,186	949,980	226,756	308,160	106,912	136,681	532,657	102,047	89,733	100,184	39,844	258,99
Reserves other than gold:													
Jan. 3.....	113,319	8,782	29,055	15,379	6,287	8,436	4,631	20,850	8,830	557	2,739	4,632	3,043
Jan. 10.....	124,509	8,551	30,628	13,302	8,239	10,832	6,315	22,982	11,239	672	2,933	4,617	4,169
Jan. 17.....	136,645	8,527	28,746	15,518	9,869	11,558	8,083	25,799	13,226	934	3,602	5,595	5,138
Jan. 24.....	141,844	8,944	27,468	15,148	10,847	12,230	8,848	26,471	15,506	656	4,708	6,093	4,925
Total reserves:													
Jan. 3.....	3,162,770	226,887	1,013,570	245,988	283,993	105,618	139,480	547,395	118,586	82,337	90,522	44,829	263,565
Jan. 10.....	3,187,467	232,036	1,025,064	237,905	292,610	107,685	141,220	541,477	120,420	83,299	99,205	46,771	259,788
Jan. 17.....	3,214,137	244,102	956,428	244,884	300,876	114,387	144,339	557,393	122,485	86,629	100,790	47,988	263,836
Jan. 24.....	3,221,981	237,130	977,448	241,904	319,007	119,142	145,529	559,128	117,553	90,389	104,892	45,937	263,922

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, JANUARY 3 TO JANUARY 24, 1923—Con.

RESOURCES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
<b>Nonreserve cash:</b>													
Jan. 3.....	94,565	12,523	11,530	2,737	8,555	3,707	9,536	12,311	6,051	2,209	4,071	4,200	16,199
Jan. 10.....	92,165	14,027	12,855	4,421	6,803	4,478	10,823	15,354	5,487	3,205	5,178	4,816	4,718
Jan. 17.....	82,178	11,506	9,542	3,337	7,465	4,108	9,862	13,614	5,082	3,035	4,662	4,897	5,068
Jan. 24.....	76,043	10,912	8,958	2,627	5,040	3,718	9,791	12,591	4,747	2,362	4,523	5,825	4,916
<b>Bills discounted:</b>													
Secured by U. S. Government obligations—													
Jan. 3.....	351,483	20,885	169,695	38,033	24,339	19,824	1,764	31,246	13,182	2,413	15,978	1,074	13,050
Jan. 10.....	281,996	15,334	154,575	32,625	14,252	15,407	2,188	22,105	7,282	1,686	8,380	1,706	6,456
Jan. 17.....	284,017	14,352	161,502	32,300	15,086	13,159	2,055	23,420	7,372	1,050	2,954	1,099	9,068
Jan. 24.....	341,454	20,985	191,283	33,784	19,063	15,481	2,472	29,232	8,820	1,073	4,768	1,625	12,868
Other bills discounted—													
Jan. 3.....	276,162	30,775	15,880	10,010	24,704	29,650	20,687	46,545	13,487	18,838	18,755	13,352	27,461
Jan. 10.....	230,053	22,898	13,277	6,949	14,270	27,512	20,335	42,372	7,837	17,870	16,666	13,040	26,418
Jan. 17.....	229,328	30,642	21,231	7,406	10,813	21,703	18,742	37,568	6,002	17,322	16,095	14,583	24,221
Jan. 24.....	228,281	28,305	25,358	7,379	10,099	23,758	20,149	38,148	5,975	17,529	13,804	15,089	22,688
<b>Bills bought in open market:</b>													
Jan. 3.....	255,182	23,627	51,796	21,910	50,065	1,519	10,897	16,098	12,778	.....	402	25,132	40,058
Jan. 10.....	225,760	19,906	37,724	20,074	46,641	962	9,875	16,055	13,820	.....	111	23,506	37,086
Jan. 17.....	201,335	16,183	29,394	21,510	43,148	759	8,108	9,850	14,926	.....	85	22,082	35,290
Jan. 24.....	204,547	18,319	32,066	25,614	41,123	706	7,199	10,039	15,228	.....	85	21,368	32,800
<b>U. S. bonds and notes:</b>													
Jan. 3.....	182,315	6,312	44,164	24,350	11,897	1,291	313	7,633	10,765	11,816	27,528	2,629	27,617
Jan. 10.....	175,709	6,890	36,684	24,344	11,862	1,291	302	7,392	16,866	12,314	27,519	2,629	27,616
Jan. 17.....	156,878	6,020	18,829	24,607	11,862	1,341	136	7,026	17,972	10,813	26,926	3,729	27,617
Jan. 24.....	166,857	6,556	29,933	24,798	12,326	1,341	398	6,716	18,218	8,295	26,931	3,729	27,616
<b>U. S. certificates of indebtedness:</b>													
Jan. 3.....	274,239	34,494	77,205	9,750	36,862	5,000	9,031	49,162	7,781	5,495	17,630	10,679	11,150
Jan. 10.....	332,467	31,806	109,795	15,256	33,903	8,000	9,140	63,353	8,845	3,495	15,595	11,129	22,150
Jan. 17.....	255,554	22,079	91,220	4,607	26,894	4,500	2,031	58,878	6,478	495	16,593	8,629	13,150
Jan. 24.....	185,962	22,622	66,917	4,593	14,008	.....	2,031	41,899	6,025	495	11,593	8,629	7,150
<b>Municipal warrants:</b>													
Jan. 3.....	39	.....	.....	.....	.....	.....	.....	.....	.....	39	.....	.....	.....
Jan. 10.....	24	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	.....	.....
Jan. 17.....	10	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	.....	.....
Jan. 24.....	4	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....
<b>Total earning assets:</b>													
Jan. 3.....	1,339,420	116,093	358,749	104,053	147,867	57,293	48,692	150,684	63,993	38,601	80,293	52,866	120,236
Jan. 10.....	1,246,009	96,834	352,055	99,248	120,928	53,172	41,840	151,277	54,650	35,398	68,271	52,610	119,726
Jan. 17.....	1,127,122	89,276	322,176	90,430	107,803	44,462	31,072	136,742	52,750	29,690	62,653	50,722	109,346
Jan. 24.....	1,127,105	96,787	345,557	96,168	96,619	41,286	32,249	126,034	54,266	27,396	57,181	50,440	103,122
<b>Bank premises:</b>													
Jan. 3.....	45,281	4,434	10,100	640	7,005	2,617	1,960	8,288	911	943	4,702	1,037	1,744
Jan. 10.....	45,521	4,434	10,101	640	7,202	2,617	1,964	8,288	911	946	4,702	1,037	1,779
Jan. 17.....	45,895	4,434	10,101	660	7,368	2,617	2,060	8,305	919	978	4,731	1,037	1,785
Jan. 24.....	46,400	4,434	10,478	660	7,439	2,617	2,060	8,306	919	978	4,731	1,037	1,841
<b>Five per cent redemption fund against F. R. bank notes:</b>													
Jan. 3.....	2,097	422	.....	.....	.....	.....	468	665	.....	196	200	146	.....
Jan. 10.....	911	.....	.....	.....	.....	.....	.....	695	.....	.....	200	46	.....
Jan. 17.....	311	.....	.....	.....	.....	.....	.....	65	.....	.....	200	46	.....
Jan. 24.....	310	.....	.....	.....	.....	.....	.....	64	.....	.....	200	46	.....
<b>Uncollected items:</b>													
Jan. 3.....	770,070	72,660	178,108	68,074	82,604	59,600	25,928	93,929	44,073	18,559	50,259	32,165	44,111
Jan. 10.....	606,288	53,409	123,186	50,390	56,882	54,186	23,797	75,039	38,647	15,301	41,604	25,407	45,440
Jan. 17.....	653,495	55,334	145,874	56,886	65,958	57,627	25,891	80,453	40,320	15,350	40,406	26,540	42,847
Jan. 24.....	580,151	46,140	124,081	49,368	56,939	57,192	26,297	72,199	35,704	14,298	37,047	22,304	38,582
<b>All other resources:</b>													
Jan. 3.....	15,506	319	2,088	392	589	635	289	683	1,015	1,844	1,077	1,619	4,656
Jan. 10.....	14,894	344	2,043	416	673	455	305	724	460	1,831	996	1,918	4,729
Jan. 17.....	15,329	371	2,173	453	707	416	351	939	503	1,795	943	1,940	4,738
Jan. 24.....	15,497	397	2,215	478	754	450	290	977	524	1,642	912	1,940	4,918
<b>Total resources:</b>													
Jan. 3.....	5,429,709	433,338	1,574,145	421,884	530,613	229,470	226,353	813,985	234,632	144,659	232,027	138,062	450,511
Jan. 10.....	5,193,255	401,084	1,523,294	363,020	485,098	222,593	219,949	792,824	220,575	139,977	220,156	136,505	436,180
Jan. 17.....	5,138,467	405,023	1,476,294	396,650	490,177	223,617	213,575	797,511	222,059	137,456	214,385	134,070	427,620
Jan. 24.....	5,067,487	395,800	1,468,737	391,205	455,798	224,405	216,216	779,302	213,713	137,065	209,456	128,429	417,331

## RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, JANUARY 3 TO JANUARY 24, 1923—Con.

## LIABILITIES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Franc- isco.
<b>Capital paid in:</b>													
Jan. 3.....	107,450	8,120	28,688	9,327	11,712	5,597	4,310	14,778	4,829	3,535	4,623	4,195	7,736
Jan. 10.....	107,465	8,127	28,690	9,327	11,716	5,597	4,310	14,778	4,830	3,533	4,617	4,195	7,745
Jan. 17.....	107,484	8,123	28,737	9,327	11,716	5,597	4,259	14,775	4,830	3,578	4,620	4,177	7,745
Jan. 24.....	107,648	8,123	28,737	9,332	11,711	5,607	4,345	14,845	4,837	3,578	4,614	4,182	7,737
<b>Surplus:</b>													
Jan. 3.....	218,369	16,312	59,800	18,749	23,495	11,288	8,042	30,398	9,665	7,473	9,488	7,496	15,263
Jan. 10.....	218,369	16,312	59,800	18,749	23,495	11,288	8,042	30,398	9,665	7,473	9,488	7,496	15,263
Jan. 17.....	218,369	16,312	59,800	18,749	23,495	11,288	8,042	30,398	9,665	7,473	9,488	7,496	15,263
Jan. 24.....	218,369	16,312	59,800	18,749	23,495	11,288	8,042	30,398	9,665	7,473	9,488	7,496	15,263
<b>Deposits:</b>													
<b>Government—</b>													
Jan. 3.....	6,630	73	241	574	765	833	319	1,528	224	436	408	191	1,038
Jan. 10.....	6,193	362	376	761	650	82	516	886	424	342	1,181	452	155
Jan. 17.....	9,341	709	795	511	628	440	372	999	525	874	1,236	670	1,352
Jan. 24.....	33,042	4,240	6,369	3,992	2,491	1,181	2,222	2,270	3,116	2,330	773	1,079	2,979
<b>Member bank— reserve ac- count—</b>													
Jan. 3.....	1,942,749	127,649	741,929	114,912	161,643	62,859	59,062	269,917	78,171	50,948	84,968	52,192	139,499
Jan. 10.....	1,960,346	129,267	762,804	113,878	151,715	63,290	59,306	276,817	73,758	49,372	83,377	53,227	141,535
Jan. 17.....	1,918,463	128,061	711,692	113,349	162,164	61,769	54,979	284,166	76,349	49,388	80,968	53,637	139,946
Jan. 24.....	1,924,521	127,214	722,717	115,918	163,669	66,326	55,623	278,777	70,739	50,306	80,449	54,254	138,529
<b>Other deposits—</b>													
Jan. 3.....	75,394	9,575	12,285	5,739	14,062	518	5,848	2,172	2,364	4,835	11,600	2,087	4,309
Jan. 10.....	53,337	3,466	11,820	2,478	8,094	814	3,012	2,448	1,655	5,578	7,709	1,810	4,453
Jan. 17.....	41,642	1,688	11,443	1,982	4,485	518	1,276	2,460	1,165	4,074	5,597	1,600	5,354
Jan. 24.....	33,263	1,134	10,856	1,941	2,861	271	851	1,955	766	2,469	5,384	711	4,965
<b>Total deposits:</b>													
Jan. 3.....	2,024,773	137,297	754,455	121,225	176,470	61,210	65,229	273,617	80,759	56,219	96,976	54,470	143,846
Jan. 10.....	2,019,876	133,095	775,000	117,117	160,465	64,186	62,834	280,151	75,837	55,292	92,267	57,489	146,143
Jan. 17.....	1,969,451	130,458	723,930	115,842	167,277	62,727	56,827	287,625	78,039	54,336	87,801	57,907	146,682
Jan. 24.....	1,990,826	132,888	739,912	120,951	169,021	67,778	58,696	283,002	74,620	55,105	86,606	56,044	146,473
<b>F. R. notes in actual circulation:</b>													
Jan. 3.....	2,411,058	207,206	597,350	212,917	242,859	98,499	126,325	419,333	93,918	59,539	70,328	38,595	244,187
Jan. 10.....	2,312,674	201,717	565,213	204,617	238,215	93,899	122,950	406,086	89,533	58,742	68,532	36,782	226,398
Jan. 17.....	2,256,491	197,663	552,218	202,412	229,016	92,104	120,164	393,522	85,145	57,604	67,215	35,353	219,075
Jan. 24.....	2,221,316	195,086	545,265	197,481	228,464	90,582	118,718	389,307	86,419	56,393	66,701	34,437	212,458
<b>F. R. bank notes in circulation—net li- ability:</b>													
Jan. 3.....	2,947	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,177	770	.....
Jan. 10.....	2,866	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,092	774	.....
Jan. 17.....	3,117	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,204	783	.....
Jan. 24.....	3,132	.....	.....	.....	.....	.....	.....	185	.....	.....	2,185	762	.....
<b>Deferred availability items:</b>													
Jan. 3.....	655,532	64,139	131,992	59,408	75,292	49,460	20,897	74,855	44,745	17,108	48,093	31,098	38,535
Jan. 10.....	521,667	41,571	94,253	42,879	50,413	47,179	20,274	60,346	40,005	14,113	42,679	28,297	39,658
Jan. 17.....	573,705	52,194	109,512	49,972	57,934	51,483	22,775	68,053	40,692	13,684	42,651	26,845	37,907
Jan. 24.....	515,000	43,331	92,055	44,237	52,318	48,700	24,866	60,510	37,453	13,676	39,457	23,976	34,401
<b>All other liabilities:</b>													
Jan. 3.....	9,580	232	1,860	258	785	416	650	1,004	716	815	432	1,438	944
Jan. 10.....	10,338	262	2,338	331	794	444	639	1,065	705	824	481	1,472	983
Jan. 17.....	9,850	273	2,097	348	739	418	608	1,008	688	811	403	1,509	948
Jan. 24.....	11,196	360	2,938	455	789	450	629	1,055	719	835	435	1,532	999
<b>Total liabilities:</b>													
Jan. 3.....	5,429,709	433,338	1,574,145	421,884	530,613	229,470	226,353	813,985	234,632	144,689	232,027	138,062	450,511
Jan. 10.....	5,193,255	401,084	1,525,294	393,020	485,098	222,593	219,949	792,824	220,575	139,977	220,156	136,505	436,180
Jan. 17.....	5,138,467	405,023	1,476,294	396,650	490,177	223,617	213,575	797,511	222,059	137,488	214,385	134,070	427,620
Jan. 24.....	5,067,437	393,800	1,468,737	391,205	485,798	224,405	216,216	779,302	213,713	137,005	209,486	128,429	417,331
<b>MEMORANDA.</b>													
<b>Ratio of total reserves to deposit and F. R. notes liabilities com- bined—per cent:</b>													
Jan. 3.....	71.3	65.9	75.0	73.6	67.7	64.9	72.8	79.0	68.0	71.1	54.1	48.2	67.9
Jan. 10.....	73.6	69.3	76.5	73.9	73.4	68.1	76.0	78.9	72.8	73.0	61.7	49.6	69.7
Jan. 17.....	76.1	74.4	77.3	76.9	75.9	73.9	81.6	81.6	73.7	77.4	65.0	51.5	72.1
Jan. 24.....	76.5	72.4	76.1	76.0	80.3	73.2	82.0	83.2	73.0	81.1	68.4	50.8	73.5
<b>Contingent liability on bills purchased for foreign corre- spondents:</b>													
Jan. 3.....	33,912	2,511	12,130	2,752	2,815	1,686	1,238	4,093	1,617	929	1,651	894	1,596
Jan. 10.....	33,913	2,474	12,466	2,711	2,773	1,661	1,220	4,033	1,593	915	1,627	881	1,559
Jan. 17.....	33,941	2,474	12,494	2,711	2,773	1,661	1,220	4,033	1,593	915	1,627	881	1,559
Jan. 24.....	33,928	2,474	12,475	2,711	2,779	1,661	1,220	4,033	1,593	915	1,627	881	1,559

**MATURITY DISTRIBUTION OF BILLS, CERTIFICATES OF INDEBTEDNESS, AND MUNICIPAL WARRANTS HELD BY THE 12 FEDERAL RESERVE BANKS COMBINED.**

[In thousands of dollars.]

	Total.	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.
<b>Bills discounted:</b>						
Jan. 3.....	627,645	443,297	43,826	61,399	49,550	20,573
Jan. 10.....	512,049	353,518	34,678	51,690	43,339	28,824
Jan. 17.....	513,345	367,072	31,695	48,289	38,848	27,441
Jan. 24.....	569,735	421,946	31,576	52,390	30,641	27,272
<b>Bills bought in open market:</b>						
Jan. 3.....	255,182	97,524	45,049	68,309	37,180	7,120
Jan. 10.....	225,760	72,432	48,501	61,891	35,375	7,481
Jan. 17.....	201,335	62,988	47,223	55,604	28,628	0,886
Jan. 24.....	204,547	71,673	41,930	52,446	29,204	9,294
<b>United States certificates of indebtedness:</b>						
Jan. 3.....	274,239	100,385	.....	.....	66,616	107,238
Jan. 10.....	332,467	145,787	.....	.....	81,919	104,761
Jan. 17.....	235,554	75,710	5,914	71,272	.....	102,658
Jan. 24.....	185,962	13,970	.....	70,567	14,507	80,918
<b>Municipal warrants:</b>						
Jan. 3.....	39	26	.....	6	6	1
Jan. 10.....	24	17	1	5	1	.....
Jan. 17.....	10	6	.....	4	.....	.....
Jan. 24.....	4	.....	.....	4	.....	.....

**FEDERAL RESERVE NOTES.**

**FEDERAL RESERVE AGENTS' ACCOUNTS ON WEDNESDAYS, JANUARY 3 TO JANUARY 24, 1923.**

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minno- apolis.	Kansas City.	Dallas.	San Fran- cisco.
<b>Net amount of F. R. notes received from Comptroller of the Currency:</b>													
Jan. 3.....	3,683,657	308,815	1,178,248	290,726	305,251	138,618	210,487	551,257	136,897	73,523	98,231	60,337	331,207
Jan. 10.....	3,650,303	304,739	1,168,941	287,291	299,713	136,573	209,043	549,115	135,075	72,575	97,781	53,533	329,621
Jan. 17.....	3,620,438	299,810	1,157,001	283,230	296,082	134,503	207,338	549,318	134,513	73,525	97,086	53,127	328,900
Jan. 24.....	3,588,873	296,714	1,148,519	277,932	292,817	132,607	205,553	548,638	132,814	72,884	96,012	58,473	325,910
<b>F. R. notes on hand:</b>													
Jan. 3.....	873,403	80,700	398,690	48,920	31,340	27,260	78,249	83,760	22,740	10,310	20,060	17,904	53,470
Jan. 10.....	902,598	84,900	398,690	47,520	34,140	29,260	80,744	87,960	26,540	9,065	21,360	18,344	64,075
Jan. 17.....	928,927	86,700	398,690	55,520	38,390	31,260	82,004	92,000	28,140	12,110	21,350	19,044	65,709
Jan. 24.....	934,748	84,700	398,690	59,520	41,490	31,360	80,849	94,560	26,140	12,210	21,360	20,744	63,125
<b>F. R. notes outstanding:</b>													
Jan. 3.....	2,810,254	228,115	779,558	241,806	273,911	111,358	132,238	467,497	114,157	63,213	78,231	42,433	277,737
Jan. 10.....	2,747,705	219,839	770,251	239,771	265,573	107,313	128,299	461,155	108,535	63,510	76,421	41,489	265,549
Jan. 17.....	2,691,511	213,110	758,311	227,710	257,692	103,248	125,334	457,318	108,373	61,415	75,726	40,083	263,191
Jan. 24.....	2,654,125	212,014	749,829	218,412	251,327	101,247	124,704	454,078	106,674	60,674	74,652	37,729	262,785
<b>Collateral security for F. R. notes outstanding:</b>													
<b>Gold and gold certificates—</b>													
Jan. 3.....	353,462	15,300	283,184	7,000	13,275	.....	2,400	.....	11,780	13,052	.....	7,471	.....
Jan. 10.....	352,462	15,300	283,184	7,000	13,275	.....	2,400	.....	11,780	13,052	.....	6,471	.....
Jan. 17.....	342,462	15,300	273,184	7,000	13,275	.....	2,400	.....	11,780	13,052	.....	6,471	.....
Jan. 24.....	339,809	15,300	270,531	7,000	13,275	.....	2,400	.....	11,780	13,052	.....	6,471	.....
<b>Gold redemption fund—</b>													
Jan. 3.....	130,431	15,228	34,708	12,549	14,039	3,564	6,168	16,153	4,212	1,320	4,295	2,713	15,477
Jan. 10.....	122,876	11,152	34,521	14,115	14,301	1,519	4,724	16,016	4,390	1,372	3,785	2,709	14,272
Jan. 17.....	131,719	16,223	34,290	15,054	14,669	2,454	5,519	14,218	4,828	2,262	3,088	2,502	19,612
Jan. 24.....	133,647	13,127	34,073	14,755	15,004	3,553	8,734	14,539	4,129	1,621	4,015	2,848	17,249
<b>Gold fund, F. R. Board—</b>													
Jan. 3.....	1,681,734	128,000	341,000	160,889	165,000	59,795	100,000	395,644	59,500	32,000	47,300	9,500	183,046
Jan. 10.....	1,710,856	143,000	341,000	163,889	165,000	64,795	100,500	395,644	63,500	33,000	49,360	9,500	181,668
Jan. 17.....	1,718,293	138,000	341,000	159,889	170,000	66,795	99,000	401,645	65,000	33,000	55,360	9,500	179,104
Jan. 24.....	1,707,665	138,000	341,000	154,889	170,000	63,795	94,000	400,644	65,500	33,000	56,360	6,000	184,477
<b>Eligible paper—</b>													
<b>Amount re- quired—</b>													
Jan. 3.....	644,627	69,587	120,666	61,268	81,697	47,999	23,670	55,695	33,665	16,841	26,576	22,749	79,214
Jan. 10.....	561,511	50,387	111,546	64,767	72,997	49,999	20,675	49,495	28,865	16,086	23,276	22,808	69,609
Jan. 17.....	496,037	43,587	109,837	45,767	59,748	33,899	18,415	41,455	28,765	13,101	17,278	21,610	64,475
Jan. 24.....	473,004	45,587	104,225	41,768	53,648	33,899	19,570	38,895	25,285	13,001	14,277	22,410	61,059
<b>Excess amount held—</b>													
Jan. 3.....	206,123	5,700	91,095	5,848	16,115	2,151	15,616	38,161	782	3,350	8,559	16,561	2,177
Jan. 10.....	132,165	7,751	75,917	807	1,931	2,024	11,717	30,988	69	2,789	1,851	15,870	301
Jan. 17.....	189,352	17,690	86,590	5,224	8,167	3,738	10,481	29,263	1,535	4,704	1,856	16,620	3,604
Jan. 24.....	273,801	22,022	124,226	20,055	16,990	4,806	10,245	38,524	4,758	5,105	4,380	15,548	7,142

CONDITION OF MEMBER BANKS IN LEADING CITIES.

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, FROM DECEMBER 27, 1922, TO JANUARY 17, 1923.

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.
<b>Number of reporting banks:</b>													
Dec. 27.....	782	46	104	56	84	78	41	109	37	30	79	52	66
Jan. 3.....	783	46	106	56	84	78	40	109	37	30	79	52	66
Jan. 10.....	781	46	106	56	84	78	39	108	37	30	79	52	66
Jan. 17.....	781	46	106	56	84	78	39	108	37	30	79	52	66
<b>Loans and discounts, gross:</b>													
<b>Secured by U. S. Gov- ernment obligations—</b>													
Dec. 27.....	290,261	16,821	95,117	19,841	31,937	12,621	7,700	46,458	19,933	8,001	10,733	4,702	16,347
Jan. 3.....	3,909,392	16,741	106,358	20,324	31,836	12,157	8,075	49,290	19,732	8,408	10,460	6,278	16,196
Jan. 10.....	304,307	16,459	108,050	20,323	31,223	11,478	7,756	49,306	19,561	7,944	9,942	5,946	16,319
Jan. 17.....	296,581	16,287	105,534	19,782	31,537	11,778	7,584	45,683	18,471	8,061	9,760	5,950	16,154
<b>Secured by stocks and bonds—</b>													
Dec. 27.....	3,774,775	248,141	1,715,780	245,145	379,144	123,281	57,098	539,093	140,621	45,309	74,507	52,063	154,593
Jan. 3.....	3,909,392	247,259	1,858,419	251,320	364,038	125,941	56,286	544,668	138,757	45,931	73,503	49,466	153,807
Jan. 10.....	3,786,621	241,499	1,711,575	255,536	376,137	126,833	55,679	553,517	140,481	45,154	75,500	49,604	155,106
Jan. 17.....	3,811,555	247,353	1,716,641	242,247	367,791	127,352	57,794	573,258	142,578	45,495	76,166	50,217	164,663
<b>All other loans and dis- counts—</b>													
Dec. 27.....	7,263,941	565,271	2,239,802	327,432	644,843	323,478	335,033	1,023,649	297,447	194,077	364,059	211,100	737,750
Jan. 3.....	7,382,187	592,989	2,298,977	323,060	642,497	316,376	341,649	1,086,578	295,253	189,500	359,448	206,098	729,762
Jan. 10.....	7,387,499	594,178	2,315,670	326,558	642,828	313,110	333,176	1,077,261	297,740	194,128	355,702	206,146	731,002
Jan. 17.....	7,387,560	598,646	2,305,648	329,668	648,112	312,641	332,765	1,073,216	290,710	200,909	353,854	205,616	726,207
<b>Total loans and discounts:</b>													
Dec. 27.....	11,328,977	830,233	4,050,699	592,418	1,055,074	459,380	399,831	1,609,200	458,001	247,387	449,299	267,865	908,690
Jan. 3.....	11,597,484	856,889	4,263,754	594,704	1,038,421	454,474	406,010	1,680,533	453,742	243,839	443,411	261,842	899,765
Jan. 10.....	11,478,427	832,136	4,135,295	602,417	1,050,188	451,421	398,611	1,680,984	457,782	247,226	441,144	261,696	902,427
Jan. 17.....	11,495,696	862,286	4,127,823	591,695	1,047,440	451,771	398,143	1,692,391	461,266	254,465	439,780	261,783	907,087
<b>U. S. bonds:</b>													
Dec. 27.....	1,485,007	100,718	592,249	63,080	175,008	65,367	30,587	142,342	50,263	29,262	62,941	34,520	138,670
<b>U. S. pre-war bonds:</b>													
Dec. 27.....	275,280	12,475	43,878	11,493	47,183	30,491	13,859	23,424	15,412	8,939	12,364	19,056	31,706
Jan. 3.....	278,974	12,773	48,904	11,343	47,112	29,971	14,336	23,223	15,354	8,248	12,094	19,118	36,496
Jan. 10.....	279,442	12,775	48,034	11,343	47,436	29,971	14,543	23,481	15,354	8,511	12,082	19,118	36,444
<b>U. S. Liberty bonds:</b>													
Dec. 27.....	1,083,886	80,323	486,784	47,428	118,635	30,629	13,236	108,089	26,189	16,593	45,191	15,180	93,664
Jan. 3.....	1,082,118	79,905	486,031	47,609	119,606	30,817	12,723	105,752	26,596	19,378	45,927	15,017	92,757
Jan. 10.....	1,081,531	82,610	487,102	48,403	120,778	30,962	11,144	103,991	25,939	18,980	46,148	13,144	92,950
<b>U. S. Treasury bonds:</b>													
Dec. 27.....	145,678	8,608	50,924	4,931	11,076	4,794	2,244	27,200	10,511	3,248	5,264	2,729	14,147
Jan. 3.....	143,103	8,512	48,776	5,158	9,274	4,837	2,079	26,850	10,712	2,834	5,923	4,229	13,921
Jan. 10.....	149,653	8,842	48,446	5,103	9,494	4,957	2,885	33,341	10,896	1,917	5,337	4,045	14,360
<b>U. S. Victory notes and Treasury notes:</b>													
Dec. 27.....	825,736	27,680	461,471	41,282	49,064	7,826	7,279	122,078	20,079	12,011	20,049	16,443	40,475
Jan. 3.....	786,552	28,497	458,188	41,050	48,860	6,294	6,204	92,210	20,067	15,261	18,755	13,374	37,792
Jan. 10.....	792,671	27,588	466,046	44,939	48,534	6,180	6,231	90,158	19,751	15,211	19,062	12,887	36,084
Jan. 17.....	940,489	35,942	523,110	62,587	56,481	14,084	7,064	114,124	25,226	20,683	21,958	14,866	44,364
<b>U. S. certificates of indebted- ness:</b>													
Dec. 27.....	237,956	5,134	124,526	7,098	14,976	3,745	8,145	30,782	5,572	6,039	7,038	6,867	18,034
Jan. 3.....	209,857	5,315	113,301	3,577	14,764	3,010	7,091	29,508	5,269	1,642	4,792	5,583	15,005
Jan. 10.....	198,953	5,384	104,484	2,024	17,692	2,812	7,909	23,181	4,248	1,244	4,726	6,154	12,097
Jan. 17.....	210,543	12,095	113,408	3,141	16,019	3,064	6,316	28,563	4,265	1,903	4,180	5,181	13,140
<b>Other bonds, stocks, and securities:</b>													
Dec. 27.....	2,274,145	171,120	757,335	182,679	293,444	54,946	35,645	432,776	88,234	23,889	60,239	8,955	159,833
Jan. 3.....	2,232,072	173,284	766,779	183,650	299,772	55,500	36,435	360,799	89,536	30,042	61,987	9,111	165,177
Jan. 10.....	2,193,683	173,881	761,875	183,535	294,152	53,810	33,406	354,116	83,707	28,850	61,264	8,880	156,227
Jan. 17.....	2,203,583	172,428	758,691	187,510	295,055	53,043	37,588	357,259	87,287	29,042	59,403	8,523	157,754
<b>Total loans, discounts, and investments:</b>													
Dec. 27.....	16,151,821	1,134,885	5,986,280	886,557	1,588,466	591,294	481,487	2,337,178	622,149	323,588	599,615	334,650	1,265,702
Jan. 3.....	16,330,807	1,165,491	6,188,608	883,833	1,578,711	585,192	485,079	2,321,783	620,726	321,509	591,764	327,875	1,257,566
Jan. 10.....	16,165,931	1,160,181	6,051,411	897,025	1,586,558	579,848	473,295	2,308,394	618,148	322,991	590,140	327,961	1,250,009
Jan. 17.....	16,360,937	1,186,978	6,106,614	909,782	1,592,753	587,852	477,683	2,352,321	629,496	335,811	588,888	326,660	1,266,099
<b>Reserve balance with F. R. banks:</b>													
Dec. 27.....	1,393,755	85,017	639,948	70,333	103,017	35,833	34,814	196,355	43,052	22,123	47,911	25,058	90,294
Jan. 3.....	1,457,931	85,934	668,380	74,059	121,351	37,510	35,862	198,277	44,237	24,665	51,535	24,274	91,847
Jan. 10.....	1,473,072	89,070	694,794	70,974	101,341	37,427	36,434	205,835	43,054	22,929	49,826	27,247	94,141
Jan. 17.....	1,433,712	88,026	641,573	69,402	114,376	35,418	33,424	211,893	47,170	22,920	47,921	27,695	93,594

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, DECEMBER 27, 1922, TO JANUARY 17, 1923—Continued.

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT—Continued.

(In thousands of dollars.)

	Total.	Boston.	New York.	Phila- delphia.	Clevo- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.
<b>Cash in vault:</b>													
Dec. 27.....	358,449	22,591	114,683	20,001	38,078	16,575	11,714	68,037	9,784	7,205	13,990	11,174	21,617
Jan. 3.....	326,250	21,164	92,364	17,653	36,813	16,045	12,082	64,670	10,346	6,874	13,254	11,018	23,977
Jan. 10.....	317,412	20,725	93,846	17,644	34,397	14,945	11,683	60,263	8,467	6,972	13,012	10,324	25,174
Jan. 17.....	290,124	19,139	85,032	16,798	31,629	14,173	10,612	55,154	7,653	6,367	11,770	9,338	22,459
<b>Net demand deposits:</b>													
Dec. 27.....	11,255,425	813,832	4,904,010	698,089	858,189	335,679	271,316	1,467,033	365,572	207,652	445,741	235,044	653,268
Jan. 3.....	11,527,350	849,079	5,048,206	704,381	877,421	346,231	284,412	1,493,962	375,142	208,885	445,346	237,040	657,245
Jan. 10.....	11,595,702	852,742	5,005,595	729,571	914,310	346,762	290,682	1,496,914	384,814	212,677	451,290	245,961	664,384
Jan. 17.....	11,599,541	850,301	4,976,914	716,771	931,604	349,867	286,246	1,522,341	386,184	218,291	450,688	241,277	668,857
<b>Time deposits:</b>													
Dec. 27.....	3,708,466	237,567	764,230	58,857	562,241	145,619	161,595	744,470	179,379	84,326	124,436	70,527	576,210
Jan. 3.....	3,748,208	240,037	769,864	63,657	569,781	146,992	164,084	746,107	179,973	85,451	123,619	76,953	581,690
Jan. 10.....	3,715,326	241,554	772,351	64,067	541,842	148,102	148,259	748,602	180,669	86,072	124,386	71,439	587,083
Jan. 17.....	3,735,272	239,642	766,520	65,848	548,483	148,351	169,306	750,715	181,951	80,178	121,280	72,084	580,705
<b>Government deposits:</b>													
Dec. 27.....	471,209	21,696	246,246	29,969	36,492	9,983	11,749	50,032	11,915	6,333	8,054	13,462	25,278
Jan. 3.....	351,373	16,137	183,161	21,580	26,673	7,279	8,672	39,877	8,830	4,759	5,845	10,025	18,535
Jan. 10.....	185,941	8,603	97,671	11,515	14,566	3,928	4,491	19,649	4,740	2,188	3,024	5,737	9,829
Jan. 17.....	298,612	20,697	131,227	26,943	15,046	12,833	7,418	38,927	10,665	8,146	3,650	5,129	17,931
<b>Bills payable and redis- counted with F. R. banks:</b>													
<b>Secured by U. S. Gov- ernment obligations—</b>													
Dec. 27.....	206,253	10,603	102,034	17,378	15,400	17,207	469	15,116	9,567	1,013	8,189	302	8,675
Jan. 3.....	253,784	9,248	148,809	16,778	13,114	12,451	72	18,247	7,256	1,398	14,901	400	11,107
Jan. 10.....	195,150	5,572	137,054	12,820	4,400	8,538	393	10,902	1,775	1,921	6,910	1,050	3,813
Jan. 17.....	198,769	5,580	143,804	13,661	6,452	5,976	192	12,440	1,436	321	6,113	1,030	6,262
<b>All other—</b>													
Dec. 27.....	163,322	36,829	13,881	9,540	10,318	17,775	10,381	23,128	8,836	2,706	8,845	2,388	12,695
Jan. 3.....	136,411	23,746	10,458	6,079	19,654	17,017	11,593	12,728	9,069	2,900	7,550	2,738	12,879
Jan. 10.....	94,146	16,420	8,925	3,516	9,018	15,012	6,750	9,976	3,448	2,199	5,415	2,800	10,667
Jan. 17.....	97,292	24,298	17,017	4,523	5,821	12,428	5,793	7,104	1,336	1,695	4,902	3,500	8,875

MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

<b>Number of reporting banks:</b>													
Dec. 29.....	262	23	63	43	8	10	7	50	13	6	16	8	15
Jan. 3.....	261	23	63	43	8	10	6	50	13	6	16	8	15
Jan. 10.....	261	23	63	43	8	10	6	50	13	6	16	8	15
Jan. 17.....	261	23	63	43	8	10	6	50	13	6	16	8	15
<b>Loans and discounts, gross:</b>													
<b>Secured by U. S. Gov- ernment obligations—</b>													
Dec. 27.....	197,818	13,933	85,602	18,055	7,241	2,296	1,418	37,499	15,825	5,172	2,428	2,029	6,320
Jan. 3.....	213,672	13,711	96,920	18,537	7,209	2,221	2,071	40,282	15,739	5,451	2,705	2,255	6,511
Jan. 10.....	213,453	13,073	98,516	18,577	7,161	2,043	2,025	40,379	15,579	5,187	2,351	1,935	6,597
Jan. 17.....	205,474	13,372	95,999	17,990	6,867	2,091	2,092	36,690	14,462	5,205	2,337	1,925	6,444
<b>Secured by stocks and bonds—</b>													
Dec. 27.....	2,773,958	196,532	1,544,413	224,648	140,779	19,386	10,626	408,470	106,109	23,898	20,580	11,143	67,374
Jan. 3.....	2,915,114	195,745	1,683,639	228,932	138,464	20,342	10,536	409,345	104,968	25,615	19,595	10,924	67,009
Jan. 10.....	2,780,486	190,284	1,533,104	233,842	142,873	21,360	10,625	419,921	105,587	24,854	19,789	11,188	65,059
Jan. 17.....	2,798,185	195,446	1,537,891	220,829	140,082	22,286	10,664	440,502	107,521	24,996	21,078	11,214	65,676
<b>All other loans and dis- counts—</b>													
Dec. 27.....	4,449,842	424,352	1,949,205	295,472	294,872	67,970	51,910	629,277	165,520	95,120	119,830	55,739	300,575
Jan. 3.....	4,521,885	451,254	2,010,863	291,917	296,476	64,153	49,471	635,122	163,763	92,865	119,624	52,490	293,887
Jan. 10.....	4,539,732	452,290	2,027,604	294,674	297,141	63,392	50,376	623,494	169,222	95,197	118,050	52,165	296,119
Jan. 17.....	4,542,196	455,979	2,017,399	297,757	297,591	63,928	50,584	622,815	170,589	100,660	116,815	51,528	296,551
<b>Total loans and discounts:</b>													
Dec. 27.....	7,421,618	634,817	3,579,220	538,175	442,892	89,652	63,954	1,075,246	287,454	124,190	142,838	68,911	374,269
Jan. 3.....	7,650,671	660,710	3,791,422	539,396	442,149	86,716	62,078	1,084,749	284,467	123,964	141,924	65,699	367,407
Jan. 10.....	7,533,671	655,656	3,661,224	547,093	447,175	86,795	63,026	1,083,794	290,388	125,238	140,220	65,288	367,774
Jan. 17.....	7,545,855	664,797	3,651,289	536,576	444,540	88,305	63,340	1,100,007	292,572	130,861	140,230	64,667	368,671
<b>U. S. bonds:</b>													
Dec. 27.....	832,001	45,372	497,331	48,014	30,581	5,497	5,196	59,293	30,657	8,950	22,515	10,049	63,544
<b>U. S. pre-war bonds:</b>													
Dec. 27.....	97,485	2,321	38,735	7,383	4,580	1,825	2,937	1,736	8,272	3,722	2,127	4,240	19,607
Jan. 3.....	98,106	2,321	38,358	7,233	4,589	1,875	2,920	1,836	8,224	3,031	2,131	4,240	21,357
Jan. 10.....	98,097	2,321	38,304	7,233	4,580	1,775	2,937	2,073	8,224	3,031	2,126	4,240	21,253
<b>U. S. Liberty bonds:</b>													
Dec. 27.....	660,964	38,520	416,745	36,800	24,941	3,790	1,008	51,465	15,039	3,936	19,532	4,580	44,008
Jan. 3.....	659,693	38,293	418,246	36,900	25,040	3,832	1,008	49,331	16,181	4,022	19,619	4,593	42,616
Jan. 10.....	659,693	38,293	418,246	36,900	25,040	3,832	1,008	49,331	16,181	4,022	19,619	4,593	42,616
Jan. 17.....	661,038	39,619	418,711	37,710	25,186	3,852	1,008	47,262	15,638	4,953	19,844	4,594	42,661

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS, DECEMBER 27, 1922, TO JANUARY 17, 1923—Continued.

MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
U. S. Treasury bonds:													
Dec. 27.....													
Jan. 3.....	89,384	5,456	39,417	4,066	1,876	327	415	20,480	8,018	1,573	1,390	1,018	5,348
Jan. 10.....	87,922	5,360	37,835	4,293	1,920	223	359	20,183	7,962	1,036	1,365	2,077	5,300
Jan. 17.....	93,432	5,689	37,669	4,238	1,926	360	359	25,907	7,831	730	1,485	1,803	5,435
U. S. Victory notes and Treasury notes:													
Dec. 27.....	638,181	20,174	438,855	38,195	8,467	1,068	1,297	82,048	13,591		7,945	8,127	18,394
Jan. 3.....	607,612	21,334	433,318	37,853	8,138	704	1,367	54,402	13,315	3,015	7,173	7,302	19,691
Jan. 10.....	616,430	21,024	441,540	41,386	7,967	733	1,365	52,386	13,063	4,238	7,275	6,878	18,575
Jan. 17.....	715,719	26,895	492,705	57,494	9,603	856	310	66,617	17,086	5,924	8,250	7,599	22,237
U. S. certificates of indebtedness:													
Dec. 27.....	172,246	4,019	118,863	6,531	2,302	1,825	2,587	20,911	3,099	4,493	1,623	3,008	2,985
Jan. 3.....	149,836	4,200	108,147	3,205	1,561	1,701	1,556	19,978	3,443	222	1,420	2,467	1,636
Jan. 10.....	136,915	4,963	99,836	1,948	1,806	1,678	1,556	18,304	2,758	124	1,316	1,583	1,638
Jan. 17.....	150,491	4,748	109,783	2,632	2,171	1,878	2,502	18,714	2,296	124	832	1,906	2,885
Other bonds, stocks, and securities:													
Dec. 27.....	1,206,599	79,384	555,838	145,690	65,912	6,230	3,347	193,538	56,737	11,712	12,550	1,515	74,146
Jan. 3.....	80,859	566,741	147,590	68,154	7,299	2,801	189,843	57,480	12,090	11,684	1,413	73,833	
Jan. 10.....	1,191,798	80,814	558,841	147,404	65,170	6,662	2,781	181,979	53,092	11,574	11,922	1,479	70,080
Jan. 17.....	1,199,714	80,884	556,302	151,320	64,849	6,428	3,908	185,387	55,103	11,620	11,162	1,502	71,240
Total loans and discounts and investments:													
Dec. 27.....	10,270,645	783,768	5,190,107	776,605	550,154	104,292	76,381	1,431,038	391,538	149,345	187,471	91,610	538,338
Jan. 3.....	10,475,939	813,400	5,394,525	776,283	551,699	102,362	72,162	1,422,653	390,634	148,522	185,450	86,719	531,530
Jan. 10.....	10,324,535	807,839	5,255,883	786,317	553,664	101,798	73,015	1,407,813	391,618	149,263	183,848	86,138	527,340
Jan. 17.....	10,464,346	824,953	5,304,766	797,232	552,915	103,454	74,364	1,445,967	398,750	157,273	183,929	86,311	534,432
Reserve balance with F. R. banks:													
Dec. 27.....	990,390	68,820	590,913	63,924	29,161	6,050	6,733	141,011	27,813	10,753	17,225	5,513	31,474
Jan. 3.....	1,032,020	67,985	617,013	67,603	35,523	7,079	5,740	136,548	28,804	13,363	17,505	4,809	30,048
Jan. 10.....	1,072,233	72,630	651,207	64,597	29,538	5,434	6,017	144,982	28,114	10,692	18,225	6,954	33,843
Jan. 17.....	1,024,569	70,673	592,369	62,969	33,542	6,455	6,217	152,402	31,062	11,042	15,868	8,400	33,570
Cash in vault:													
Dec. 27.....	198,265	10,962	98,498	15,971	10,487	1,197	2,032	40,548	4,699	2,318	2,902	1,528	7,123
Jan. 3.....	169,163	9,959	76,373	14,411	10,651	1,009	2,291	35,953	4,834	2,180	2,775	1,404	7,323
Jan. 10.....	165,936	9,489	78,321	14,216	8,981	1,016	2,269	33,269	3,939	2,255	2,606	1,527	7,945
Jan. 17.....	152,430	8,575	71,573	13,636	8,575	956	1,978	31,202	3,583	2,259	2,323	1,233	6,537
Net demand deposits:													
Dec. 27.....	7,787,181	631,877	4,402,658	615,127	221,641	56,128	45,722	1,008,717	239,326	100,126	160,215	63,115	242,529
Jan. 3.....	7,972,587	652,914	4,533,676	621,213	230,166	58,582	47,093	1,018,255	247,595	102,738	157,384	62,860	240,111
Jan. 10.....	8,002,872	664,487	4,507,574	646,457	228,740	59,668	47,844	1,020,773	254,857	102,000	160,173	64,462	245,837
Jan. 17.....	7,992,973	661,522	4,475,376	633,678	233,965	62,774	47,596	1,043,797	255,521	106,557	158,071	66,115	248,001
Time deposits:													
Dec. 27.....	1,792,777	102,817	530,110	41,967	310,669	24,320	20,370	361,276	104,254	35,399	16,042	10,857	234,596
Jan. 3.....	1,809,744	103,484	531,887	45,886	312,232	24,785	20,761	364,689	102,795	35,877	16,494	11,391	239,463
Jan. 10.....	1,811,019	103,838	525,158	47,062	314,786	24,858	21,062	363,609	103,226	36,387	16,470	11,718	242,845
Jan. 17.....	1,801,980	101,231	516,110	47,844	314,222	25,006	26,081	364,984	103,503	36,360	16,271	11,838	241,530
Government deposits:													
Dec. 27.....	358,727	15,635	235,958	28,409	5,329	2,800	1,426	30,347	9,160	3,185	5,125	7,979	13,374
Jan. 3.....	268,751	11,631	175,481	20,419	3,887	2,063	1,051	25,424	6,647	2,300	3,808	5,934	10,049
Jan. 10.....	141,424	6,213	93,582	10,896	2,096	1,097	525	11,882	3,460	831	1,934	3,555	5,303
Jan. 17.....	224,900	16,535	122,132	25,076	3,656	979	1,145	24,750	9,043	4,112	1,821	2,793	12,858
Bills payable and rediscounted with F. R. banks:													
Secured by U. S. Government obligations—													
Dec. 27.....	120,339	7,300	75,846	15,453	770	2,527	5	3,127	4,985	123	2,103		8,100
Jan. 3.....	171,430	7,195	121,199	15,003	570	1,683	35	3,699	3,784	123	5,109		10,030
Jan. 10.....	141,543	2,697	119,824	10,795	225	130	35	950	450	123	2,064		3,400
Jan. 17.....	157,272	3,030	128,844	12,211		119	35	2,615	112	123	3	980	5,170
All other—													
Dec. 27.....	91,843	36,330	6,118	9,540	6,227	4,327	906	11,636	3,135	1,100	243	881	10,900
Jan. 3.....	69,931	23,290	3,905	6,079	10,258	5,297	1,201	2,592	4,185	1,329	276	881	10,637
Jan. 10.....	44,691	16,031	3,425	3,516	4,195	3,682	856	1,096	1,090	389	245	1,254	8,822
Jan. 17.....	56,702	23,967	11,208	4,523	1,868	2,990	951	290	1,045	454	238	1,897	7,271

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN REPORTING CENTERS.

SUMMARY BY FEDERAL RESERVE DISTRICTS.

(In thousands of dollars.)

Federal reserve district.	Number of centers included.	1922	1923				1921	1922			
		Week ending—	Week ending—				Week ending—	Week ending—			
		Dec. 27.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Dec. 28.	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.
No. 1—Boston	14	414,921	592,405	514,058	590,217	510,120	358,482	504,563	484,233	540,467	410,118
No. 2—New York	7	3,669,018	6,045,605	5,230,424	5,435,191	4,835,167	3,648,460	4,800,781	4,861,365	5,002,491	4,138,046
No. 3—Philadelphia	13	416,887	523,888	461,602	467,818	431,506	342,275	427,688	409,608	395,213	359,055
No. 4—Cleveland	14	529,742	790,677	619,009	586,267	572,352	389,340	601,810	499,786	452,844	428,168
No. 5—Richmond	11	195,851	235,743	246,631	236,239	224,170	180,548	248,361	219,009	197,516	177,106
No. 6—Atlanta	15	188,434	241,746	240,503	242,858	217,456	149,694	208,405	198,242	179,826	163,080
No. 7—Chicago	24	941,938	1,220,321	1,110,025	1,182,222	1,081,166	754,336	950,691	964,114	956,469	833,330
No. 8—St. Louis	8	226,092	332,435	317,272	293,750	259,443	176,762	256,388	228,118	230,047	187,005
No. 9—Minneapolis	11	132,638	172,331	157,555	160,126	143,207	118,079	127,116	126,849	123,079	114,717
No. 10—Kansas City	16	236,219	316,726	290,949	287,641	260,761	182,314	232,761	241,836	240,083	212,087
No. 11—Dallas	13	142,857	183,692	167,635	167,656	169,253	135,799	160,456	159,223	149,106	131,898
No. 12—San Francisco	20	445,964	562,683	570,802	587,537	527,860	397,142	509,637	519,219	503,189	434,158
Total	166	7,540,761	11,218,252	9,929,465	10,267,522	9,232,461	6,833,231	9,034,657	8,914,602	8,970,330	7,529,687

DATA FOR EACH REPORTING CENTER.

(In thousands of dollars.)

Reporting Center	1922	1923				1921	1922			
	Week ending—	Week ending—				Week ending—	Week ending—			
	Dec. 27.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Dec. 28.	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.
<b>District No. 1.—Boston:</b>										
Bangor, Me.	4,456	4,361	3,574	3,386	3,205	2,700	3,707	3,367	3,274	2,009
Boston, Mass.	279,804	407,257	344,082	419,296	357,463	249,413	347,731	335,724	382,488	298,721
Brockton, Mass.	4,032	4,717	4,459	6,528	4,529					
Fall River, Mass.	7,479	8,132	7,852	8,891	8,039	5,378	6,766	6,828	7,154	6,937
Hartford, Conn.	21,358	32,122	27,053	25,958	22,338	17,089	28,040	24,557	27,718	18,995
Holyoke, Mass.	3,295	4,085	4,184	4,054	4,065	2,604	2,780	3,048	3,079	2,928
Lowell, Mass.	4,499	5,170	5,288	5,240	4,718	3,937	4,663	5,004	4,899	3,866
Lynn, Mass.	4,032	5,711	5,729	5,652	4,671		5,332	6,035	6,449	5,490
Manchester, N. H.	4,009	4,822	5,009	4,476	4,293	3,677	5,629	5,032	4,550	3,010
New Bedford, Mass.	6,350	7,709	6,212	8,210	6,930	4,863	6,410	6,226	7,165	6,653
New Haven, Conn.	14,770	20,172	22,883	20,941	19,334	12,140	18,938	18,457	19,693	14,998
Portland, Me.	7,235	8,992	8,099	9,109	7,623	5,260	7,138	7,162	7,541	6,655
Providence, R. I.	28,062	41,629	37,149	39,207	33,456	24,074	35,141	35,141	36,665	21,523
Springfield, Mass.	13,882	19,123	17,899	15,762	15,843	10,741	14,707	12,398	13,895	12,978
Waterbury, Conn.	5,797	9,760	7,194	8,144	7,296	5,121	6,848	7,041	6,107	5,818
Worcester, Mass.	13,925	19,071	17,580	17,543	15,517	11,485	16,065	14,248	16,209	13,527
<b>District No. 2.—New York:</b>										
Albany, N. Y.	17,456	26,194	26,559	22,415	17,873	22,735	22,575	34,078	22,650	20,231
Binghamton, N. Y.	3,624	4,789	5,163	5,204	4,501	3,182	4,085	4,515	3,724	3,331
Buffalo, N. Y.	59,124	78,862	79,891	72,245	66,177	43,426	64,289	63,417	61,524	51,008
Elmira, N. Y.	3,555	3,719	3,603	3,610	3,549					
Jamestown, N. Y.	3,293	4,362	3,893	4,433	3,570					
Montclair, N. J.	2,569	3,166	3,243	3,535	3,335					
Newark, N. J.	58,728	68,863	60,428	71,077	59,981					
New York, N. Y.	3,542,543	5,866,014	5,056,168	5,298,006	4,696,897	3,541,421	4,657,565	4,703,125	4,866,232	4,023,250
Northern New Jersey Clearing House Association	45,432	54,040	53,495	48,821	38,684					
Passaic, N. J.	6,582	7,562	8,083	6,885	5,945	5,025	6,115	5,881	6,004	4,639
Rochester, N. Y.	26,261	44,089	37,561	35,177	29,499	22,723	36,802	39,190	30,211	24,452
Stamford, Conn.	2,518	2,899	4,581	3,264	3,203					
Syracuse, N. Y.	13,428	18,095	16,999	15,259	14,275	9,948	15,350	14,159	12,146	11,135
<b>District No. 3.—Philadelphia:</b>										
Allentown, Pa.	6,039	7,568	7,186	6,376	6,418					
Altoona, Pa.	3,233	3,480	3,618	4,082	3,429	2,766	2,776	2,727	2,878	2,503
Camden, N. J.	9,186	14,129	10,619	11,493	10,164					
Chester, Pa.	4,082	5,706	5,433	6,678	4,921	3,054	4,538	4,276	4,650	4,209
Harrisburg, Pa.	8,207	6,898	7,648	7,634	6,685	6,279	8,059	7,902	8,155	8,087
Hazleton, Pa.	2,072	2,463	2,267	2,671	2,018					
Johnstown, Pa.	5,873	5,783	5,643	5,080	4,595	4,750	4,095	3,973	4,362	3,577
Lancaster, Pa.	6,690	6,211	6,362	6,892	5,789	3,925	4,667	4,636	4,549	3,708
Lebanon, Pa.	1,318	1,525	1,478	1,512	1,360					
Norristown, Pa.	734	732	936	915	798					
Philadelphia, Pa.	323,391	426,016	364,410	371,225	345,377	265,195	345,302	322,254	317,631	281,874
Reading, Pa.	7,848	9,033	9,937	10,928	8,447	6,695	7,640	8,448	7,514	6,877
Scranton, Pa.	16,302	18,056	19,129	15,859	17,029	13,845	15,635	16,385	12,554	15,910
Trenton, N. J.	17,563	13,163	13,850	13,087	11,390	15,001	11,133	11,495	10,513	10,258
Wilkes-Barre, Pa.	9,103	9,838	9,949	10,027	8,050	7,741	8,909	9,421	7,515	8,340
Williamsport, Pa.	3,937	5,911	4,709	4,308	4,051	3,157	4,486	4,158	3,862	3,403
Wilmington, Del.	6,455	9,073	8,509	8,377	7,431	6,461	6,894	8,488	6,726	6,443
York, Pa.	4,183	4,720	5,105	4,611	4,312	3,406	3,554	5,447	3,804	3,376



## DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922	1923 —				1921	1922			
	Week ending—	Week ending—				Week ending—	Week ending—			
	Dec. 27.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Dec. 28.	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.
District No. 4—Cleveland:										
Akron, Ohio.....	13,683	17,333	16,614	15,324	16,565	9,117	12,365	13,889	12,463	11,720
Butler, Pa.....	2,365	3,053	2,933	2,440	2,308					
Canton, Ohio.....	10,445	10,593	11,619	9,989	9,958					
Cincinnati, Ohio.....	66,338	113,922	77,416	84,226	74,280	53,785	94,305	70,823	65,464	60,766
Cleveland, Ohio.....	120,446	229,504	162,753	145,347	142,003	113,054	179,284	132,692	119,693	105,237
Columbus, Ohio.....	33,982	38,048	47,912	35,919	31,824	24,936	32,269	29,122	27,921	23,743
Connellsville, Pa.....	1,457	1,253	1,446	1,540	1,162					
Dayton, Ohio.....	12,362	19,363	16,422	15,099	16,203	11,473	13,885	14,442	11,905	10,992
Erie, Pa.....	5,823	7,138	9,271	7,621	7,502	4,506	5,474	6,472	5,479	4,841
Greensburg, Pa.....	4,760	5,806	5,189	5,171	4,678	3,182	3,030	2,659	4,086	2,468
Homestead, Pa.....	702	816	836	886	718					
Lexington, Ky.....	5,258	6,772	7,629	7,974	6,898	3,127	6,265	5,408	4,734	3,970
Lima, Ohio.....	3,530	3,741	4,258	3,817	3,668					
Lorain, Ohio.....	1,074	1,356	1,457	1,204	1,261					
New Brighton, Pa.....	2,258	2,600	2,691	2,553	2,101					
Oil City, Pa.....	2,841	3,127	3,612	3,147	3,270	1,944	2,544	3,001	2,627	2,372
Pittsburgh, Pa.....	199,901	260,739	191,224	186,362	199,868	118,241	194,410	157,721	146,317	144,929
Springfield, Ohio.....	4,218	5,796	5,680	5,588	6,060	2,982	2,509	5,045	3,760	3,660
Toledo, Ohio.....	37,596	55,579	47,318	44,316	38,578	28,317	39,115	35,917	33,368	37,278
Warren, Ohio.....	2,988	2,340	3,040	2,923	3,266					
Wheeling, W. Va.....	9,615	11,354	11,591	15,618	11,309	6,444	8,724	7,883	6,680	6,702
Youngstown, Ohio.....	12,919	18,196	16,378	14,555	13,314	8,232	7,631	14,707	8,347	9,510
Zanesville, Ohio.....	2,455	3,254	3,446	2,913	2,735					
District No. 5—Richmond:										
Asheville, N. C.....	4,612	4,174	4,332	4,750	4,871					
Baltimore, Md.....	73,800	95,060	93,700	91,000	83,700	84,567	121,929	99,271	78,838	71,604
Charleston, S. C.....	5,984	6,888	5,800	5,311	10,383	5,314	7,600	7,411	5,838	5,780
Charleston, W. Va.....	8,141	11,069	9,465	8,743	9,287					
Charlotte, N. C.....	7,540	9,539	9,910	9,233	8,397	5,526	8,504	6,779	6,778	5,554
Columbia, S. C.....	4,376	5,800	6,983	6,664	5,672	4,290	7,071	5,542	6,162	4,670
Cumberland, Md.....	1,776	1,938	2,033	1,851	1,675					
Danville, Va.....	2,450	2,791	3,144	2,620	2,751					
Durham, N. C.....	3,363	4,763	4,798	4,824	4,287					
Greensboro, N. C.....	4,009	5,340	5,676	5,266	5,647					
Greenville, S. C.....	3,900	4,400	5,300	5,400	4,700	3,106	5,198	4,922	3,347	3,499
Hagerstown, Md.....	1,645	2,138	2,268	2,385	2,010					
Huntington, W. Va.....	6,149	6,679	7,434	6,251	5,915	3,803	4,462	5,125	5,003	4,082
Lynchburg, Va.....	4,455	6,638	6,459	5,410	4,770					
Newport News, Va.....	1,427	1,825	1,908	2,001	1,758					
Norfolk, Va.....	14,385	16,304	18,200	16,438	15,416	13,463	14,884	14,538	14,736	12,480
Raleigh, N. C.....	5,800	8,000	9,000	8,500	7,950	3,050	9,000	5,000	4,900	4,600
Richmond, Va.....	30,521	32,357	35,904	36,127	33,900	20,224	27,555	24,460	27,884	25,049
Roanoke, Va.....	4,521	5,959	6,627	5,482	5,605					
Spartanburg, S. C.....	1,641	3,074	3,187	2,823	2,304					
Washington, D. C.....	38,518	44,199	49,715	46,483	44,129	33,031	36,351	41,062	39,179	36,263
Wilmington, N. C.....	4,878	6,437	4,685	4,812	4,008	4,174	5,807	4,899	4,851	3,615
Winston-Salem, N. C.....	4,460	6,300	8,237	7,738	7,170					
District No. 6—Atlanta:										
Albany, Ga.....	1,200	1,411	1,380	1,105	1,030					
Atlanta, Ga.....	26,682	34,218	32,014	32,756	27,303	20,526	28,243	26,613	24,959	20,482
Augusta, Ga.....	6,083	7,305	7,762	7,694	7,592	5,917	7,621	7,329	6,022	5,835
Birmingham, Ala.....	17,897	26,230	27,735	26,850	26,005	12,346	16,687	19,408	13,382	13,541
Brunswick, Ga.....	821	845	782	598	600					
Chattanooga, Tenn.....	6,671	9,426	10,518	9,531	8,077	6,143	8,058	9,455	8,177	6,003
Columbus, Ga.....	2,909	3,316	3,204	3,207	3,160					
Cordele, Ga.....	340	459	411	322	267					
Dothan, Ala.....	618	1,090	732	1,080	710					
Elberton, Ga.....	201	354	388	340	205					
Jackson, Miss.....	2,405	2,862	3,576	3,355	2,871					
Jacksonville, Fla.....	10,966	13,172	13,312	13,212	11,986	8,892	10,154	11,843	9,694	9,473
Knoxville, Tenn.....	5,725	7,946	8,473	8,728	6,652	4,605	7,345	6,759	6,555	5,686
Macon, Ga.....	4,650	5,425	4,702	5,379	4,759	3,827	4,015	3,900	3,496	3,296
Meridian, Miss.....	1,783	1,721	2,289	2,594	2,456					
Mobile, Ala.....	5,703	7,712	8,621	7,278	6,381	5,628	7,381	6,510	4,946	6,303
Montgomery, Ala.....	3,941	5,627	5,622	4,877	5,088	3,110	3,781	3,887	3,652	3,323
Nashville, Tenn.....	14,115	19,185	21,124	19,085	15,596	11,547	14,356	13,535	17,289	13,765
Newnan, Ga.....	342	646	526	436	379					
New Orleans, La.....	66,651	81,791	78,417	87,265	77,548	50,365	76,806	70,276	64,066	59,113
Pensacola, Fla.....	1,182	1,824	1,762	1,605	1,581	1,100	1,295	1,492	1,420	1,326
Savannah, Ga.....	10,641	12,890	10,566	9,394	9,401	9,522	14,624	9,944	8,813	8,610
Tampa, Fla.....	5,779	6,930	7,727	7,079	6,759	4,704	5,893	6,447	5,733	5,542
Valdosta, Ga.....	1,048	1,411	1,435	1,285	1,148					
Vicksburg, Miss.....	1,748	2,065	2,148	2,125	2,728	1,462	2,146	1,844	1,622	1,691
District No. 7—Chicago:										
Adrian, Mich.....	716	862	1,011	999	954					
Aurora, Ill.....	2,537	3,027	3,735	3,129	3,055					
Bay City, Mich.....	2,410	2,453	2,538	2,286	2,277	2,301	2,532	2,536	2,715	2,078
Bloomington, Ill.....	2,083	2,918	2,657	2,660	2,418	1,639	2,472	2,230	2,126	1,824
Cedar Rapids, Iowa.....	4,071	7,199	7,530	5,913	5,831	6,315	11,188	9,880	9,200	7,758
Chicago, Ill.....	594,109	826,966	703,978	779,910	698,362	495,008	638,713	636,167	641,083	563,299

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922	1923				1921	1922			
	Week ending—	Week ending—				Week ending—	Week ending—			
	Dec. 27.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 21.	Dec. 28.	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.
<b>District No. 7—Chicago—Continued.</b>										
Danville, Ill.	2,400	2,900	3,000	2,700	2,700					
Davenport, Iowa	7,362	10,807	10,493	7,547	7,971	5,489	7,781	7,554	6,264	7,150
Decatur, Ill.	2,788	4,230	3,388	3,399	3,029	2,247	2,797	3,002	2,097	2,506
Des Moines, Iowa	15,423	17,542	20,020	18,040	20,030	12,052	14,868	17,769	16,614	13,689
Detroit, Mich.	138,809	146,549	134,679	152,324	146,188	91,155	104,240	116,470	112,045	91,469
Dubuque, Iowa	2,858	4,088	4,129	3,986	4,004	2,263	3,204	3,132	2,929	2,477
Flint, Mich.	5,911	5,800	7,419	7,044	8,003	4,231	4,190	4,365	5,450	4,650
Fort Wayne, Ind.	7,576	9,740	8,900	8,042	7,525	6,001	7,054	6,927	6,799	6,620
Gary, Ind.	3,578	2,624	3,879	2,966	2,899					
Grand Rapids, Mich.	14,569	14,603	15,395	15,716	14,074	18,108	17,113	19,850	14,367	13,205
Green Bay, Wis.	1,988	2,241	2,581	2,397	2,063					
Hammond, Ind.	3,400	3,330	3,530	3,280	3,750					
Indianapolis, Ind.	33,111	37,985	41,572	44,458	36,669	27,951	31,188	31,698	32,671	28,991
Jackson, Mich.	4,065	5,215	7,378	5,566	4,545	3,518	3,752	3,717	3,873	3,167
Kalamazoo, Mich.	4,713	5,233	5,631	6,102	4,430	3,453	4,616	4,862	3,535	3,501
Lansing, Mich.	5,300	7,500	6,700	6,800	7,300	3,652	4,500	4,400	4,646	3,892
Mason City, Iowa	2,394	2,787	2,951	2,192	2,103					
Milwaukee, Wis.	51,382	59,372	68,350	67,757	61,240	41,159	55,148	52,217	52,277	45,690
Moline, Ill.	1,443	1,672	2,100	1,722	1,642	1,287	1,384	1,772	1,847	1,518
Muscataine, Iowa	1,422	1,642	2,046	1,650	1,421					
Oshkosh, Wis.	2,200	2,600	3,400	2,700	2,300					
Peoria, Ill.	7,223	10,532	9,400	10,196	8,464	6,168	7,617	8,093	7,662	6,640
Rockford, Ill.	4,389	5,676	6,831	6,004	4,643	3,852	4,335	4,782	4,422	3,946
Saginaw, Mich.	5,213	5,093	5,890	6,160	5,537					
Sioux City, Iowa	13,827	16,198	18,776	18,160	16,038	5,180	7,590	7,491	8,423	7,021
South Bend, Ind.	9,916	7,675	9,338	7,906	7,101	4,437	5,074	5,998	5,184	4,683
Springfield, Ill.	5,189	6,280	7,330	6,314	5,616	4,738	5,179	5,853	6,111	4,811
Terre Haute, Ind.	6,343	5,945	7,476	5,985	5,447					
Waterloo, Iowa	3,199	4,228	4,513	4,361	3,766	2,202	3,256	3,329	2,929	2,745
<b>District No. 8—St. Louis:</b>										
East St. Louis and National Stock Yards, Ill.	8,422	8,684	12,007	10,759	9,985	6,098	7,586	8,822	8,093	7,510
Evansville, Ind.	7,204	9,009	9,146	8,258	6,970	4,962	6,620	6,608	6,431	5,081
Fort Smith, Ark.	2,565	2,860	3,000	2,857	2,906					
Greenville, Miss.	843	1,180	1,484	1,468	1,122					
Helena, Ark.	1,252	1,735	2,006	1,566	1,337					
Little Rock, Ark.	13,530	13,214	18,732	15,793	13,009	5,806	12,494	11,340	9,037	9,371
Louisville, Ky.	30,790	41,187	44,619	45,196	39,095	26,316	30,511	31,427	31,253	26,957
Memphis, Tenn.	39,775	41,146	43,733	40,749	36,164	20,529	27,497	31,082	27,257	21,191
Owensboro, Ky.	1,953	1,653	2,325	1,944	1,557					
Quincy, Ill.	1,957	2,812	2,875	2,844	2,311	1,532	2,029	2,247	2,092	1,922
St. Louis, Mo.	130,818	212,321	181,959	166,842	147,834	107,037	168,231	133,427	143,759	112,033
Springfield, Mo.	3,096	4,062	4,201	3,509	3,175	1,480	3,420	3,165	3,125	2,940
<b>District No. 9—Minneapolis:</b>										
Aberdeen, S. Dak.	1,152	1,581	1,387	1,213	1,127	1,040	1,621	1,262	1,278	1,076
Billings, Mont.	2,100	2,882	2,430	2,145	1,622	1,502	2,085	1,740	1,753	1,452
Dickinson, N. Dak.	306	464	476	3,973	260					
Duluth, Minn.	14,419	18,235	16,255	15,174	13,831	10,473	12,125	12,930	8,883	10,862
Fargo, N. Dak.	2,168	2,837	2,917	2,585	2,416	1,753	2,296	2,433	2,149	1,847
Grand Forks, N. Dak.	1,519	1,864	1,969	2,006	1,653	1,076	1,276	1,496	1,478	1,053
Helena, Mont.	3,293	2,607	2,864	2,916	2,590	2,811	3,171	2,953	2,336	2,160
Jamestown, N. Dak.		551	679	508	520					
La Crosse, Wis.	422	2,823	3,376	2,935	2,611					
Lewistown, Mont.	1,838	1,231	1,608	1,513	1,160					
Minneapolis, Minn.	70,663	94,580	80,613	85,046	73,590	61,682	70,367	67,705	62,291	57,372
Minot, N. Dak.	946	1,334	1,592	1,047	798					
Red Wing, Minn.	497	628	591	525	415					
St. Paul, Minn.	131,271	140,225				32,280	27,384	28,652		
Do.	34,657	46,444	40,534	39,215	39,611				36,130	33,121
Sioux Falls, S. Dak.	3,602	4,075	4,476	4,670	3,671	3,004	4,104	4,754	4,254	3,638
Superior, Wis.	1,780	1,717	1,860	1,681	1,611	1,724	1,568	1,714	1,587	1,296
Winona, Minn.	871	1,418	2,940	3,207	1,485	734	1,119	1,210	970	831
<b>District No. 10—Kansas City:</b>										
Atchison, Kans.	1,417	1,328	1,670	1,669	1,609	885	1,022	1,240	1,383	960
Bartlesville, Okla.	2,747	4,151	2,562	2,796	4,066	2,231	2,431	2,528	2,099	1,709
Casper, Wyo.	3,244	4,309	5,117	3,142	3,192					
Cheyenne, Wyo.	3,043	4,564	3,350	2,901	2,395	2,282	3,379	2,779	3,253	3,364
Colorado Springs, Colo.	2,731	2,697	3,095	2,865	2,551	1,759	3,556	2,816	2,651	2,523
Denver, Colo.	36,135	40,317	43,477	38,382	35,808	30,414	34,081	37,496	33,100	31,971
Enid, Okla.	1,786	3,344	3,316	3,096	2,652					
Fremont, Nebr.	712	795	1,076	964	726					
Grand Island, Nebr.	991	1,459	1,484	1,255	1,254					
Grand Junction, Colo.	510	640	960	698	421					
Guthrie, Okla.	657	951	850	890	879					
Hutchinson, Kans.	2,952	3,752	3,795	3,096	3,561					
Independence, Kans.	1,734	2,198	1,822	2,988	2,175					
Joplin, Mo.	3,185	3,311	3,478	3,435	2,843	1,911	2,405	2,678	2,418	2,102
Kansas City, Kans.	4,090	4,966	4,498	4,116	7,918	3,113	3,911	3,364	4,172	3,471
Kansas City, Mo.	67,458	90,486	86,254	88,594	78,863	51,100	65,873	63,350	65,342	58,038
Lawrence, Kans.	776	1,423	1,127	922	976					

<sup>1</sup> Debits of banks which submitted reports in 1921.

## DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1922	1923				1921	1922			
	Week ending—	Week ending—				Week ending—	Week ending—			
	Dec. 27.	Jan. 3.	Jan. 10.	Jan. 17.	Jan. 24.	Dec. 28.	Jan. 4.	Jan. 11.	Jan. 18.	Jan. 25.
<b>District No. 10—Kansas City—Con.</b>										
McAlester, Okla.	958	1,360	1,161	1,262	1,023					
Muskogee, Okla.	5,925	8,318	7,709	6,612	6,533	3,204	4,104	3,429	3,575	2,659
Oklahoma City, Okla.	16,967	23,250	19,358	21,696	16,401	15,353	22,192	21,367	18,187	16,559
Okmulgee, Okla.	1,989	2,553	2,651	3,052	1,975					
Omaha, Nebr.	39,980	54,096	53,096	48,720	48,445	24,896	36,406	35,843	38,401	36,629
Parsons, Kans.	1,038	1,096	1,198	1,037	1,010					
Pittsburg, Kans.	1,662	1,330	1,413	1,733	1,409					
Pueblo, Colo.	5,133	6,081	4,299	3,707	3,388	3,393	3,450	4,759	2,696	2,505
St. Joseph, Mo.	12,307	17,596	17,065	17,179	14,260	13,086	15,763	17,050	19,064	16,163
Topeka, Kans.	3,281	3,873	4,983	3,320	3,507	2,613	3,774	3,950	3,880	3,372
Tulsa, Okla.	22,090	39,105	23,496	23,375	21,928	18,726	22,332	28,555	29,468	21,406
Wichita, Kans.	9,730	12,597	12,559	12,674	10,185	7,259	8,082	9,632	10,394	8,866
<b>District No. 11—Dallas:</b>										
Albuquerque, N. Mex.	2,065	2,027	2,286	2,543	2,031	1,788	2,087	2,011	1,976	1,542
Austin, Tex.	3,564	4,436	4,145	3,922	3,472	2,669	3,038	3,388	3,228	2,176
Beaumont, Tex.	3,103	3,711	4,917	4,267	3,774	2,962	3,221	3,959	3,362	3,575
Corrigan, Tex.	1,785	1,228	2,164	1,311	1,428					
Dallas, Tex.	38,550	54,705	46,515	44,692	40,660	30,921	41,150	41,953	34,042	29,767
El Paso, Tex.	7,116	8,022	7,746	7,127	7,081	8,875	7,819	9,572	7,809	7,378
Fort Worth, Tex.	25,788	27,420	27,106	27,788	27,976	31,940	32,566	33,127	33,100	31,265
Galveston, Tex.	16,078	21,881	19,988	17,886	30,830	13,575	16,246	17,221	16,551	13,143
Houston, Tex.	25,754	36,067	27,764	32,453	29,317	25,704	32,535	25,788	25,769	25,645
Roswell, N. Mex.	474	725	638	721	472					
San Antonio, Tex.	6,134	6,304	7,872	7,615	7,416	4,979	5,431	7,476	7,734	5,331
Shreveport, La.	7,576	9,034	10,637	10,417	8,671	6,341	8,180	7,720	9,059	6,082
Texarkana, Tex.	2,052	2,130	2,085	2,068	2,058	1,581	2,620	1,386	1,226	1,251
Tucson, Ariz.	1,675	3,031	2,079	2,052	1,850	1,500	1,571	1,792	1,450	1,553
Waco, Tex.	3,402	4,924	4,495	4,721	4,117	2,964	3,992	3,830	3,800	3,190
<b>District No. 12—San Francisco:</b>										
Bakersfield, Calif.	1,953	3,226	2,681	2,841	2,208					
Bellingham, Wash.	1,469	1,780	1,680	2,132	1,676					
Berkeley, Calif.	2,732	3,277	5,092	5,107	5,895	2,343	3,475	4,453	4,133	3,163
Boise, Idaho.	4,372	3,070	4,143	3,644	2,785	2,626	2,911	3,154	3,449	2,981
Eugene, Oreg.	2,900	1,600	1,713	2,129	2,020					
Fresno, Calif.	11,839	13,028	14,195	12,309	11,011	8,965	10,594	11,246	9,676	8,996
Long Beach, Calif.	9,197	10,751	14,108	12,699	12,587	4,605	6,045	7,825	6,846	5,876
Los Angeles, Calif.	120,728	145,819	149,965	163,347	146,404	90,802	123,012	121,705	127,550	111,564
Oakland, Calif.	19,096	29,863	30,199	26,415	23,629	15,491	18,745	22,750	18,704	18,366
Ogden, Utah.	7,469	7,426	8,619	6,987	6,326	3,301	5,952	5,882	3,945	4,746
Pasadena, Calif.	5,387	6,509	8,760	8,119	6,427	4,196	5,315	6,801	7,426	5,520
Phoenix, Ariz.	4,166	4,743	5,198	4,707	4,742					
Portland, Oreg.	27,269	32,454	30,547	36,763	30,244	25,820	29,494	31,533	31,162	25,999
Reno, Nev.	2,198	3,210	2,907	2,678	2,545	1,712	3,241	2,849	2,325	1,851
Ritzville, Wash.	134	215	187	154	109					
Sacramento, Calif.	10,834	18,346	23,642	20,746	16,979	16,564	11,133	18,202	15,817	11,062
Salt Lake City, Utah.	14,726	19,157	15,398	15,186	13,486	12,683	21,928	14,847	15,227	10,372
San Bernardino, Calif.	1,465	1,303	2,230	1,827	1,459					
San Diego, Calif.	7,667	12,738	12,832	11,406	12,189	6,151	8,512	10,000	9,452	8,978
San Francisco, Calif.	142,082	183,132	172,194	186,500	170,295	148,639	190,078	196,667	183,569	145,131
San Jose, Calif.	4,462	5,833	7,239	5,546	5,414	4,214	3,179	7,104	5,428	4,301
Seattle, Wash.	31,877	40,789	38,649	40,493	36,127	29,094	35,825	26,106	32,808	42,189
Spokane, Wash.	9,742	11,932	13,029	12,785	10,757	7,754	10,703	9,877	9,839	9,205
Stockton, Calif.	4,280	4,936	6,598	5,520	4,620	3,854	4,370	7,187	4,586	4,261
Tacoma, Wash.	8,046	7,904	9,975	7,932	8,239	6,180	8,363	8,305	8,417	7,750
Yakima, Wash.	1,961	2,509	2,711	2,355	1,991	2,148	2,762	2,726	2,530	1,847

# FEDERAL RESERVE CLEARING SYSTEM.

OPERATIONS DURING DECEMBER, 1922.

[Numbers in thousands. Amounts in thousands of dollars.]

Federal reserve bank or branch.	Items drawn on banks located in own district.				Items drawn on Treasurer of United States.		Total items handled, exclusive of duplications.		Items forwarded to other Federal reserve banks and their branches.		Items forwarded to parent bank or to branch in same district.		Total items handled, including duplications.				Number of member banks.		Number of nonmember banks.				
	In Federal reserve bank or branch city.		Outside Federal reserve bank or branch city.										Number.		Amount.				On par list.		Not on par list. <sup>1</sup>		
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	1922	1921 <sup>2</sup>	1922	1921 <sup>2</sup>	Dec. 31, 1922.	Dec. 15, 1921.	Dec. 31, 1921.	Dec. 15, 1921.	Dec. 31, 1922.	Dec. 15, 1921.	
Boston.....	634	618,044	4,014	457,839	164	15,431	4,812	1,091,314	243	55,787			5,055	4,652	1,147,081	1,026,186	427	436	259	257			
New York.....	2,266	4,497,835	5,766	743,180	1,111	121,844	9,143	5,362,859	1,357	147,755	27	5,301	10,527	8,493	5,515,915	2,879,242	723	715	265	254			
Buffalo.....	227	102,634	516	66,578	17	2,490	760	165,702	151	25,249	35	19,429	946	929	210,380	183,653	85	85	78	78			
Philadelphia.....	2,066	919,287	2,529	320,427	175	31,214	4,770	1,270,928	512	98,189			5,282	4,679	1,369,117	1,147,041	716	704	486	472			
Cleveland.....	787	274,431	1,504	174,318	88	6,522	2,379	455,271	79	6,590	34	7,223	2,492	1,826	469,084	354,348	313	319	517	521			
Cincinnati.....	221	142,321	925	92,621	78	7,379	* 1,235	* 243,965	16	6,286	16	6,286	34	3,110	1,128	253,361	206,477	224	222	315	320	1	1
Pittsburgh.....	558	277,041	1,059	115,123	51	6,012	1,668	398,176	100	41,549	35	8,947	1,803	1,443	448,672	359,132	344	343	253	244			
Richmond.....	135	154,868	2,265	328,444	51	6,946	2,451	490,258	157	66,704	42	10,726	2,680	2,401	567,688	514,113	471	464	699	728	568	577	
Baltimore.....	305	160,553	808	80,836	59	6,519	1,232	247,908	199	41,662	87	8,842	1,518	1,183	298,412	255,101	161	161	263	266			
Atlanta.....	713	197,542	409	49,567	38	4,719	1,160	251,828	33	9,502	28	4,319	1,221	561	265,649	128,618	228	225	90	102	457	505	
Birmingham.....	247	49,270	222	17,890	13	1,444	482	68,604	24	13,999	31	35,270	537	462	117,873	78,346	93	76	35	33	143	119	
Jacksonville.....	74	24,540	197	19,201	14	1,144	285	44,885	37	6,787	7	1,419	329	263	53,091	44,381	78	72	61	63	147	146	
Nashville.....	71	31,938	253	22,333	16	1,513	340	55,784	9	1,840	4	1,105	353	302	58,729	56,946	89	86	144	146	159	157	
New Orleans.....	81	52,053	134	16,652	39	18,081	254	86,786	49	14,441	6	9,933	309	274	102,160	76,066	55	54	50	50	223	229	
Chicago.....	1,222	666,114	4,576	362,277	406	56,685	6,204	1,085,076	387	36,844	12	2,490	6,603	5,474	1,124,410	964,158	1,318	1,319	3,988	3,976			
Detroit.....	314	193,597	625	53,870	42	4,487	981	251,954	24	6,654	5	2,814	1,010	798	261,419	197,544	125	124	258	258			
St. Louis.....	375	269,184	1,666	96,502	139	11,306	2,180	376,992	43	4,078	11	1,829	2,234	1,891	382,899	319,097	386	368	1,698	1,734			
Little Rock.....	80	32,134	391	26,498	8	1,568	479	60,200	3	985	11	1,381	493	389	62,566	47,823	70	69	233	228			
Louisville.....	117	74,460	501	30,155	41	8,493	659	113,108	12	1,097	2	166	673	557	114,371	85,154	95	94	348	348			
Memphis.....	89	47,734	247	18,277	13	2,629	349	68,640	2	305	2	266	353	289	69,211	51,472	59	55	188	186	159	167	
Minneapolis.....	278	134,002	1,843	97,876	47	6,568	* 2,173	* 243,152	92	16,851	1	120	2,266	1,862	260,123	230,577	825	823	2,407	2,447	180	152	
Helena.....	28	2,059	153	13,393	15	1,252	196	16,704	7	4,261	2	1,541	205	250	22,506	35,324	189	200	189	189	8	2	
Kansas City.....	377	230,248	1,515	100,709	93	11,761	1,985	342,718	271	36,018	75	12,264	2,331	2,069	391,000	361,896	330	365	1,417	1,451	3		
Denver.....	154	52,222	414	28,494	28	4,899	596	85,615	83	16,216	55	14,506	734	618	116,337	101,948	161	161	260	278	3		
Oklahoma City.....	7	57,669	1,101	76,491	11	1,788	1,186	135,948	59	8,149	20	6,890	1,265	1,055	150,987	134,542	412	317	419	530	7	1	
Omaha.....	120	61,089	697	36,572	35	2,614	* 852	* 100,437	50	5,396	20	4,639	922	713	110,472	92,038	249	254	911	913	152	184	
Dallas.....	230	92,016	1,657	212,449	36	4,575	1,923	309,040	94	10,335	50	6,178	2,067	1,572	325,551	282,327	659	655	731	818	52	23	
El Paso.....	49	11,542	152	11,004	17	1,520	218	24,126	15	2,198	7	6,676	240	212	27,002	24,678	64	71	59	71			
Houston.....	84	46,320	402	36,142	15	1,440	501	83,902	18	2,335	5	1,339	524	462	87,576	75,788	138	135	255	265			
San Francisco.....	352	139,757	788	48,293	74	165,594	1,214	353,634	37	4,307	37	4,775	1,288	902	362,716	216,509	102	209	274	278			
Los Angeles.....	401	153,428	1,615	117,207	56	21,284	2,072	291,919	122	17,041	62	8,150	2,256	1,756	317,110	243,528	161	172	191	163			
Portland.....	76	36,331	249	12,848	22	6,643	347	55,822	7	1,331	43	4,205	397	341	61,358	60,439	136	133	139	165	25		
Salt Lake City.....	60	34,633	466	32,697	19	3,967	545	71,297	17	3,419	12	2,246	573	515	76,062	77,013	162	178	103	105			
Seattle.....	140	39,289	261	17,328	44	10,132	445	66,749	27	5,881	48	5,925	520	393	78,555	65,174	66	61	92	98			
Spokane.....	43	19,611	218	11,608	11	2,454	272	33,673	16	2,865	20	2,962	308	267	39,500	41,692	109	102	148	164			
Total: December.....	13,048	9,896,396	40,198	3,939,759	3,086	562,907	* 56,348	* 14,404,974	4,381	722,883	852	191,986	61,591	50,984	15,319,843	11,018,371	9,913	9,827	17,822	18,217	2,288	2,263	
November.....	11,840	9,641,082	36,671	3,728,616	3,149	352,937	51,677	13,730,270	3,836	705,189	774	182,815	56,287	49,660	14,618,274	10,880,891	9,916	9,805	17,836	18,319	2,286	2,218	

<sup>1</sup> Incorporated banks other than mutual savings banks.

<sup>2</sup> Nov. 16 to Dec. 15.

\* Includes items drawn on banks in other Federal reserve districts forwarded direct to drawee banks as follows: Cincinnati, 11,000 items, \$1,644,000; Minneapolis, 5,000 items, \$4,106,000; Omaha, 255 items, \$162,000; total, 16,000 items and \$5,912,000.

NOTE.—Number of business days in period for Nashville was 26 and for other Federal reserve banks and branch cities, 25 days.

**GOLD AND SILVER IMPORTS AND EXPORTS.**  
IMPORTS INTO AND EXPORTS FROM THE UNITED STATES, DISTRIBUTED BY COUNTRIES.

Countries.	Gold.				Silver.			
	December—		Twelve months ending December—		December—		Twelve months ending December—	
	1921	1922	1921	1922	1921	1922	1921	1922
<b>IMPORTS.</b>								
Denmark.....	\$2,021,156		\$5,431,500	\$17,769,576	\$944		\$1,214	\$987
France.....	3,705,371	\$5,526,222	190,666,453	27,043,158	6,879	\$2,362	184,513	206,856
Germany.....	470,009		19,926,761	35,118	69,990		5,320,337	707,137
Netherlands.....	673,280	28,365	19,893,019	9,957,870			2,474	
Norway.....			1,534,985	8,423,894			7,767	11,732
Spain.....		15,462	3,319,281	71,125		29,136	16,471	145,621
Sweden.....	1,362,560	20,823	66,355,925	32,885,875			6,604	1,790
United Kingdom:								
England.....	13,729,437	15,600,648	202,091,349	121,732,152	13,189	37,503	1,199,408	236,576
Scotland.....				151,320				
Canada.....	2,314,451	501,657	36,856,110	10,378,032	255,818	924,175	3,807,268	6,975,881
Central America.....	694,734	195,187	6,539,820	4,373,220	75,348	83,289	2,022,926	1,461,229
Mexico.....	329,602	493,767	5,588,737	5,912,737	3,842,400	5,201,199	41,249,925	48,453,079
West Indies.....	183,878	15,332	7,081,563	1,780,020	427	39,308	306,510	577,137
Argentina.....	7,234	5,845	1,066,471	26,828	1,021	270	19,613	6,419
Chile.....	61,514	34,011	447,633	389,339	123,627	121,566	1,825,744	1,639,639
Colombia.....	1,020,608	255,239	11,941,685	6,847,910	14,463	11,645	178,632	253,013
Peru.....	166,102	282,033	1,613,621	1,619,119	795,391	1,180,316	5,598,218	8,179,895
Uruguay.....	371,146		6,817,903	273,689	24,244		28,110	2,167
Venezuela.....	156,088	66,997	1,353,846	915,169	66	80	3,309	3,718
China.....	99,586	1,177,273	17,912,687	8,937,975	25	4,398	8,029	12,215
British India.....	195,167		32,009,533				12,368	
Dutch East Indies.....	290,747	324,912	1,316,545	1,626,911	111,028	85,864	494,047	616,672
Hongkong.....			5,660,825	14,730			396	75
Philippine Islands.....	218,778	133,699	1,399,808	833,034	1,817	2,212	21,773	12,689
British Oceania.....	2,154,527	95,884	16,970,261	4,230,900	137	123	4,679	1,579
Egypt.....	902,532	1,587,338	6,874,924	2,569,101			169	12,788
All other.....	529,320	73,978	20,577,032	6,350,983	179,190	124,124	922,232	1,287,759
<b>Total.....</b>	<b>31,665,827</b>	<b>26,439,677</b>	<b>691,248,297</b>	<b>275,169,785</b>	<b>5,515,904</b>	<b>7,847,570</b>	<b>63,242,671</b>	<b>70,806,653</b>
<b>EXPORTS.</b>								
Spain.....	25,000	10,000	25,200	727,000				600
Sweden.....			2,643,013	78,000				10,685,540
United Kingdom—England.....		15,472	20,990	20,990	130,960	1,897,927	11,843,103	2,220,671
Canada.....	206,209	1,656,937	2,913,783	22,161,759	656,879	133,660	4,591,373	7,350
Central America.....			12,127				284,843	2,269,685
Mexico.....	1,685,380	454,950	7,090,419	4,303,609	94,470	182,334	2,140,667	29,433
West Indies.....		135	250,844	5,884	3,758	467	425,372	805,703
Colombia.....				500,000			239,500	20,225,808
China.....		250,200		350,200	2,529,615	2,293,594	12,782,879	11,971,351
British India.....			1,179,000	4,445,339	84,325	2,114,046	3,233,382	1,320,000
Dutch East Indies.....			60,000	435,010			1,848,000	12,852,797
French East Indies.....					1,320,000		10,408,021	47,237
Hongkong.....					2,005,797	291,172	3,492,359	371,111
Japan.....	212,130	311,760	9,621,655	3,582,385	34,243		285,900	
All other.....	32,863	10,137	107,463	252,591				
<b>Total.....</b>	<b>2,161,582</b>	<b>2,709,591</b>	<b>23,891,377</b>	<b>36,874,894</b>	<b>7,145,047</b>	<b>6,913,200</b>	<b>51,575,399</b>	<b>62,807,286</b>

**DISCOUNT RATES OF FEDERAL RESERVE BANKS IN EFFECT JANUARY 31, 1923.**

Federal reserve bank.	Paper maturing within 90 days.					Bankers' acceptances maturing within 3 months.	Agricultural and live-stock paper maturing after 90 days, but within 6 months.
	Secured by—		Trade acceptances.	Commercial, agricultural, and live-stock paper, n. e. s.			
	Treasury notes and certificates of indebtedness.	United States bonds and Victory notes.					
Boston.....	4	4	4	4		4	
New York.....	4	4	4	4		4	
Philadelphia.....	4½	4½	4½	4½		4½	
Cleveland.....	4½	4½	4½	4½		4½	
Richmond.....	4½	4½	4½	4½		4½	
Atlanta.....	4½	4½	4½	4½		4½	
Chicago.....	4½	4½	4½	4½		4½	
St. Louis.....	4½	4½	4½	4½		4½	
Minneapolis.....	4½	4½	4½	4½		4½	
Kansas City.....	4½	4½	4½	4½		4½	
Dallas.....	4½	4½	4½	4½		4½	
San Francisco.....	4	4	4	4		4	

**GOLD SETTLEMENT FUND.**

INTERBANK TRANSACTIONS FROM DECEMBER 29, 1922, TO JANUARY 25, 1923, INCLUSIVE.

[In thousands of dollars.]

Federal reserve bank.	Transfers.		Daily settlements.		Changes in ownership of gold through transfers and settlements.		Balance in fund at close of period.
	Debits.	Credits.	Debits.	Credits.	Decrease.	Increase.	
Boston.....	9,500	5,000	574,766	591,856		12,590	29,070
New York.....	214,000	19,000	2,021,140	2,117,665	98,475		155,648
Philadelphia.....	7,500	12,500	656,011	653,791		2,780	21,224
Cleveland.....		23,500	548,424	500,103		35,179	100,357
Richmond.....		23,000	457,087	448,689		14,592	31,787
Atlanta.....	1,000	14,000	238,606	226,460		854	25,251
Chicago.....		38,000	1,029,079	1,023,911		32,832	61,245
St. Louis.....		31,000	525,805	499,117		4,312	16,087
Minneapolis.....	1,000	13,000	142,616	137,204		6,648	33,929
Kansas City.....	1,000	24,000	376,406	350,978	2,428		37,250
Dallas.....	3,000	1,000	216,496	216,305	8,131		13,379
San Francisco.....	3,000	36,000	275,966	242,213	763		34,627
<b>Total 4 weeks ending—</b>							
Jan. 25, 1923.....	240,000	240,000	7,062,412	7,062,412	109,787	109,787	559,854
Dec. 23, 1922.....	77,000	77,000	6,547,524	6,547,524			516,581
Jan. 26, 1922.....	82,475	82,475	5,123,081	5,123,081			503,703
Dec. 29, 1921.....	149,273	149,273	5,166,443	5,166,443			541,973

**MONEY IN CIRCULATION, JANUARY 1, 1923.**

[Source: United States Treasury Department circulation statement.]

	Stock of money in the United States.	Money held by the U. S. Treasury and the Federal reserves system.	Money in circulation.	
			Amount.	Per capita.
Gold coin and bullion.....	\$3,933,475,615	\$3,504,283,436	\$429,192,179	\$3.88
Gold certificates.....	<sup>1</sup> (708,130,329)	405,386,430	302,743,899	2.74
Standard silver dollars.....	441,754,404	380,289,095	61,465,309	.56
Silver certificates.....	<sup>1</sup> (344,286,693)	55,696,884	288,589,809	2.61
Treasury notes of 1890.....	<sup>2</sup> (1,484,883)	1,000	1,483,883	.01
Subsidiary silver.....	269,288,995	23,310,986	245,978,009	2.23
United States notes.....	346,681,016	60,475,349	286,205,667	2.59
Federal reserve notes.....	2,817,191,215	444,326,294	2,372,864,921	21.46
Federal reserve bank notes.....	43,913,965	7,186,171	36,727,794	.33
National-bank notes.....	762,128,087	54,480,566	707,647,521	6.40
<b>Total.....</b>	<b>8,614,433,297</b>	<b>4,935,436,211</b>	<b>4,732,693,991</b>	<b>42.81</b>
<b>Comparative totals:</b>				
Dec. 1, 1922.....	8,482,254,551	4,885,537,645	4,616,508,059	41.80
Jan. 1, 1922.....	8,282,070,452	4,750,975,593	4,521,566,570	41.51
Apr. 1, 1917.....	5,312,109,272	3,896,318,653	4,100,590,704	39.54
July 1, 1914.....	3,738,288,871	1,843,452,323	3,402,015,427	34.35
Jan. 1, 1879.....	1,007,084,483	212,420,402	816,266,721	16.92

<sup>1</sup> Does not include gold bullion or foreign coin outside of vaults of the Treasury, Federal reserve banks, and Federal reserve agents.

<sup>2</sup> These amounts are not included in the total, since the money held in trust against gold and silver certificates and Treasury notes of 1890 is included under gold coin and bullion and standard silver dollars, respectively.

<sup>3</sup> Includes gold held in trust against gold certificates and standard silver dollars held in trust against silver certificates and Treasury notes of 1890, the aggregate of which should be deducted from the sum of money held by the United States Treasury and the Federal reserve system and money in circulation to arrive at the stock of money in the United States. The amounts of such gold and silver held in trust as of the date of this statement are shown in parentheses in the first column.

# EARNINGS AND EXPENSES OF FEDERAL RESERVE BANKS FOR THE YEAR ENDING DECEMBER 31, 1922.

## EARNINGS.

	Total.	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Discounted bills.....	\$26,523,123	\$1,543,539	\$3,970,210	\$2,393,673	\$2,247,607	\$2,569,887	\$1,951,695	\$3,862,291	\$1,303,808	\$1,451,659	\$1,492,657	\$1,609,383	\$2,126,654
Purchased bills.....	5,628,956	591,647	1,619,512	712,383	743,759	74,655	164,704	547,339	255,750	.....	8,828	197,994	712,385
United States securities.....	16,682,463	1,391,691	5,227,483	1,119,457	1,946,915	95,378	189,890	2,031,340	832,169	383,531	1,408,738	195,049	1,811,317
Deficient reserve penalties.....	602,951	9,777	49,738	14,409	27,223	97,089	44,357	49,761	45,915	128,087	47,215	50,432	48,957
Miscellaneous.....	1,053,246	4,659	474,371	12,028	28,718	5,944	2,590	208,132	18,805	5,971	137,222	32,917	121,889
<b>Total earnings.....</b>	<b>50,490,739</b>	<b>3,541,313</b>	<b>11,341,319</b>	<b>4,251,950</b>	<b>4,994,282</b>	<b>2,832,944</b>	<b>2,352,736</b>	<b>6,748,863</b>	<b>2,456,447</b>	<b>1,969,248</b>	<b>3,094,660</b>	<b>2,085,775</b>	<b>4,821,202</b>

## CURRENT EXPENSES.

<b>Salaries:</b>													
Bank officers.....	2,461,323	141,000	494,844	129,499	220,100	155,467	159,994	367,156	155,877	107,977	161,530	132,184	235,695
Clerical staff.....	14,222,021	925,072	3,602,883	982,600	1,081,239	760,883	487,751	1,907,058	829,072	463,390	957,883	680,629	1,543,561
Special officers.....	818,772	34,430	188,207	57,952	93,785	33,189	23,375	155,333	28,418	22,281	62,918	37,134	81,750
All other.....	1,310,524	100,932	280,085	83,477	108,236	78,739	38,758	236,665	40,750	16,446	107,316	105,356	113,764
Governors' conferences.....	5,515	411	490	206	360	166	656	309	456	467	512	261	1,221
Federal reserve agents' conferences.....	4,029	426	247	181	260	123	286	348	267	250	297	1,116	297
Federal Advisory Council.....	9,063	250	845	461	613	629	690	992	1,250	1,140	460	250	1,483
Directors' meetings.....	146,084	7,367	23,075	6,407	8,386	5,795	21,758	8,221	10,675	11,407	25,604	6,003	11,386
Traveling expenses <sup>1</sup> .....	293,236	9,820	28,923	16,378	21,036	23,101	19,284	42,083	24,498	21,470	17,941	30,383	33,319
Assessment for Federal Reserve Board expenses.....	722,545	55,241	197,882	60,625	76,737	37,402	30,164	98,307	31,820	24,945	32,230	26,189	51,003
Legal fees.....	63,322	775	3,982	4,370	5,538	12,218	8,948	1,387	2,919	11,592	6,911	708	3,974
Insurance (life, fidelity, casualty, workmen's compensation, and general liability).....	433,273	29,072	63,887	43,202	24,612	22,541	27,651	65,581	40,587	25,311	28,650	24,454	37,725
<b>Banking house:</b>													
Taxes.....	270,915	90,900	29,184	21,276	23,493	40,901	9,393	.....	3,076	1,578	15,495	30,485	5,134
Fire insurance.....	9,238	2,081	348	452	897	1,774	260	43	.....	.....	1,962	904	347
Light, heat, and power.....	175,908	25,489	16,569	39,085	7,494	10,989	10,555	.....	3,014	902	28,253	28,212	5,346
Repairs and alterations (not of permanent character).....	89,638	1,767	2,581	20,396	6,845	24,854	1,101	.....	382	1,667	25,883	3,215	947
All other.....	33,122	1,886	3,345	1,425	20,084	1,274	562	.....	193	11	3,958	.....	384
Rent.....	1,040,949	52,772	350,284	1,675	162,648	4,341	25,841	205,729	73,627	44,038	18,786	3,743	97,465
Fire insurance—furniture and equipment.....	11,099	381	909	784	1,091	613	248	1,775	1,027	491	1,133	643	2,014
Office and other supplies.....	443,193	26,539	62,481	31,457	37,965	36,384	17,819	83,090	19,244	21,954	32,408	31,792	42,060
Printing and stationery.....	739,715	74,588	90,276	51,973	66,080	48,431	33,225	109,172	37,977	42,515	45,300	54,667	85,511
Telephone.....	203,023	21,169	48,983	23,431	15,969	5,944	4,546	31,328	7,448	7,090	9,127	12,213	15,775
Telegraph.....	573,858	7,977	63,943	18,745	36,516	34,934	64,789	62,168	42,841	21,697	73,831	58,383	88,034
Postage (other than on money and security shipments).....	1,118,151	81,415	128,952	73,008	82,843	89,731	61,085	150,434	97,582	79,184	121,593	68,322	84,002
Expressage (other than on money and securities shipments).....	49,084	2,434	4,176	4,283	3,043	2,215	1,832	3,824	3,477	887	3,998	3,080	15,835
Security shipments.....	139,392	14,005	38,485	6,498	16,011	5,669	3,251	11,717	8,081	4,018	12,028	3,933	15,696
Currency and coin shipments.....	1,078,518	147,072	228,530	142,359	101,218	59,415	52,634	136,943	43,711	22,992	39,118	54,206	50,320
Federal reserve currency:													
Original cost, including ship- ping charges.....	1,578,592	65,501	553,125	118,014	124,508	68,358	107,938	95,378	52,719	53,334	64,990	44,262	230,465
Cost of redemption, including shipping charges.....	434,179	38,792	70,174	43,381	37,788	24,734	25,219	82,631	11,586	16,765	28,077	12,336	42,696
Taxes on Federal Reserve bank note circulation.....	304,261	23,871	69,374	24,723	21,335	13,184	22,360	33,425	16,377	14,260	37,713	12,639	15,000
All other expenses.....	776,801	38,965	129,461	45,596	54,536	27,358	31,080	183,960	34,140	44,876	44,962	46,508	88,359
<b>Total current expenses.....</b>	<b>29,559,343</b>	<b>2,022,400</b>	<b>6,776,530</b>	<b>2,053,919</b>	<b>2,461,266</b>	<b>1,631,356</b>	<b>1,293,053</b>	<b>4,080,057</b>	<b>1,623,222</b>	<b>1,084,942</b>	<b>2,010,820</b>	<b>1,515,391</b>	<b>3,006,387</b>

<sup>1</sup> Other than those connected with governor's and agents' conferences and meetings of directors and of the advisory council.

PROFIT AND LOSS ACCOUNT.

	Total.	Boston.	New York.	Philadel- phia.	Cleaveland.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Earnings.....	\$50,490,739	\$3,541,313	\$11,341,319	\$4,251,950	\$4,094,282	\$2,832,944	\$2,352,736	\$6,748,803	\$2,456,447	\$1,969,248	\$3,094,660	\$2,085,775	\$4,821,202
Current expenses.....	29,559,343	2,022,400	6,776,530	2,053,919	2,461,266	1,631,356	1,293,053	4,080,057	1,623,222	1,031,942	2,010,820	1,515,391	3,006,387
Current net earnings.....	20,931,396	1,518,913	4,564,789	2,198,031	2,533,016	1,201,588	1,059,683	2,668,806	833,225	884,306	1,083,840	570,384	1,814,815
Additions to current net earnings:													
Amounts deducted from re- serve for—													
Depreciation on U. S. bonds.....	630,122	32,100	.....	67,732	43,728	3,618	2,590	144,554	3,883	.....	95,999	231,523	4,395
Probable losses.....	390,984	.....	.....	.....	.....	.....	.....	300,000	.....	.....	.....	80,984	.....
All other.....	328,838	9,494	2,743	14,946	5,161	8,831	1,823	127,465	2,257	41,231	5,960	1107,113	1,814
Total additions.....	1,339,944	41,594	2,743	82,678	48,889	12,449	4,413	572,019	6,140	41,231	101,959	419,620	6,209
Deductions from current net earn- ings:													
Depreciation allowances on bank premises.....	3,107,295	328,215	365,053	.....	125,428	178,358	163,294	1,400,000	2,000	9,713	337,810	161,018	36,406
Furniture and equipment.....	788,244	133,100	50,172	42,931	42,779	64,710	17,387	238,923	44,755	24,640	60,128	32,710	36,003
Reserve for probable losses.....	886,000	.....	.....	.....	.....	50,000	200,000	.....	125,000	.....	.....	439,000	72,000
Reserve for self insurance.....	444,072	.....	294,072	.....	100,000	50,000	.....	.....	.....	.....	.....	.....	.....
Reserve for depreciation on U. S. bonds.....	78,058	.....	.....	.....	.....	.....	.....	.....	.....	78,058	.....	.....	.....
All other.....	469,935	1,784	136,642	902	45,010	3,521	10,685	196,687	20,038	30,431	4,825	3,151	16,259
Total deductions.....	5,773,604	463,105	845,939	43,833	313,217	346,589	391,366	1,835,610	191,793	142,842	402,763	635,879	160,668
Net deductions from current net earnings.....	4,433,660	421,511	843,196	* 38,845	264,328	334,140	386,953	1,263,591	185,653	101,611	300,804	216,259	154,459
Net earnings available for divid- ends, franchise tax, and surplus	16,497,736	1,097,402	3,721,593	2,236,876	2,268,688	867,448	672,730	1,403,215	647,572	782,695	783,036	354,125	1,660,356
Dividends paid.....	6,307,035	481,951	1,652,138	541,552	692,436	333,321	256,618	876,203	283,166	213,774	275,655	251,915	448,306
Franchise tax paid U. S. Govern- ment.....	7,450,543	538,883	1,862,509	855,364	714,988	480,714	374,501	476,111	87,956	512,029	456,643	.....	1,090,845
Transferred to surplus account.....	2,740,158	76,568	206,946	839,960	861,264	53,413	41,611	52,901	276,450	56,892	50,738	102,210	121,205
MEMORANDA.													
Amounts added to surplus ac- count through reversal of charges previously made for—													
Depreciation allowances on bank premises.....	2,630,277	.....	.....	.....	125,000	225,277	.....	2,630,000	.....	.....	.....	.....	250,000
Reserve for undetermined liabilities.....	1,000,000	.....	1,000,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Amounts deducted from surplus account and paid to U. S. Govern- ment as a franchise tax for 1921.....	* 3,400,062	247,350	* 1,604,549	36,366	.....	20,459	213,629	710,190	.....	52,423	208,170	.....	306,926

\* Includes \$55,000 representing excess of sale price over net book value of old bank building sold during the year.

\* Net additions.

\* Includes \$270,389 for 1920.



REIMBURSABLE EXPENDITURES OF FISCAL AGENCY DEPARTMENT.

	Total.	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Expenditures during 1922:													
Salaries.....	\$699,144	\$10,037	\$12,093	\$27,470	\$38,725	\$25,450	\$29,603	\$89,536	\$53,987	\$104,367	\$107,952	\$12,828	\$37,096
All other.....	484,671	23,709	167,196	26,199	31,622	15,451	17,445	72,811	21,812	44,662	25,411	12,162	26,188
Amounts reimbursable Jan. 1, 1922	63,113	2,216	3,910	2,101	7,148	1,299	3,485	11,488	5,280	8,737	10,319	3,113	4,017
Total.....	1,246,928	65,962	213,199	55,770	107,495	42,203	50,533	173,835	81,079	157,766	143,682	58,103	97,301
Reimbursements received during 1922.....	878,685	40,471	102,887	41,393	72,767	35,843	41,784	134,094	55,911	129,734	109,900	51,429	62,472
Balance reimbursable Jan. 1, 1923.....	368,243	25,491	110,312	14,377	34,728	6,360	8,749	39,741	25,168	28,032	33,782	6,674	34,829

## DISCOUNT AND INTEREST RATES.

In the following table are presented actual discount and interest rates prevailing during the 30-day period ending January 15, 1923, in the various cities in which the several Federal reserve banks and their branches are located. A complete description of the several types of paper for which quotations are given will be found in the September, 1918, and October, 1918, FEDERAL RESERVE BULLETIN.

A comparison of the discount and interest rates for prime commercial paper prevailing in the various centers during the 30-day period ending January 15 and the 30-day period ending December 15 shows relatively little change, but rates for interbank loans, bankers' acceptances, and collateral loans were reported lower in some centers. Compared with the 30-day period January 15, 1922, all rates are lower in almost all cities.

DISCOUNT AND INTEREST RATES PREVAILING IN VARIOUS CENTERS DURING THE 30-DAY PERIOD ENDING JANUARY 15, 1923.

District.	City.	Prime commercial paper.				Interbank loans.	Bankers' acceptances, 60 to 90 days.		Collateral loans—stock exchange.			Cattle loans.	Secured by warehouse receipts.	Ordinary loans to customers secured by Liberty bonds.
		Customers'.		Open market.			Indorsed.	Unindorsed.	Demand.	3 months.	3 to 6 months.			
		30 to 90 days.	4 to 6 months.	30 to 90 days.	4 to 6 months.									
		<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>	<i>H. L. C.</i>
No. 1.	Boston.	5 4½ 5	5 4½ 5	5 4½ 4½	5 4½ 4½	5 4½ 5	4 4 4	4½ 4 4	5½ 5 5	5½ 5 5½	5½ 5 5½			4½ 4½ 4½
No. 2.	New York	8 4½ 4½-5	6½ 4½ 4½-5	5 4½ 4½-4½	5 4½ 4½-5	6 4½ 4½-5	4½ 4 4-4½	5½ 4 4-4½	6 3½ 4-5	6 4½ 5	6 4½ 5			6 4½ 4½-5
	Buffalo.	7 5 6	6 5 6	6 5 6	5 5 5	8 5 6½			7 5 6	7 5 6	6 5 6			6 5 6
No. 3.	Philadelphia.	6 4½ 5	6 4½ 5½	5 4½ 4½	5½ 4½ 4½	6 5			6 4½ 5	6 5 5	6 4½ 5			6 4½ 5
No. 4.	Cleveland.	7 4½ 6	7 4½ 6					5½ 5 5	6 5 6	6 5 6	6 5 6			5½ 5 5
	Pittsburgh.	6 5 6	6 5 6	5 5 5	5 5 5	6 6 6	4½ 4½ 4½	4½ 4 4½	6 5 6	6 5 6	6 5 6			6 5 6
	Cincinnati.	6 5 6	6 5½ 6	6 5 5½	6 5½ 6	6 5 5-5½	4½ 4 4	4½ 4 4	6 5 5½-6	6 5½ 6	6 5½ 6			6 5 6
No. 5.	Richmond.	6 5 6	6 5½ 6	5½ 5 5½	5½ 5 5½	6 4½ 6			6 5 6	6 5 6	6 5 6			6 5 6
	Baltimore.	6 5 5½	6 5 5½			6 5 5½			6 5 5½	6 5 5½	6 5 5½			6 5 5½
No. 6.	Atlanta.	8 4 6	7 4 6	4½ 4 4½	4½ 4 4½	8 5 6	6 5 6	7 5 6	8 5 6	7 4½ 6	7 4½ 6			8 5 6
	Birmingham.	8 5 6-7	8 5 6-7	5 4½ 4½	5 4½ 4½-1	8 5 6			8 5 5-6	8 5 6-7	8 6 6			8 6 6
	Jacksonville.	7½ 5 6½	7½ 5 6½	5 4½ 4½-5	5½ 4½ 5	6½ 6 6			7 5½ 6½	7½ 5½ 7	7½ 5½ 6½			7½ 5 6½
	New Orleans.	8 4½ 5½	7½ 5 6	4½ 4½ 4½	5 4½ 4½	7 5 6	5½ 4½ 4½	5½ 4½ 5	7½ 5 6	7½ 5 6	7½ 5 6			7 5 5½
	Nashville.	8 6 7	8 6 7			8 6 6			8 6 7	8 6 7	8 6 7			7 6 6
No. 7.	Chicago.	6 4½ 5-5½	6 4½ 5-5½	5 4½ 5	5 4½ 4½-5	6 5 5-5½	4 4 4	4 4 4	6 4½ 5-5½	6 4½ 5-5½	6 4½ 5-5½			6 4½ 5
	Detroit.	6 5 5½	6 5 5½	4½ 4½ 4½	4½ 4½ 4½	5½ 5 5½			6 5 6	6 5 6	6 5 6			6 5 6
No. 8.	St. Louis.	6 4 5½	6 4 5½	5 4½ 4½	5 4½ 4½	6 5 5½	4 4 4		6 5½ 5½	6 4½ 5½	6 4½ 5½			6 4½ 5½
	Louisville.	6 4½ 6	6 5 6	4½ 4½ 4½	4½ 4½ 4½	6 5 6			6 5 6	6 5 6	6 5 6			6 5 6
	Memphis.	6 5 6	7 6 6	6 5 6		6 5½ 6		5 5 5	6 5 6	6 6 6	6 6 6			6 6 6
	Little Rock.	7 6 6	7 6 6	5 4½ 4½	5 4½ 4½	6 5½ 6	4½ 4 4	4½ 4 4	7 6 6	6 6 7	8 6 7			7 6 6-7
No. 9.	Minneapolis.	5 5 5	5½ 5 5½	5 4½ 4½	5 4½ 4½	6 5½ 6	4½ 4½ 4½	5 4½ 4½	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6			5 5 5
	Helena.	8 7 8	8 7 8	6 4½ 4½	6 4½ 4½	8 7 8			8 8 8	8 7 8	8 7 8			8 8 8
No. 10.	Kansas City.	7 5 6	7 5 6	5 4 4	5 4 4	7 5 6			7 5 6	8 5 6	8 5 6			8 5 6
	Omaha.	7½ 5 6½	7½ 5 6½	4½ 4½ 4½	4½ 4½ 4½	7½ 5½ 6½			7½ 5½ 6½	7½ 5½ 6½	7½ 5½ 6½			7½ 5 6½
	Denver.	8 6 6-7	8 6 6-7	4½ 4½ 4½	4½ 4½ 4½	8 6 7			8 5 6	8 5 6	8 5 6			8 5 6
	Oklahoma City.	10 4½ 7	10 6 7	4½ 4 5½	4½ 4 5½	8 6 7	7 6 6	7 6 6	10 3 6	10 6 8	10 6 8			10 6 8
No. 11.	Dallas.	6 6 4½ 5½	6 5 5½	6 4½ 5½	6 5 5½	9 6 8			8 6 6	8 6 7	8 6 8			8 6 8
	El Paso.	10 6 8	10 8 8	5½ 4 4½	10 8 8	9 6 8			10 8 8	10 8 8	10 8 8			10 8 8
	Houston.	7 5 6	7 5 6			5 4½ 4½			7 5 6	7 5 6	7 5 6			5 4½ 5
No. 12.	San Francisco.	6 5 5-5½	6 5 5½	4½ 4½ 4½-4½	4½ 5½ 4½-4½	6 5½ 5½	5 4 4½	4½ 4 4½	6 5 5½-6	6 6 5 7	6 5 6			6 5 5½-6
	Portland.	8 4½ 7	8 4½ 7	5 4½ 4½	5 4½ 4½	7 6 6	7 4½ 4½		8 4 7	8 5 6	8 6 6			8 6 6
	Seattle.	8 5 6½	8 6 6½	5 4½ 4½	5 4½ 4½	6½ 6 6½	5½ 4 5	4 4 4	8 6 6	8 4½ 7	8 6 8			8 6 7
	Spokane.	8 5½ 6½-7	8 6 7	6½ 6½ 6½		7 6 6	7 6 6½-7	7 6 7	8 6 6-8	8 6 7	8 6 7			8 6 7
	Salt Lake City.	8 6 7	8 6 7			7 6 6			8 7 7	8 7 7	8 7 7			8 7 8
	Los Angeles.	8 4½ 6	8 4½ 6½	5 4½ 4½	5 4½ 4½	7 5 6	4½ 3½ 4	4½ 4 4	7 5 6	8 5 6½	8 5 6½			8 5½ 6½

\*Rates for demand paper secured by prime bankers' acceptances—high, 5½; low, 3½; customary, 4-5.

FEBRUARY, 1923.

FEDERAL RESERVE BULLETIN.

## FOREIGN EXCHANGE RATES.

[General index for January, 1923 (preliminary), 68; for December, 1922 (preliminary), 70; for January, 1922, 65. Noon buying rates for cable transfers in New York as published by Treasury. Rates in cents per unit of foreign currency.]

## COUNTRIES INCLUDED IN COMPUTATION OF INDEX.

	Monetary unit.	Par of exchange.	Low		High.		Average.		Index (per cent of par). <sup>1</sup>	
			January.	December.	January.	December.	January.	December.	January.	December.
Belgium.....	Franc.....	19.30	5.1200	6.4200	6.8100	6.9500	6.0765	6.6148	31.48	34.43
Denmark.....	Krone.....	26.80	18.7300	20.3500	20.5500	20.9900	19.7938	20.6700	73.86	77.13
France.....	Franc.....	19.30	5.8200	6.9700	7.4100	7.6100	6.6789	7.2296	34.60	37.46
Great Britain.....	Pound.....	486.65	463.8100	451.9800	467.7300	467.9000	465.4611	460.9800	95.65	94.73
Italy.....	Lira.....	19.30	4.7000	4.8200	5.1700	5.1300	4.8702	5.0340	25.28	26.08
Netherlands.....	Florin.....	40.20	39.3700	39.5200	39.7200	39.7200	39.5642	39.8368	98.42	99.10
Norway.....	Krone.....	26.80	18.4100	18.4900	19.0500	19.2400	18.0685	18.9396	69.65	70.67
Spain.....	Peseta.....	19.30	15.5300	15.3600	15.7800	15.7900	15.0600	15.6356	81.14	81.01
Sweden.....	Krona.....	26.80	26.6600	26.9000	27.0200	27.0300	26.8610	26.9484	100.23	100.55
Switzerland.....	Franc.....	19.30	18.5800	18.7100	18.9500	19.0000	18.7831	18.9100	97.32	97.98
Canada.....	Dollar.....	100.00	98.8750	98.5605	99.6181	99.9874	99.0943	99.4484	99.09	99.45
Argentina.....	Peso (gold).....	96.48	83.5700	83.7500	85.6800	86.3700	84.7354	85.5688	87.83	88.69
Brazil.....	Milreis.....	32.44	11.1900	11.6200	11.6700	12.2400	11.3796	11.9452	35.08	36.62
Chile.....	Peso (paper).....	* 19.53	11.9800	11.8500	13.3200	13.0500	12.8177	12.4064	65.63	63.52
China.....	Shanghai tael.....	* 66.85	70.7300	70.4500	72.8500	72.0700	71.9331	71.0444	107.60	106.27
India.....	Rupce.....	48.66	31.1100	30.0300	33.2000	31.1100	31.7262	30.6488	65.20	62.99
Japan.....	Yen.....	49.85	48.3000	48.5100	48.9600	48.9900	48.7454	48.8500	97.78	97.99

## OTHER COUNTRIES.

	Monetary unit.	Par of exchange.	Low.		High.		Average.		Index (per cent of par). <sup>1</sup>	
			January.	December.	January.	December.	January.	December.	January.	December.
Austria.....	Krone.....	20.26	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.01	0.01
Bulgaria.....	Lev.....	19.30	.0586	.6783	.7143	.7180	.6947	.6997	3.60	3.63
Czechoslovakia.....	Krone.....	.....	2.7705	2.7256	3.0925	3.1878	2.8556	3.0969	.....	.....
Finland.....	Markka.....	19.30	2.4688	2.4888	2.5100	2.5263	2.4807	2.5124	12.85	13.02
Germany.....	Reichsmark.....	23.82	.0021	.0118	.0139	.0186	.0073	.0136	.03	.06
Greece.....	Drachma.....	19.30	1.1588	1.0000	1.2863	1.4200	1.2206	1.2337	6.32	6.39
Hungary.....	Krone.....	20.26	.0378	.0396	.0411	.0437	.0392	.0430	.19	.21
Poland.....	Polish mark.....	.....	.0027	.0054	.0057	.0060	.0043	.0057	.....	.....
Portugal.....	Escudo.....	108.05	4.4600	4.2500	4.7000	4.8500	4.6050	4.5212	4.26	4.18
Rumania.....	Leu.....	19.30	.3728	.5775	.5906	.6338	.5194	.6111	2.69	3.17
Yugoslavia.....	Dinar.....	19.30	.6955	1.0750	1.0864	1.4014	.9560	1.2231	4.95	6.34
Cuba.....	Peso.....	100.00	99.9000	99.8875	100.0000	100.0500	99.9508	99.9450	99.95	99.95
Mexico.....	do.....	49.85	48.5417	48.3125	49.2031	48.7025	48.9082	48.4468	98.11	97.19
Uruguay.....	do.....	103.42	82.3100	80.9800	85.6400	85.4500	84.6050	84.2120	81.81	81.43
China.....	Mexican dollar.....	* 48.11	51.7100	51.4200	52.7500	52.9000	52.2985	52.0288	108.71	108.15
Hongkong.....	Dollar.....	* 47.77	52.7700	52.5000	53.9600	54.0500	53.4246	53.2288	111.84	111.43
Straits Settlements.....	Singapore dollar.....	56.78	52.9600	51.9600	54.7100	53.6700	54.1412	53.0100	95.35	93.36

<sup>1</sup> Based on average.<sup>2</sup> 1913 average.

## SILVER.

[Average price per fine ounce.]

	January.	December.
London (converted at average rate of exchange).....	\$0.66978	\$0.65104
New York.....	.66094	.64250

**FINANCIAL STATISTICS FOR PRINCIPAL FOREIGN COUNTRIES.**

A summary of banking and financial conditions abroad is presented statistically in the accompanying tables.

**ENGLAND.**

[Amounts in millions of pounds sterling.]

	Note accounts and Bank of England deposits.				Nine London clearing banks. <sup>1</sup>				London bankers' clearing house returns—total clearings.	Government floating debt.			Discount rates.			Capital issues in United Kingdom. <sup>4</sup>	Index numbers of securities prices. <sup>5</sup>	Statist. index number of foreign exchange value of £. <sup>6</sup>
	Gold and silver, coin and bullion. <sup>1</sup>	Bank notes in circulation. <sup>2</sup>	Currency notes and certificates outstanding.	Total deposits.	Money at call and short notice.	Discounts and advances.	Investments.	Total deposits.		Treasury bills.	Temporary advances.	Total floating debt.	Three months' Treasury bills.	Three months' bank	Six months' trade bills.			
<b>Average of end of month figures:</b>												<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>				
1913.....	38	29	57					1,370	15			4½	4½	21				
1920.....	146	103	348	147				3,252	1,078	219	1,297	6½	6½	40		99.56		
1921.....	157	108	327	136	97	1,176	309	1,768	2,911	1,139	183	1,322	4½	5½	6½	33	99.2	110.1
1922.....	156	103	296	130	107	1,008	372	1,727	3,097	796	165	961	2½	2½	3½	49	111.7	120.6
<b>1922, end of—</b>																		
January.....	157	103	305	135	114	1,192	333	1,826	3,399	1,038	116	1,154	3½	3½	5½	158	102.1	118.2
October.....	154	101	287	125	105	1,033	370	1,636	3,124	740	179	919	2½	2½	3½	31	115.1	123.0
November.....	154	102	288	121	98	1,031	365	1,667	2,959	732	179	911	2½	2½	3½	19	114.1	124.6
December.....	154	104	301	133	106	1,031	360	1,685	2,769	719	222	941	2½	2½	3½	15	113.2	125.8

<sup>1</sup> Held by the Bank of England and by the Treasury as note reserve.  
<sup>2</sup> Less notes in currency notes account.  
<sup>3</sup> Average weekly figures.  
<sup>4</sup> Statist.  
<sup>5</sup> Bankers Magazine.  
<sup>6</sup> Excluding Germany.

**FRANCE.**

[Amounts in millions of francs.]

	Bank of France.					Government finances.					New stock and bond issues.		
	Gold reserves. <sup>1</sup>	Silver reserves.	War advances to the Government.	Note circulation.	Total deposits.	Government revenue.	Bons de la Défense Nationale.	Internal debt (including Bons de la Défense Nationale).	Price of 3 per cent perpetual rente.	Average daily clearings of the Paris banks.	Savings banks, excess of deposits (+) or withdrawals (-).	Value.	Average rate of return.
<b>Average of end of month figures:</b>													
1913.....	3,343	629		5,565	830	320		35,000	86.77	59	-65		
1920.....	3,586	253	26,000	38,066	3,527	1,005			57.34	554	+48	4,654	
1921.....	3,568	274	25,300	37,404	2,927	1,103			56.56	550	+67	1,100	6.70
1922.....	3,597	285	23,042	36,177	2,307				58.48	525	+53		
<b>1922, end of—</b>													
January.....	3,576	280	23,000	36,433	2,392	1,323	59,163		56.55	489	+41	791	6.66
October.....	3,635	288	23,600	36,694	2,170	1,503			58.25	556	+17	421	6.41
November.....	3,636	289	22,900	36,114	2,184	1,207			59.00	783	+43	179	6.59
December.....	3,670	289	23,600	36,359	2,309	1,311			59.02	630	+33		
<b>1923, end of—</b>													
January.....	3,671	290	23,100	36,780	2,208				58.60				

<sup>1</sup> Not including gold held abroad.  
<sup>2</sup> Converted to francs at par.

## ITALY.

[Amounts in millions of lire.]

	Banks of issue.					Leading private banks. <sup>1</sup>					Government finances.				Index numbers of security prices. <sup>4</sup>	
	Reserves.		Loans and discounts.	Note circulation.		Total deposits.	Cash.	Loans and discounts including treasury bills.	Due from correspondents.	Participations.	Total deposits.	Short-term treasury bills.	Foreign debt.	Total public debt. <sup>3</sup>		Principal revenues during month. <sup>2</sup>
	Gold.	Total.		For account of commerce.	For account of the State.											
Average of end of month figures:																
1913 <sup>5</sup> .....	1,375	1,661	857	2,284	318	129	1,093	914	55	1,674						
1920.....	1,043	2,088	6,335	7,035	10,581	2,474	1,308	10,594	446	15,810	13,200					
1921.....	1,074	2,020	7,586	9,304	9,064	2,475	1,200	10,677	5,575	16,001				1,019	87.12	
1922.....																
1921, end of—																
December.....	1,092	1,999	10,088	10,304	8,505	3,108	1,997	8,012	3,785	316	12,562	21,926	21,245	109,092	1,458	
1922, end of—																
September.....	1,125	2,024	8,858	9,924	8,066	2,661	769	8,706	3,460	337	11,897	25,574			682	
October.....	1,136	2,039	9,082	9,782	8,075	2,638	781	8,659	3,568	339	11,960				1,354	
November.....	1,141	2,034		9,892	8,074										730	
December.....															1,442	

<sup>1</sup> Includes Banca Commerciale Italiana, Credito Italiano, Banco di Roma, and until November, 1921 Banca Italiana di Sconto.<sup>2</sup> Includes paper circulation of the State and of banks on account of the State.<sup>3</sup> Revenues from State railways; from post, telegraph, and telephone; from State domain; from import duties on grain; and from Government sales of sugar are not included from November, 1921.<sup>4</sup> Figures for 1921 based on quotations of Dec. 31, 1920=100; those for 1922 on quotations of Dec. 31, 1921=100.<sup>5</sup> End of December figures.

## GERMANY.

[Amounts in millions of marks.]

	Reichsbank.						Darlehensscheine in circulation.	Government finances.			Value of new stock and bond issues placed on German market.	Index of security prices. <sup>3</sup>			
	Gold reserve.	Note circulation.	Total deposits.	Discounted Treasury bills.	Commercial paper discounted.	Total clearings.		Receipts from taxes.	Revenue of State railways.	Treasury bills outstanding.		25 stocks.	10 domestic bonds.		
Average of end of month figures:															
1913.....	1,068	1,958	668			6,136		207	13	1,220				Per cent.	Per cent.
1920.....	1,092	53,964	17,702		47,980	57,898	13,145								
1921.....	1,056	80,952	20,213		83,133	89,297	8,861	6,285	2,358	192,832	2,655				
1922.....	1,002	339,677	108,633		338,147	72,211	530,647	11,217		475,835					
1922, end of—															
January.....	996	115,376	23,412		126,161	1,592	116,680	8,046	8,802	4,415	255,678	4,831	100	100	
October.....	1,005	469,457	140,779		477,201	101,155	789,341	14,009	50,175	58,161	614,000	7,187	169	105	
November.....	1,005	754,088	240,969		672,222	248,949	1,463,766	13,809	103,658	92,959	839,000	15,223			
December.....	1,005	1,280,095	530,526		1,184,464	422,235	2,078,969	13,450	132,615	122,785	1,495,000			1,334	312
1923, end of—															
January.....	1,005	1,984,496	762,264		1,609,081	697,216		13,395			2,082,000			1,378	322

<sup>1</sup> End of March, 1913.<sup>2</sup> Recalculated by the Frankfurter Zeitung, using as base (100) prices for January, 1922, instead of for January, 1921, and eliminating the five bonds in foreign currencies. Figures are as of beginning of month.

SWEDEN.

[Amounts in millions of kronor.]

	Riksbank.				Joint-stock banks.		Government finances.		Protested bills during month. <sup>1</sup>		Value of stock issues registered during month.	Business failures during month. <sup>1</sup>	Index number of stock prices.	Index number of foreign exchange value of krona.
	Gold coin and bullion.	Note circulation.	Total deposits.	Clearings.	Bills discounted with Riksbank.	Loans and discounts.	Funded State debt.	Floating State debt.	Number.	Value.				
Averages of end of month figures:														
1913 <sup>1</sup> .....	102	235	108	585	139	2,287	628	20	4,314	2	24	309	258	.....
1920.....	269	733	226	3,596	476	6,008	1,281	248	3,586	6	61	196	176	112.9
1921.....	280	661	193	2,715	389	5,948	.....	.....	6,907	15	31	432	121	121.8
1922.....	274	579	269	2,109	340	5,317	.....	.....	6,116	9	29	388	103	123.4
1921, end of—														
December.....	275	628	331	3,305	464	5,656	1,433	78	6,298	10	21	528	107	126.3
1922, end of—														
September.....	274	605	180	1,902	288	5,181	.....	.....	4,993	5	14	371	103	130.5
October.....	274	569	178	1,995	206	5,149	.....	.....	5,357	6	15	335	98	131.7
November.....	274	575	191	1,979	252	5,099	.....	.....	5,009	4	59	353	90	132.2
December.....	274	584	389	2,588	331	4,984	.....	.....	4,838	5	12	309	96	129.9
1922, end of—														
January.....	274	520	.....	.....	214	4,888	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> End of December figures.

CANADA.

[Amounts in millions of dollars.]

	Chartered Banks.					Government finances.						Bank clearings. <sup>2</sup>	New incorporations.	Business failures.	
	Gold coin and bullion. <sup>1</sup>	Current loans and discounts.	Money at call and short notice.	Public and railway securities.	Note circulation.	Individual deposits—demand and time.	Gold reserves against Dominion notes.	Dominion note circulation.	Total net debt.	Revenue.	Expenditure.				
Average of end of month figures:															
1921.....	72	1,403	282	369	195	2,125	85	272	2,335	35	28	1,454	15	47	
1922.....	75	1,272	280	332	166	2,009	90	240	.....	.....	.....	1,353	15	73	
1921, end of—															
January.....	74	1,438	304	362	206	2,216	98	294	2,303	39	28	1,487	.....	50	
February.....	75	1,429	303	361	207	2,186	99	290	2,307	35	20	1,310	14	45	
March.....	79	1,445	282	355	206	2,180	80	278	2,311	32	24	1,347	17	35	
April.....	74	1,441	264	362	203	2,134	81	264	.....	.....	.....	1,448	16	41	
May.....	74	1,431	269	394	193	2,137	83	257	2,317	63	42	1,524	25	31	
June.....	70	1,412	277	388	196	2,153	84	269	2,349	25	33	1,452	18	34	
July.....	70	1,392	288	386	193	2,095	85	263	2,358	33	23	1,374	13	45	
August.....	70	1,377	264	374	184	2,075	81	262	2,345	27	25	1,292	17	43	
September.....	69	1,391	290	361	187	2,094	81	260	2,333	42	21	1,343	10	45	
October.....	69	1,400	277	346	194	2,101	81	254	2,329	26	19	1,546	12	58	
November.....	69	1,354	297	372	182	2,093	82	287	2,369	30	62	1,667	12	59	
December.....	70	1,319	288	366	185	2,052	81	281	2,367	29	17	1,633	19	72	
1922, end of—															
January.....	70	1,287	261	361	163	1,925	81	255	2,373	24	28	1,349	11	90	
February.....	70	1,299	273	352	164	1,987	81	247	2,372	25	18	1,149	17	89	
March.....	70	1,301	267	354	163	1,981	81	241	2,385	28	28	1,346	15	90	
April.....	70	1,314	278	343	165	2,000	81	242	.....	.....	.....	1,193	10	59	
May.....	70	1,285	288	313	156	2,059	83	222	2,391	57	45	1,497	19	67	
June.....	70	1,266	274	319	166	2,053	85	233	2,397	29	30	1,323	20	64	
July.....	70	1,248	272	323	152	2,016	87	231	2,393	31	20	1,278	12	60	
August.....	70	1,248	277	331	158	1,979	89	229	2,388	30	20	1,172	15	64	
September.....	71	1,250	279	322	177	1,985	91	235	2,384	32	24	1,253	11	65	
October.....	87	1,276	301	310	179	2,020	93	240	2,370	34	17	1,497	18	72	
November.....	92	1,255	303	317	170	2,036	96	251	2,392	34	54	1,619	14	76	
December.....	93	1,230	284	341	176	2,061	129	287	2,412	30	32	1,555	16	83	

<sup>1</sup> Includes gold in central gold reserve but not gold held abroad.

<sup>2</sup> Total for month.

<sup>3</sup> Weekly average.

## ARGENTINA.

[Amounts in millions of pesos.]

	Banco de la Nación.				Banks. <sup>1</sup>				Caja de Conversión.		Clearings in Buenos Aires (paper).	Liabilities under bankruptcies during month.
	Cash.		Dis-counts and advances (paper).	Total deposits (paper).	Cash.		Dis-counts and advances (paper).	Total deposits (paper).	Gold reserve.	Nota circulation (paper).		
	Gold	Paper			Gold.	Paper.						
End of—												
1913.....	32	180	478	541	62	435	1,541	1,464	263	823	1,471	14
1919.....	39	268	676	1,250	66	771	2,113	3,010	399	1,177	2,805	3
1920.....	25	406	804	1,412	46	1,081	2,505	3,530	470	1,363	3,612	5
1921.....	23	410	866	1,310	36	1,087	2,543	3,375	470	1,363	3,482	13
1921, end of—												
November.....	23	463	840	1,293	36	1,150	2,501	3,359	470	1,363	2,133	13
1922, end of—												
August.....	23	407	946	1,353	35	1,041	2,491	3,356	470	1,363	2,570	7
September.....	23	402	950	1,346	35	1,048	2,514	3,379	470	1,363	2,725	10
October.....	23	405	921	1,328	35	1,028	2,549	3,354	470	1,363	2,827	11
November.....	23	396	934	1,345	35	1,033	2,557	3,394	470			

<sup>1</sup> Includes Banco de la Nación.<sup>2</sup> Figures for 1919 include 79,000,000 pesos, and for succeeding years 4,000,000 pesos, held in foreign legations.

## JAPAN.

[Amounts in millions of yen ]

	Bank of Japan.						Tokyo banks.					Government finances.		Capital issues in Japan.	Index of security prices. <sup>2</sup>
	Specie reserve for notes. <sup>1</sup>	Loans and dis-counts.	Ad-vances on foreign bills.	Note cir-culation.	Gov-ernment depos-its in Japan.	Pri-vate depos-its in Japan.	Cash on hand.	Total loans.	Total depos-its.	Total clear-ings.	Average dis-count rate.	Internal loans.	Ex-ternal loans.		
Average of end of month figures:															
1913.....	216	47	33	363	297	7	333	364	8.38	1,075	1,484	32			
1921.....	1,200	107	39	1,226	409	50	1,932	2,572	9.00	1,956	1,044	186	194		
1922.....	1,172	208	94	1,291	409	36	1,961	1,789	2,834	9.31					
1922, end of—															
January.....	1,241	224	56	1,377	277	35	1,984	1,743	2,246	9.02		83	196		
October.....	1,068	160	142	1,236	437	33	1,926	1,812	2,697	9.38			160		
November.....	1,066	183	141	1,241	445	40	1,929	1,828	2,971	9.45					
December.....	1,064	375	205	1,590	333	66	1,969	1,869	3,329	9.34					
1923, end of—															
January.....	1,062	180	159	1,303	380	34	1,113	2,002	1,860	2,246					

<sup>1</sup> Includes gold credits abroad, coin and bullion in Japan.<sup>2</sup> Tokyo market.

CONDITION OF PRINCIPAL EUROPEAN BANKS OF ISSUE, 1913-1922.

BANK OF ENGLAND.

[Combined data for issue and banking departments.]

[From the London Economist and weekly statements of the Bank of England.]

[In thousands of pounds.]

	Dec. 31, 1913.	Dec. 30, 1914.	Dec. 29, 1915.	Dec. 27, 1916.	Dec. 26, 1917.	Dec. 25, 1918.	Dec. 31, 1919.	Dec. 29, 1920.	Dec. 28, 1921.	Dec. 27, 1922.
<b>ASSETS.</b>										
Gold and silver.....	34,983	69,493	51,476	54,305	58,337	79,111	91,342	128,268	128,434	127,443
Government securities:										
Held by issue department.....	18,450	18,450	18,450	18,450	18,450	18,450	18,450	18,450	18,450	18,450
Held by banking department.....	13,199	14,808	32,840	57,188	58,303	71,100	92,469	107,865	36,962	51,968
Other securities.....	52,138	106,236	112,076	106,461	94,889	92,140	106,778	86,028	83,165	78,158
<b>Total.....</b>	<b>118,770</b>	<b>208,987</b>	<b>214,842</b>	<b>236,404</b>	<b>229,979</b>	<b>260,807</b>	<b>309,039</b>	<b>340,611</b>	<b>267,011</b>	<b>276,019</b>
<b>LIABILITIES.</b>										
Proprietors' capital.....	14,553	14,553	14,553	14,553	14,553	14,553	14,553	14,553	14,553	14,553
Rest (surplus).....	3,252	3,283	3,312	3,311	3,301	3,257	3,272	3,340	3,334	3,345
Public deposits.....	10,256	26,933	49,677	52,116	42,009	23,643	19,213	14,335	16,057	13,324
Other deposits.....	61,087	128,055	111,973	126,727	124,162	149,037	190,638	175,534	106,532	119,903
Seven-day and other bills.....	14	24	18	22	10	10	13	8	15	16
Notes in circulation.....	29,608	36,139	35,309	39,675	45,944	70,307	91,350	132,551	128,520	124,878
<b>Total.....</b>	<b>118,770</b>	<b>208,987</b>	<b>214,842</b>	<b>236,404</b>	<b>229,979</b>	<b>260,807</b>	<b>309,039</b>	<b>340,611</b>	<b>267,011</b>	<b>276,019</b>
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	34.65	36.36	26.14	24.85	27.50	32.56	31.37	39.75	51.56	49.38

BANK OF FRANCE.

[From weekly statements of the Bank of France.]

[In thousands of francs.]

	Dec. 26, 1913.	Dec. 10, <sup>1</sup> 1914.	Dec. 30, 1915.	Dec. 28, 1916.	Dec. 27, 1917.	Dec. 26, 1918.	Dec. 26, 1919.	Dec. 30, 1920.	Dec. 29, 1921.	Dec. 28, 1922.
<b>ASSETS.</b>										
Gold in vault.....	3,517,392	4,141,757	5,015,287	3,382,827	3,314,417	3,440,460	3,600,245	3,551,902	3,575,861	3,670,484
Other metallic reserve.....	640,063	351,034	352,088	294,869	217,657	318,348	268,035	266,333	279,765	289,464
<b>Total metallic vault reserve.....</b>	<b>4,157,455</b>	<b>4,492,791</b>	<b>5,367,375</b>	<b>3,677,696</b>	<b>3,532,074</b>	<b>3,758,808</b>	<b>3,868,280</b>	<b>3,818,235</b>	<b>3,855,626</b>	<b>3,959,948</b>
Gold held abroad.....				1,693,088	2,037,108	2,037,108	1,978,278	1,948,367	1,948,367	1,864,345
Foreign credits.....			1,056,799	825,801	778,397	2,336,472	1,296,616	677,976	623,733	600,822
Government securities:										
Permanent investments.....	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Advances to Government since outbreak of war.....		3,600,000	5,000,000	7,400,000	12,500,000	17,150,000	25,500,000	26,600,000	24,600,000	23,600,000
Treasury bills discounted (advances to foreign Governments).....			630,000	1,800,000	3,220,000	3,526,000	3,755,000	3,980,000	4,142,000	4,355,000
Other Government securities.....	117,958	113,378	113,378	112,682	112,979	112,729	112,913	114,819	114,839	142,813
Loans and discounts.....	1,526,462	213,291	429,321	619,684	618,257	1,052,336	1,286,361	3,311,324	2,506,977	2,462,460
Bills matured and extended.....		3,637,514	1,834,206	1,338,833	1,140,832	1,028,568	626,438	403,633	57,240	28,707
Advances on bullion, specie, securities, etc.....	772,403	* 780,758	1,151,916	1,317,753	1,224,798	1,215,715	1,464,331	2,201,795	2,240,918	2,082,076
Bank premises.....	44,230		50,272	46,086	46,295	46,425	47,261	46,655	54,460	107,680
Sundry assets.....	320,005		363,233	502,718	627,520	1,550,272	1,927,158	1,579,028	2,117,383	1,980,030
<b>Total.....</b>	<b>7,238,513</b>	<b>16,296,500</b>	<b>19,634,311</b>	<b>26,468,260</b>	<b>34,114,433</b>	<b>42,162,636</b>	<b>44,982,132</b>	<b>42,561,543</b>	<b>41,423,881</b>	<b>41,423,881</b>
<b>LIABILITIES.</b>										
Capital.....	182,500	182,500	182,500	182,500	182,500	182,500	182,500	182,500	182,500	182,500
Surplus (including special reserves).....	42,519		42,964	42,964	42,964	42,964	42,972	54,917	72,618	84,754
Amortization account (laws 1914, 1917, 1918).....						437,415	702,934	1,041,628	1,829,022	1,335,363
Dividends unpaid.....	1,601		21,818	25,147	25,831	5,040	5,197	28,951	16,048	29,831
Government deposits.....	403,359	176,557	173,896	15,000	251,859	111,684	76,497	56,575	26,014	26,482
Other deposits.....	579,255	2,671,951	2,123,814	2,264,892	2,917,555	2,368,616	3,129,393	3,519,461	2,718,018	2,289,667
Bank notes in circulation.....	5,713,551	9,986,042	13,309,850	16,678,818	22,336,799	30,249,612	37,274,540	37,801,599	39,487,457	36,559,287
Sundry liabilities.....	315,728		441,658	424,981	710,752	716,602	748,603	2,196,501	1,229,866	1,121,977
<b>Total.....</b>	<b>7,238,513</b>	<b>16,296,500</b>	<b>19,634,311</b>	<b>26,468,260</b>	<b>34,114,433</b>	<b>42,162,636</b>	<b>44,982,132</b>	<b>42,561,543</b>	<b>41,423,881</b>	<b>41,423,881</b>
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	62.09	35.00	34.39	19.40	13.97	11.48	9.56	9.21	9.83	10.24

<sup>1</sup> No data available as at end of 1914. Incomplete data for Dec. 10 taken from report of Minister of Finance.

\* Advances on securities only.



## GERMAN REICHSBANK.

[From annual reports and weekly statements of the Reichsbank.]

[In thousands of marks.]

	Dec. 31, 1913.	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 30, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.	Dec. 31, 1921.	Dec. 30, 1922.
<b>ASSETS.</b>										
Gold.....	1,169,971	2,092,811	2,445,185	2,520,473	2,406,586	2,262,219	1,089,499	1,091,636	995,392	1,004,843
Other metallic reserve.....	276,832	36,865	32,073	16,319	181,350	19,048	20,520	5,773	11,612	69,195
<b>Total metallic vault re- serve.....</b>	<b>1,446,803</b>	<b>2,129,676</b>	<b>2,477,258</b>	<b>2,536,792</b>	<b>2,587,936</b>	<b>2,282,167</b>	<b>1,110,019</b>	<b>1,097,409</b>	<b>1,007,004</b>	<b>1,074,038</b>
Imperial Treasury and Loan Bank certificates.....	46,202	875,000	1,287,865	422,089	1,314,790	5,266,919	11,025,257	23,416,674	6,963,607	238,481,105
Notes of other banks.....	12,765	5,312	3,130	1,394	674	2,908	1,974	1,624	2,084	10,393
Bills and checks.....	1,490,749	3,936,568	5,803,314	9,609,767	14,596,106	27,415,712	41,744,534	60,634,023	1,061,754	422,235,296
Discounted Treasury bills.....									132,330,906	1,184,464,359
Advances on collateral.....	94,473	22,870	12,939	9,753	5,111	5,637	9,940	4,438	8,476	773,974
Securities.....	403,410	33,972	51,375	83,749	89,161	156,073	163,953	153,590	195,912	469,972
Sundry assets.....	225,135	215,013	272,229	784,125	2,091,394	2,390,080	2,459,598	9,728,125	8,220,979	78,822,505
<b>Total.....</b>	<b>3,719,537</b>	<b>7,218,411</b>	<b>9,908,110</b>	<b>13,447,674</b>	<b>20,685,172</b>	<b>37,519,496</b>	<b>56,515,305</b>	<b>95,065,883</b>	<b>149,790,722</b>	<b>1,926,331,642</b>
<b>LIABILITIES.</b>										
Capital paid in.....	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000	180,000
Surplus.....	70,048	74,479	80,550	85,471	90,137	94,828	99,496	104,258	121,413	127,264
Notes in circulation.....	2,593,445	5,045,899	6,917,922	8,054,652	11,467,749	22,187,815	35,698,369	68,805,008	113,639,464	1,280,094,831
Government and other Federal deposits.....	793,120	1,756,907	2,359,012	4,564,206	8,050,389	13,280,398	17,071,857	22,327,114	7,591,343	153,190,991
Other deposits.....									25,314,330	377,335,296
Sundry liabilities.....	82,924	161,126	370,626	563,345	896,897	1,776,455	3,465,583	3,649,503	2,944,172	115,403,260
<b>Total.....</b>	<b>3,719,537</b>	<b>7,218,411</b>	<b>9,908,110</b>	<b>13,447,674</b>	<b>20,685,172</b>	<b>37,519,496</b>	<b>56,515,305</b>	<b>95,065,883</b>	<b>149,790,722</b>	<b>1,926,331,642</b>
Ratio of metallic reserve to de- posit and note liabilities com- bined—per cent.....	42.72	31.31	26.70	20.10	13.26	6.43	2.10	1.20	.69	.06

## BANK OF BELGIUM.

[From weekly statements of the Bank of Belgium.]

[In thousands of francs.]

	Dec. 31, 1913.	Dec. 30, 1919.	Dec. 29, 1920.	Dec. 29, 1921.	Dec. 28, 1922.
<b>ASSETS.</b>					
Gold.....	249,027	266,409	266,519	266,584	268,917
Silver.....	56,367	26,902	27,920	40,490	54,887
<b>Total metallic vault reserve.....</b>	<b>305,394</b>	<b>293,311</b>	<b>294,439</b>	<b>307,074</b>	<b>323,804</b>
Foreign exchange and foreign credits.....	166,625	59,744	23,481	20,684	18,169
Bills discounted.....	634,795	392,308	756,688	425,972	634,545
Public securities.....	58,518	61,052	61,870	62,775	64,003
Investment of surplus.....	41,240	47,538	48,749	50,175	51,698
Advances on national public securities.....	61,419	62,831	126,731	120,194	129,502
Loans secured by foreign credits.....		84,955	84,653	84,653	84,653
Provincial bonds taken over by the State (law of Nov. 4, 1919).....		480,000	480,000	480,000	480,000
Funds held for the National Institution of Savings.....	11,823				
Advances to the Government for the retirement of German marks.....		5,500,000	5,500,000	5,500,000	5,500,000
Bank premises, furniture, and fixtures, net, i. e., less depreciation.....	14,974	15,391	15,887	14,960	15,410
Sundry assets.....	9,447	2,454	2,601	2,592	3,039
<b>Total.....</b>	<b>1,304,265</b>	<b>7,299,584</b>	<b>7,399,799</b>	<b>7,039,079</b>	<b>7,304,823</b>
<b>LIABILITIES.</b>					
Capital.....	50,000	50,000	50,000	50,000	50,000
Surplus.....	41,781	47,579	48,750	50,175	51,698
Notes in circulation.....	1,067,407	4,763,802	6,119,239	6,289,576	6,700,886
Deposits in current account:					
Government, including specie deposits.....	9,585	217,932	89,464	168,073	215,902
Other.....	117,098	2,216,665	1,085,149	509,109	283,010
Funds due to the National Institution of Savings.....	11,907				
Sundry liabilities.....	6,487	3,606	7,197	2,146	3,327
<b>Total.....</b>	<b>1,304,265</b>	<b>7,299,584</b>	<b>7,399,799</b>	<b>7,069,079</b>	<b>7,304,823</b>
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	25.58	4.07	4.04	4.41	4.50

NOTE.—Figures for 1914-1918 not available.

**BANK OF NETHERLANDS.**

[From annual reports and weekly statements of the Bank of Netherlands.]

[In thousands of florins.]

	Dec. 27, 1913.	Dec. 24, 1914.	Dec. 31, 1915.	Dec. 30, 1916.	Dec. 29, 1917.	Dec. 28, 1918.	Dec. 27, 1919.	Dec. 27, 1920.	Dec. 27, 1921.	Dec. 27, 1922.
<b>ASSETS.</b>										
Gold coin and bullion.....	151,490	208,120	429,182	587,602	698,233	689,441	637,323	636,141	605,969	581,790
Silver.....	9,016	3,491	6,195	6,985	7,028	8,545	6,103	21,190	8,241	8,990
<b>Total metallic vault reserve.....</b>	<b>160,506</b>	<b>211,611</b>	<b>435,377</b>	<b>594,587</b>	<b>705,261</b>	<b>697,986</b>	<b>643,426</b>	<b>657,331</b>	<b>614,210</b>	<b>590,780</b>
Domestic bills.....	67,504	154,785	76,348	66,685	81,819	243,691	168,662	196,824	270,186	217,192
Foreign bills.....	14,300	667	2,506	8,024	8,039	8,930	48,354	52,754	33,794	75,399
Advances.....	86,026	133,353	93,579	85,505	107,448	139,515	250,116	247,605	124,554	126,777
Government securities.....	9,235	4,240	11,577	11,577	3,729	3,729	12,241	13,832	13,474	14,939
Other securities.....	8,968	8,999	8,925	9,096	9,078	8,856	8,456	8,367	9,242	9,655
Bank premises.....	2,000	1,800	1,600	1,400	1,465	1,770	3,312	3,594	3,747	4,522
Sundry assets.....	1,196	10,719	24,812	71,087	65,313	89,108	40,656	22,453	19,238	25,022
<b>Total.....</b>	<b>349,735</b>	<b>526,174</b>	<b>643,147</b>	<b>847,961</b>	<b>978,423</b>	<b>1,193,585</b>	<b>1,175,423</b>	<b>1,202,760</b>	<b>1,088,445</b>	<b>1,064,286</b>
<b>LIABILITIES.</b>										
Capital.....	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Surplus.....	5,000	5,003	5,000	5,155	5,234	5,079	5,000	5,000	5,367	7,336
Notes in circulation.....	312,695	473,107	577,056	788,379	890,273	1,068,947	1,032,732	1,072,146	1,012,878	974,101
Order certificates (bank assignment).....	1,522	1,599	3,469	3,739	3,568	2,051	1,740	1,924	1,085	862
Government deposits.....			5,482	21,584						
Other deposits.....	4,333	17,465	24,289	54,577	32,048	88,478	102,343	85,261	30,573	48,965
Sundry liabilities.....	6,185	9,010	7,851	6,111	5,716	9,030	13,608	18,429	18,522	13,022
<b>Total.....</b>	<b>349,735</b>	<b>526,174</b>	<b>643,147</b>	<b>847,961</b>	<b>978,423</b>	<b>1,193,585</b>	<b>1,175,423</b>	<b>1,202,760</b>	<b>1,088,445</b>	<b>1,064,286</b>
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	50.38	43.00	71.34	72.80	74.44	60.20	56.60	56.70	58.80	57.19

**BANK OF SPAIN.**

[From España Económica y Financiera and weekly statements of the Bank of Spain.]

[In thousands of pesetas.]

	Dec. 27, 1913.	Dec. 26, 1914.	Dec. 31, 1915.	Dec. 30, 1916.	Dec. 29, 1917.	Dec. 28, 1918.	Dec. 27, 1919.	Dec. 31, 1920.	Dec. 31, 1921.	Dec. 30, 1922.
<b>ASSETS.</b>										
Gold.....	479,220	572,257	867,226	1,250,896	1,966,816	2,228,351	2,445,810	2,457,140	2,512,869	2,524,754
Silver.....	716,458	707,020	752,905	741,042	710,538	642,157	630,498	573,567	625,042	645,594
<b>Total metallic vault reserve.....</b>	<b>1,195,708</b>	<b>1,279,277</b>	<b>1,620,131</b>	<b>1,991,938</b>	<b>2,677,354</b>	<b>2,870,508</b>	<b>3,076,308</b>	<b>3,030,707</b>	<b>3,137,911</b>	<b>3,170,348</b>
Credits abroad.....	193,650	147,534	103,195	90,170	89,392	87,468	66,418	82,536	41,754	36,665
Loans, discounts, and advances.....	785,432	802,179	667,365	671,060	731,428	1,145,070	1,621,445	1,903,611	2,860,128	2,070,494
Government securities.....	594,432	594,432	594,432	594,438	594,438	594,475	594,475	594,475	594,475	593,573
Other securities.....	11,655	11,655	11,655	11,655	11,655	11,655	11,655	11,655	11,655	11,655
Bank premises.....	14,845	15,081	13,088	14,250	14,276	12,717	11,815	9,270	8,822	9,597
Sundry assets.....	71,137	124,273	137,597	104,664	60,034	202,074	21,882	380,555	17,196	15,310
<b>Total.....</b>	<b>2,860,862</b>	<b>2,974,431</b>	<b>3,147,463</b>	<b>3,478,175</b>	<b>4,178,577</b>	<b>4,923,967</b>	<b>5,403,998</b>	<b>6,012,809</b>	<b>6,671,941</b>	<b>5,907,642</b>
<b>LIABILITIES.</b>										
Capital.....	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	177,000
Surplus.....	20,000	20,000	24,000	26,000	26,000	58,000	60,000	63,000	78,000	53,000
Government deposits.....	155,709	113,237	44,878	44,850	62,757	61,831	130,121	82,549	990,000	307,520
Other deposits.....	476,834	610,531	710,758	760,859	959,758	1,165,969	1,035,075	1,169,489	1,041,817	1,090,365
Notes in circulation.....	1,924,274	1,965,068	2,100,174	2,360,084	2,782,840	3,316,215	3,856,300	4,326,250	4,244,081	4,130,958
Sundry liabilities.....	140,045	115,595	117,653	136,352	197,222	171,952	172,502	221,521	167,147	142,499
<b>Total.....</b>	<b>2,866,862</b>	<b>2,974,431</b>	<b>3,147,463</b>	<b>3,478,175</b>	<b>4,178,577</b>	<b>4,923,967</b>	<b>5,403,998</b>	<b>6,012,809</b>	<b>6,671,941</b>	<b>5,907,642</b>
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	46.77	47.58	56.73	62.92	70.36	63.17	61.26	54.33	49.99	57.28

## NATIONAL BANK OF SWITZERLAND.

[From annual reports and weekly statements of the Bank of Switzerland.]

[In thousands of francs.]

	Dec. 31, 1913.	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 30, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.	Dec. 31, 1921.	Dec. 30, 1922.
<b>ASSETS.</b>										
Gold in vault.....	160,956	237,936	250,132	344,998	357,644	414,719	453,114	477,743	549,521	535,146
Silver.....	20,836	24,913	51,238	52,454	51,830	58,412	73,649	121,571	108,240	103,865
Total metallic vault reserve.....	190,792	262,849	301,370	397,452	409,474	473,131	526,763	599,314	657,761	639,011
Gold held abroad.....							63,878	65,160		
War loan bank certificates (Darlehens- kassascheine).....		29,345	17,103	2,484	12,674	9,765	12,040	13,261	18,317	13,246
Loans and discounts.....	146,541	196,271	190,007	222,319	360,312	588,818	511,603	474,883	378,123	424,585
Foreign demand credits.....						50,069	70,285	3,456	15,300	7,516
Advances on securities.....	28,385	19,552	20,954	22,140	45,201	40,899	32,669	36,630	75,696	61,982
Securities.....	6,377	9,329	8,099	6,802	7,295	8,553	6,638	5,864	5,407	9,380
Due from correspondents.....	21,240	33,826	30,984	42,944	32,921	28,073	36,149	34,975		18,242
Bank premises.....	6,480	6,250	6,150	6,644	6,008	6,600	5,425	5,427	6,746	
Sundry assets.....	5,043	6,828	9,014	9,284	9,781	8,048	7,721	9,123	46,916	27,405
Total.....	404,858	564,250	583,681	710,069	883,666	1,213,956	1,273,171	1,248,093	1,204,266	1,201,367
<b>LIABILITIES.</b>										
Capital paid in.....	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Surplus.....	1,147	1,495	1,995	2,441	2,941	7,441	12,941	14,441	4,941	5,441
Notes in circulation.....	313,821	455,889	465,609	536,518	702,303	975,706	1,036,123	1,023,712	1,009,264	976,426
Deposits.....	59,012	70,842	82,710	129,747	138,709	187,641	180,856	163,334	128,765	165,032
Sundry liabilities.....	5,878	11,024	8,367	16,363	14,713	18,168	18,261	21,606	36,296	29,468
Total.....	404,858	564,250	583,681	710,069	883,666	1,213,956	1,273,171	1,248,093	1,204,266	1,201,367
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	51.19	49.90	51.96	59.66	48.69	40.67	43.28	50.49	57.80	55.98