

FEDERAL RESERVE BULLETIN

(FINAL EDITION)

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FEDERAL RESERVE BOARD
AT WASHINGTON**

APRIL, 1923



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The FEDERAL RESERVE BULLETIN is the Board's medium of communication with member banks of the Federal Reserve System and is the only official organ or periodical publication of the Board. It is printed in two editions, of which the first contains the regular official announcements, the national review of business conditions, and other general matter, and is distributed without charge to the member banks of the Federal Reserve System. Additional copies may be had at a subscription price of \$1.50 per annum.

The second edition contains detailed analyses of business conditions, special articles, review of foreign banking, and complete statistics showing the condition of Federal Reserve Banks. For this second edition the Board has fixed a subscription price of \$4 per annum to cover the cost of paper and printing. Single copies will be sold at 40 cents. Foreign postage should be added when it will be required. Remittances should be made to the Federal Reserve Board.

No complete sets of the BULLETIN for 1915, 1916, 1917, or 1918 are available.

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REVIEW OF THE MONTH.

During recent months the reserves of the Federal reserve banks, in consequence of continued gold imports, have

Gold and credit. reached the highest figure since the establishment of the system. Member-bank reserves at the Federal reserve banks are also the highest on record. Reserve banks and member banks, however, have utilized these reserves during the past year in altogether different degrees. Measured by total loans and investments the volume of reserve-bank credit is smaller than a year ago, while member-bank credit has increased more than \$2,000,000,000. In fact, the aggregate amount of member-bank credit now in use is approximately as large as at the peak of credit expansion in 1920. Member banks have extended this credit without obtaining from the reserve banks an amount of accommodation even approaching the volume of their borrowings in 1920. This large volume of member-bank credit is the result of increased credit demands which began early in 1922 and became more marked during the second half of that year. This expansion in member-bank credit without a corresponding growth in Federal reserve bank accommodation has been made possible by a continued flow of gold from abroad. This gold was deposited by member banks with the reserve banks and was thus the basis of additional credit extended to borrowers. The inflow of gold of over \$200,000,000 during 1922 corresponds roughly to the increase in the reserves of the reserve banks and also in the reserve balances of member banks. During this period the total of demand and time deposits of members increased \$2,800,000,000. It is impossible to determine the extent to which the influx of gold has stimulated the extension of credit by

member banks. From the point of view of the Federal reserve banks, however, it is not so important to know whether bank credit would have expanded to the same extent had there been no gold imports, as it is to realize clearly that, if member banks had not received a steady stream of gold from abroad, they could not have extended the additional credit granted by them during 1922 without applying for a larger amount of accommodation at the Federal reserve banks.

The growth of deposit liabilities of member banks at a rate approximately tenfold the increase in their reserve balances is in accordance with experience which shows that their actual reserves never greatly exceed the legally required minimum. This is in striking contrast to the Federal reserve banks which for more than a year have maintained a reserve ratio of over 75 per cent to deposit and note liabilities combined. Thus the inflow of gold in 1922 has maintained the ratio of reserve bank reserves to their increasing liabilities at a relatively constant and high level, and the utilization of the reserve balances arising out of this gold has enabled member banks to extend their loans and to maintain their reserve requirements without additional borrowing from the reserve banks.

Figures which have recently become available showing the condition of all member banks of the reserve system at the end of December, 1922, show that total loans and investments of these banks at the end of 1922 were \$25,700,000,000, indicating but little reduction from the total of \$26,100,000,000; shown at the peak of expansion in November, 1920. During the same period, total earning assets of the reserve banks, which measure the total volume of reserve-bank credit in use, declined from \$3,400,000,000 to \$1,300,000,000, and constituted at the end of 1922, 5 per cent of

member-bank credit, compared with 13 per cent in 1920. This change in the proportion of reserve-bank credit to the total volume of bank credit reflects the effect of the billion dollars of gold imported since the autumn of 1920.

The use made by member banks of gold

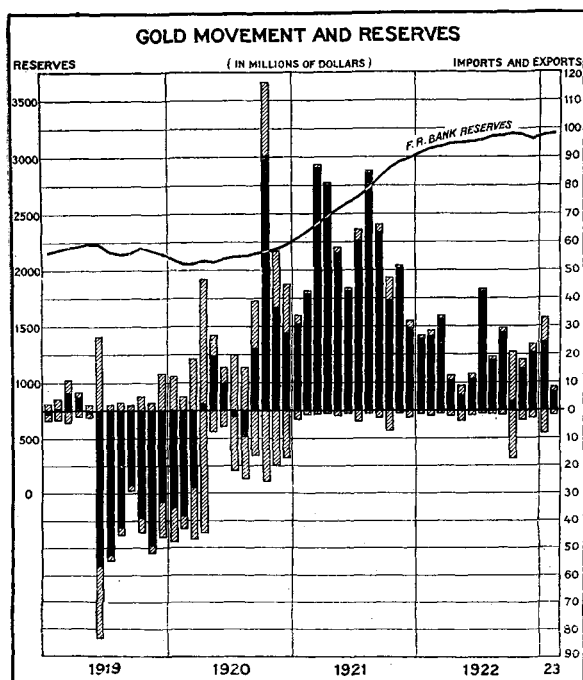
Gold imports received from abroad has depended upon the character of situation.

the business and credit situation in the United States at the time. Thus the effect upon credit of the present gold movement which began in September, 1920, may be marked off into two distinct periods. During the first period, which continued until the close of 1921, gold was chiefly used to liquidate borrowings by member banks at Federal re-

indicates changes in the reserves of Federal reserve banks. During the 15 months preceding the present gold inflow the United States lost over \$400,000,000 in gold to South American and oriental countries which had accumulated balances during the war and withdrew them after the removal of the embargo. This outflow is reflected in the decline of the reserves. The chart clearly brings out the fact that the heavy gold imports, which began in the last quarter of 1920 and continued through 1921, raised the reserves of the reserve banks to a high level. The gold reaching this country from abroad was taken to the reserve banks and there liquidated a corresponding amount of member-bank indebtedness. During 1922, however, when member banks were receiving little accommodation from the reserve banks, gold imports, which continued, though in reduced volume, were used largely as a basis for the extension of new credit.

During the first period of the present gold movement, when the gold inflow amounted to \$845,000,000, liquidation of credit in the United States was under way, the demand for credit was relatively small, prices were declining, business activity was at low ebb, and the member banks utilized the gold obtained from abroad to reduce their indebtedness at the reserve banks and thus to strengthen their own position. This use of the foreign gold representing the liquidation of debts owed to America by foreigners accelerated the reduction of bank loans which was proceeding independently as the result of domestic conditions. The reduction in Federal reserve bank assets from their peak in October, 1920, to their lowest point in the summer of 1922, was due approximately to the same extent to the liquidation of domestic and of foreign loans. The former is roughly measured by the reduction in Federal reserve note circulation and the latter by the net imports of gold.

The second period in the gold movement, during which net imports totaled \$269,000,000, began about the opening of 1922, but particularly after the first quarter of that year. A large number of member banks, especially in



Bars above the zero line at the right of the chart indicate imports and bars below represent exports. The solid black portions of the bars represent net imports or exports. The black line shows changes in the reserves of the twelve Federal reserve banks combined.

serve banks, while in the second period, with the revival of business activity and the increased demand for credit, gold was used as a basis of additional lending by member banks. The bars on the chart show imports and exports of gold since the beginning of 1919 and the line

the financial East, had paid off their entire indebtedness to the reserve banks and the gold imported during this period, when deposited with the reserve banks, constituted a basis for extension of credit by the member banks. Thus, gold imports during the first period facilitated liquidation of credit while during the second period they were used as reserves against new credit. Furthermore, during liquidation the imported gold canceled a corresponding amount of indebtedness, dollar for dollar, while during the more recent inflow it supported an approximately tenfold increase in the deposit liabilities of member banks. This increase was in response to the domestic credit demand, but in the absence of gold imports member banks would necessarily have borrowed from the reserve banks to meet their larger reserve requirements.

The consequences of any addition to reserve balances, whether they arise from gold imports or from reserve-bank accommodation, are important because of the relation they bear to the lending power of member banks and the growth of credit. The volume of member-bank reserve deposits at Federal reserve banks remains fairly steady, but small changes in these reserves are significant because of their relation to member-bank deposit liabilities. Indeed, over longer periods of time the level of reserve deposits at reserve banks changes less than that of any other big item in the statement. Federal reserve notes, for instance, dropped from a peak of \$3,400,000,000 at the end of 1920 to a low point of \$2,100,000,000 in the middle of 1922. During the same period the deposits of Federal reserve banks rose from \$1,800,000,000 to \$1,900,000,000. The difference in the range of fluctuations between the reserve deposits of member banks and Federal reserve note circulation is a reflection of the difference between member-bank and Federal reserve bank credit. Member-bank credit represents a large part of the Nation's volume of credit, and a relatively small percentage of change in that volume may reflect

the difference between a period of industrial inactivity and of industrial revival. Reserve-bank credit, on the other hand, is resorted to at times when the ordinary credit facilities are inadequate. When increased credit demands can be met only by recourse to the Federal reserve banks, the volume of reserve-bank lending is a sensitive indicator of credit conditions. But when, as has been the case during the last year, the growing demand for credit has been supported by gold imports, the volume of reserve-bank credit is not an adequate indicator of credit trends. This is evident from the fact that at the present time the volume of reserve-bank credit is at about the same level as a year ago, while the loans and investments of member banks have expanded over \$2,000,000,000.

The increase in the volume of member-bank loans and investments has furnished the business community with the credit needed to finance the recent increase in

production and trade. Increases in the volume of credit, however, are invariably followed by a larger demand for currency. During the past 12 months a part of this added demand was met by the direct use of gold, as indicated by the fact that the volume of gold in circulation increased by \$130,000,000. But this growth of gold circulation was not sufficient to meet enlarged currency requirements and additional supplies of currency could be secured by member banks only through borrowing at Federal reserve banks. It is in this way that the increased demand for credit has led to a demand for additional accommodation at reserve banks, even though the reserves against additional credit have been supplied by the receipt of gold from abroad. It is noteworthy that the increase in the earning assets of the Federal reserve banks since the end of July, 1922, when the demand for bank credit became more pronounced, is closely paralleled by the increase in Federal reserve note circulation. The increased demand for hand-to-hand cur-

Reserve balances and growth of credit.

Federal reserve notes and business activity.

rency which goes with increased employment, production, and credit caused the banks to borrow from the reserve banks in order to secure Federal reserve notes. Furthermore, when the borrowing is for the purpose of meeting reserve requirements the volume of accommodation needed is on the average only one-tenth as large as the increased deposit liabilities of member banks, but when the borrowing is for the purpose of obtaining currency it equals the amount of currency needed, dollar for dollar. At the present time the relation between the growth of credit and the demand for currency is such that even if gold imports continue at a considerable rate the need for additional currency will keep the reserve banks closely in touch with the credit situation.

Business and credit developments in the United States at a time when other leading commercial countries are not on

Absence of international gold standard.

a gold basis are not subject to the regulating influences that would be operative under an effective international gold standard. Under existing world conditions of depreciated currencies and gold embargoes, differences in the levels of money rates and prices prevail in various countries without giving rise to corrective gold movements. In pre-war times an unusual degree of loan activity, accompanied by a rise in prices more rapid in this country than abroad, resulted in unfavorable exchange rates and a consequent outflow of gold. Such an outflow tended to check the increase in the volume of bank credit and to bring international price levels and money rates into line. While the United States now has larger gold holdings than ever in its history and its currency is freely convertible into gold for export, this does not constitute an effective gold standard in a regulatory sense. Such a standard presupposes not merely that domestic currency is on a parity with gold but that gold can and does move freely into and out of the country in response to business and credit conditions here and abroad. But present world financial conditions act as an effective check upon our gold

exports. The volume of our international balance of payments, Government control of gold movements in most foreign countries, and the depreciation of foreign currencies prevent the outflow of gold. Since the beginning of 1921 there have been almost no gold exports from the United States. The largest exports for any month during the period occurred during October, 1922, when the Canadian dollar was at a slight premium and Canadian banks withdrew balances from New York. A relatively small gold movement corrected the exchange rate and the outflow ceased. More recently gold exports on a small scale have been made to British India, which has had favorable trade conditions during the past year and has also purchased gold in the London market. While moderate outward movements of gold, possibly on a somewhat larger scale, may occur during the present year, net imports will probably continue. Under such conditions there is little immediate prospect of international gold movements exercising a corrective influence on our domestic credit developments.

Large gold reserves, the result of an unprecedented inflow of gold due chiefly to conditions abroad, have increased the lending power of Federal reserve banks far beyond the present domestic credit needs.

Reserve ratio as credit indicator.

Consequently the relation of these reserves to the deposit and note liabilities of the reserve banks as expressed in the reserve ratio is not now a satisfactory indicator of changes in credit conditions. In fact, since the beginning of 1922 the reserve ratio has remained relatively constant around 75 per cent, largely as the result of offsetting changes in gold reserves and in reserve balances of member banks. Gold reserves are now approximately \$200,000,000 above what they were 15 months ago, and during this same period the deposits of reserve banks have increased also by about \$200,000,000. Consequently since the opening of 1922 the effect on the reserve ratio of the growth in liabilities has been largely offset by the increase in gold holdings. Thus the gold received from abroad in liquidation of foreign

indebtedness has balanced in the reserve ratio the enlarged volume of deposits which have increased in response to the domestic business situation. Under these circumstances, changes in the reserve ratio, since they are the result of diverse and unrelated influences, do not reflect the developments in the domestic credit and business situation.

TREASURY FINANCE.

Fiscal operations during March centered as usual about the 15th of the month, when the first installment of income and profits taxes became payable. On the same date semiannual interest on the third Liberty loan fell due, which, with other interest payments, involved the disbursement of about \$135,000,000. There also became payable on the same date about \$366,000,000 of Treasury tax certificates, issued on March 15 and on December 15 of last year.

To meet these disbursements and to cover its other current requirements the Treasury expected to raise about \$400,000,000, the estimated proceeds of the income and profits taxes collectible on March 15, and another \$400,000,000 or thereabouts from the issue on March 15 of two series of Treasury tax certificates, one bearing $4\frac{1}{2}$ per cent interest and maturing in six months and the other bearing $4\frac{1}{2}$ per cent interest and maturing in one year. In announcing these two issues on March 8 the Secretary of the Treasury discussed the situation as follows:

The present offering of certificates is intended, with the balances already on hand, to provide for the payments coming due in March over and above tax receipts, and at the same time to cover the Treasury's further cash requirements between now and the middle of May, when the uncalled Victory notes mature. There will have to be further financing at that time, of course, to refund maturing notes, but the amount involved has already been reduced to manageable proportions, and it will be still further reduced between now and then by exchanges and advance redemptions out of the proceeds of the current offering. This offering of certificates, therefore, will contribute materially to the successful refinancing of the Victory Liberty loan, and when the March operations are completed will still leave outstanding but little more than \$1,000,000,000 of Treasury certificates—a remarkably low total for this stage of the Government's postwar financing.

Reports received from Federal reserve banks give the total amount of subscriptions received on the two new issues as \$538,859,000. The total amount of subscriptions allotted was \$475,451,000, of which \$36,272,650 represent allotments on subscriptions for which Victory notes, Treasury certificates maturing March 15, or 1918 war savings certificates were tendered in payment. These exchange subscriptions were allotted in full. Allotments on other subscriptions, aggregating \$439,178,350, 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 80 per cent, but not less than \$100,000 on any one subscription; subscriptions over \$500,000 but not exceeding \$1,000,000 were allotted 75 per cent, but not less than \$400,000 on any one subscription; subscriptions over \$1,000,000 were allotted 60 per cent but not less than \$750,000 on any one subscription.

The distribution of amounts subscribed and allotted, by Federal reserve districts, is shown in the following table:

SUBSCRIPTIONS RECEIVED.

Federal reserve district.	Treasury certificates, series TS2-1923.	Treasury certificates, series TM-1924.	Total.
Boston.....	\$11,951,500	\$20,119,000	\$32,070,500
New York.....	80,992,500	123,319,500	204,312,000
Philadelphia.....	9,548,500	35,160,500	44,709,000
Cleveland.....	14,807,500	30,927,000	45,734,500
Richmond.....	4,745,500	11,639,500	16,385,000
Atlanta.....	7,240,500	12,500,500	19,741,000
Chicago.....	14,862,000	37,632,500	52,494,500
St. Louis.....	4,794,000	16,502,500	21,296,500
Minneapolis.....	4,893,000	8,496,500	13,389,500
Kansas City.....	6,608,500	14,104,500	20,713,000
Dallas.....	9,337,500	17,148,000	26,485,500
San Francisco.....	18,162,000	23,366,000	41,528,000
Total.....	187,943,000	350,916,000	538,859,000

SUBSCRIPTIONS ALLOTTED.

Federal reserve district.	Treasury certificates, series TS2-1923.	Treasury certificates, series TM-1924.	Total.	Exchanges (both series included in total allotments).
Boston.....	\$10,366,000	\$18,042,000	\$28,408,000	\$1,584,500
New York.....	62,789,000	118,685,500	181,474,500	15,265,000
Philadelphia.....	8,001,000	30,284,500	38,285,500	788,500
Cleveland.....	10,817,500	26,687,000	37,504,500	2,622,500
Richmond.....	4,495,500	11,289,500	15,785,000	715,000
Atlanta.....	6,390,500	11,395,500	17,786,000	265,000
Chicago.....	14,005,000	34,777,500	48,782,500	5,486,250
St. Louis.....	4,049,000	14,999,500	19,048,500	1,465,200
Minneapolis.....	4,893,000	8,496,500	13,389,500	1,419,500
Kansas City.....	5,683,500	12,497,500	18,181,000	2,742,000
Dallas.....	8,187,000	14,353,500	22,540,500	1,357,150
San Francisco.....	14,575,000	19,710,500	34,285,500	2,562,000
Total....	154,252,000	321,199,000	475,451,000	36,272,650

NOTES.

Death of Mr. Campbell.

Mr. Milo D. Campbell, of Michigan, member of the Federal Reserve Board since March 13, 1923, died suddenly on March 22.

Governors' conference.

On March 26-29 was held the semiannual conference of the governors of the 12 Federal reserve banks. In addition to meetings of the governors among themselves, conferences were held with members of the Federal Reserve Board and with members of the Farm Loan Board. During this conference the Federal Reserve Board discussed with the governors many matters of operation, including the amendments to the Federal reserve act contained in the agricultural credits act, changes in the board's regulations made necessary by these amendments, the open-market operations of the system, and many matters of a routine nature. The board also discussed with the governors general economic and financial conditions, the conditions of the reserves, open-market rates for various classes of paper, the demand for credit and the volume of credit in use, and gold movements, present and prospective.

Commission to investigate gold and silver situation.

The Senate prior to adjournment adopted a resolution creating a commission of five Senators to study the causes for the continued decrease in the production of gold and silver and of the depressed condition of the gold and silver industry in the United States. This commission is to report to the Senate on January 1, 1924. Following are the members appointed to serve on the commission: Senators Nicholson of Colorado, Oddie of Nevada, Gooding of Idaho, Walsh of Montana, and Pittman of Nevada. The recent death of Senator Nicholson, who had been designated as chairman, leaves a vacancy on the commission.

State bank membership in reserve system.

The agricultural credits act provides for the creation of a joint congressional committee to investigate the reasons why eligible State banks and trust companies fail to join the reserve system and the effect of this failure upon financial conditions in the agricultural sections of the United States. The membership of the committee is as follows: Senators Glass, Weller, and McLean; Representatives McFadden, Dale, Strong, Wingo, and Steagall.

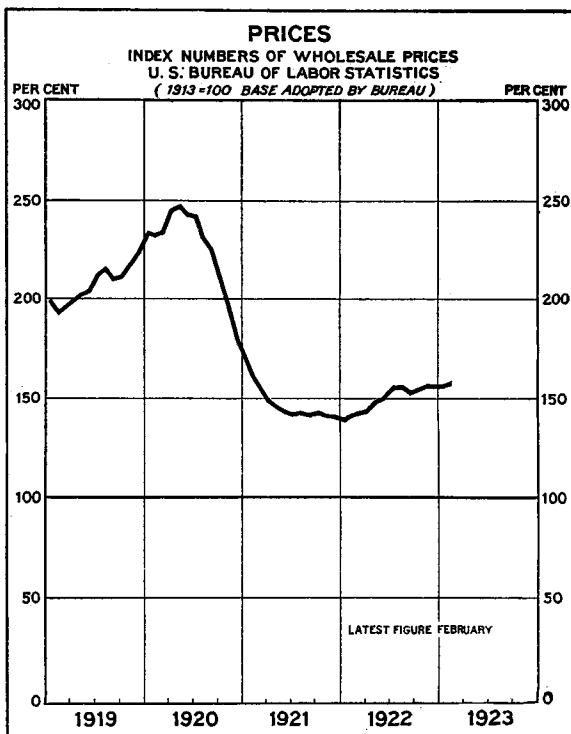
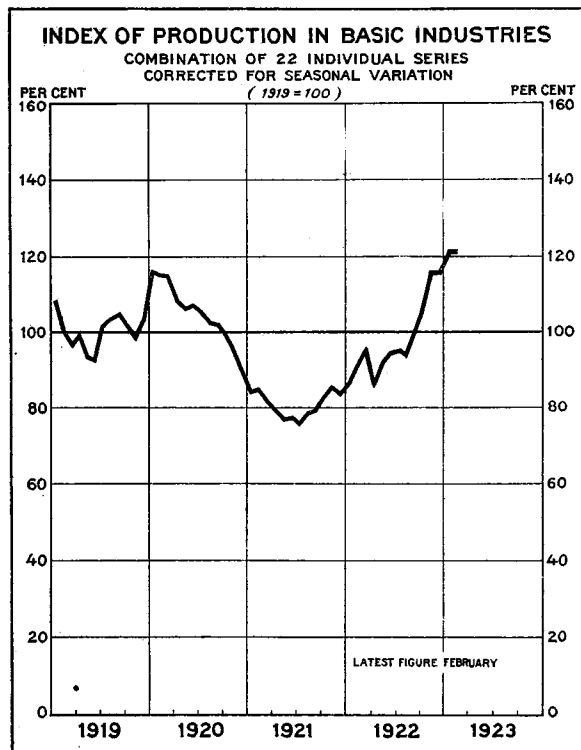
BUSINESS CONDITIONS IN THE UNITED STATES.

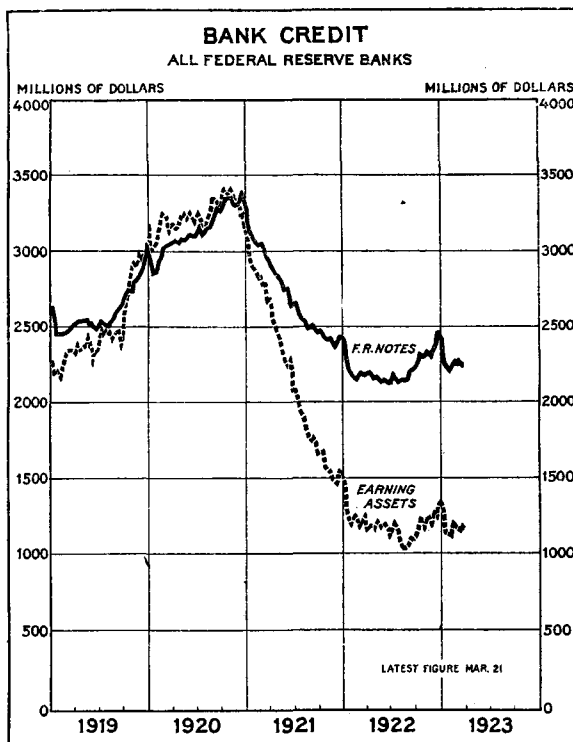
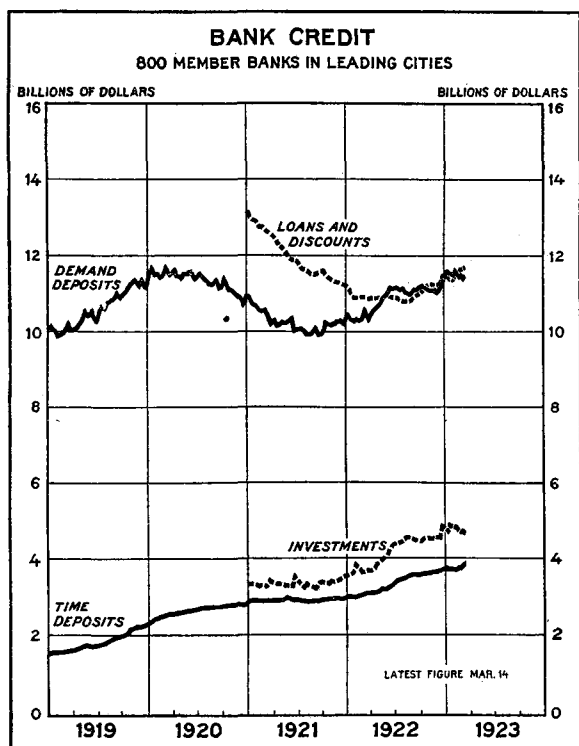
Continued active business is indicated by the maintenance of a high rate of industrial production, increases in freight traffic and employment, and a large volume of retail and wholesale trade.

Production.—The Federal Reserve Board's index of production in basic industries for February was at the same high level as in January. The index number for these industries is now approximately equal to the highest point reached in the past. Since the low point in July, 1921, there has been an increase of 63 per cent. The volume of new building projected in February was exceptionally large for the season, particularly in western districts. Railroad freight shipments have been increasing, and the shortage of box cars, which was somewhat relieved in December and January, became more marked in recent weeks.

A continued increase in industrial employment has been accompanied by further advances in wage rates in a number of industries. Many New England woolen mills announced a wage increase of 12½ per cent, effective April 30. A shortage of women workers has been reported in the textile, rubber, and garment industries, and there is a shortage of unskilled labor in many industrial centers.

Trade.—Wholesale and retail distribution of goods continued at a high level during February. Sales of both wholesale and retail concerns reporting to the Federal reserve banks were well above those of a year ago, but the increase was relatively more pronounced in wholesale trade. Mail-order and chain-store business was almost as large in February as in January, despite the shorter month, and sales of 5-and-10-cent stores were actually larger than in January.





Wholesale prices.—The Bureau of Labor Statistics index of wholesale prices advanced slightly during February. Prices of metals, building materials, and clothing increased, while prices of fuels and farm products declined. Building materials and metals during the past year have advanced more than any other groups of commodities and are now about 25 per cent higher than in March, 1922.

Bank credit.—Recent increases in industrial and commercial activity have been reflected in a larger volume of loans by member banks for commercial purposes, especially in the New York, Chicago, and San Francisco districts. Loans of this character by reporting member banks are now approximately \$500,000,000 larger than at the end of December. This increase has been accompanied by a reduction in holdings of investments; so that there has been only a moderate net increase in total loans and investments.

The larger demand for funds has not led to any increase during the past month in the total volume of credit extended by the reserve banks. Total earning assets and loans to member banks on March 21 were approximately the same as four weeks earlier. Borrowings by member banks in the interior increased, particularly in the Chicago district, but borrowings by member banks in the New York district decreased. Since the end of February there has been a small decline in the volume of Federal reserve note circulation, which is now at approximately the same level as six months ago. Other forms of currency in circulation, however, have recently increased.

The market rates on commercial paper advanced further to a range of 5 to 5¼ per cent, and the rate on bankers' acceptances remained steady at about 4 per cent. There has been a slight increase in the yield of short-term Treasury certificates as well as of Government and other high-grade bonds.

AGRICULTURE.

Although the mild weather which persisted generally in the agricultural regions during the early winter months was broken by cold waves in February, the early weeks of March were accompanied by higher temperatures and general precipitation, both of which were favorable to the agricultural and live-stock sections of the country. Throughout all districts the crop outlook has greatly improved, and rapid progress is being made in the preparation for spring planting. In the Chicago, St. Louis, Kansas City, Dallas, and San Francisco districts the condition of the fall and winter sown grains showed continued improvement, and is reported to have come through the winter in much better condition than was anticipated. The growth of winter grains was retarded by freezes in Indiana and by cold weather and continued droughts in California. In the districts of Richmond, Atlanta, Dallas, and St. Louis the agricultural conditions are generally good. Tobacco lands are in good shape; beds have been prepared and many planted. Preparation of the fields for corn planting is making rapid progress, and planting has made considerable advancement in Louisiana, Florida, southern Georgia, Mississippi, and Alabama. The cold weather near the middle of March was a retarding factor to farm work in these States, as well as doing some damage to the fruit and truck crops of Georgia and Texas.

With the recent upward movement in the price of sugar, coupled with the unsatisfactory experiences of potato growers during the past season, an increase in the sugar-beet acreage is indicated for the Kansas City and San Francisco districts, although contracts for this year's acreage have not been signed.

Grain.

The movement of grain during February within the United States, as indicated by receipts at 17 interior centers, was considerably less than in January and in February, 1922. Receipts of all grains were 77,002,000 bushels in February, compared with 111,081,000 in January and 105,278,000 in February, 1922. Declines were noted in all grains, but the greatest decreases in receipts were noted for wheat. The export situation continues unfavorable for wheat, as the Southern Hemisphere, particularly Argentina and Australia, is supplying the European markets at prices somewhat lower than American. The American, Canadian, and British visible supply of

wheat was 205,159,000 bushels on March 3, 1923, compared with 203,590,000 bushels the previous month and 177,096,000 bushels a year ago.

The estimates of grain reserves on farms on March 1 show increases in stocks of wheat, oats, and barley, but decreases in stocks of corn as compared with stocks on March 1, 1922. Prices on March 1, as compared with prices on the same date for the two previous years, were higher for corn, oats, and barley, but lower for wheat. Detail figures for the three years, 1921, 1922, and 1923, are shown in the following table:

STOCKS AND PRICES OF GRAIN ON FARMS MARCH 1, 1921, 1922, AND 1923.

	Stocks (000 omitted).			Price per bushel.		
	1921	1922	1923	1921	1922	1923
Corn.....	1,564,832	1,305,559	1,087,412	64.5	54.8	74.3
Wheat.....	217,037	134,253	153,134	147.2	116.9	105.1
Oats.....	683,759	411,934	421,511	41.9	36.6	43.1
Barley.....	65,229	42,294	43,592	56.8	49.6	57.4

Cotton.

The final figures of 1922 indicate a cotton crop of 9,761,817 bales—a reduction of 202,183 bales from the estimate of 9,964,000 bales made in December. As compared with the two preceding crops, the 1922 crop was greater than that of 1921, but considerably smaller than the crop of 13,439,603 bales in 1920. As compared with the 10-year (1911–1920) average production, the 1922 crop was smaller by approximately 2,500,000 bales. Stocks at mills and warehouses on February 28 amounted to 6,006,000 bales, compared with 5,469,000 on January 31, an increase of 537,000 bales. An increase in stocks of 196,000 bales as compared with February one year ago is also indicated, the increase being in mill stocks, as there was a slight decrease in stocks in warehouses. Although exports during February were slightly larger than in the same month in 1922, the total exports for the seven months ending February 28 were 3,739,000 bales, as compared with 3,923,000 bales for the corresponding period of last year. The decline in total exports is due largely to decreased shipments to Japan, caused by higher prices as well as the Japanese economic situation and lower prices at which Indian cotton has been obtainable. Since the beginning of the year the price of upland cotton at New York has continued the upward movement which began in the early fall,

reaching 31.20 cents, its highest point, on March 14. Weather conditions, with few exceptions, have been generally favorable in all districts for the planting of the new crop. In the Atlanta district planting is reported to be active in southern Georgia and Florida, while in the Dallas district some planting has been done in southern Texas. The cold weather in late February and in the middle of March, although it was unfavorable to early planting and killed some early cotton, has further reduced the potential damage by the boll weevil.

Tobacco.

The marketing season for tobacco is almost completed, and on the whole the season has been a successful one for the growers. The quality and yields have been good and prices have been higher than in the preceding season. Although during February many markets were closing, the producers' sales in Virginia markets were 3,633,000 pounds of bright tobacco, compared with 5,029,000 pounds sold in January and 10,644,000 pounds in February, 1922; and 5,541,000 pounds of dark tobacco, compared with 6,294,000 pounds sold in January and 6,217,000 pounds sold in February, 1922. The decrease in bright tobacco sales from February, 1922, is due in part to the exclusion of sales of cooperative warehouses, which were not in operation a year ago. Average prices for bright tobacco in the Virginia markets were \$26.17, compared with \$29.02 in January and \$13.98 in February, 1922. The lower prices in February, as compared with January, were due to the fact that in the closing periods the grades of tobacco handled were generally inferior, as the good grades continued to demand higher prices. The season's sales in North Carolina were 200,403,000 pounds at an average price of \$22.87, as compared with an average price of \$14.83 in the previous season. In the St. Louis district sales were on an enormous scale and prices were in the main satisfactory.

Production of cigarettes, manufactured tobacco, and cigars, was smaller in February than in January. The production of small cigars and manufactured tobacco was slightly smaller than in February, 1922, but cigarettes and large cigars increased. In the Philadelphia district the dull season of the year in the cigar industry is drawing to a close, and orders are reported larger than they were a year ago. The demand is excellent, and sales are greater than during March, 1922. Production in the large factories is near capacity, while in the

small factories it varies from 50 to 100 per cent of capacity. Prices of most cigars and cigarettes are unchanged, although in some lines some concessions were noted in order to induce sales.

Fruit.

As the apple season is drawing to a close in most sections of the country, the movement of apples to market during February was smaller than in January, but was greater than in February one year ago. The movement during February was 6,257 cars, compared with 8,171 in the preceding month and 4,683 in February, 1922. The prices paid to the growers have not been satisfactory, and as a result the holdings of apples in storage in the San Francisco district on March 1 were 167 per cent greater than on that date last year. The total movement of oranges and grapefruit in Florida to March 1 was greater than during the preceding season, amounting to 28,329 cars, or an increase of 4,451 cars over the same period one year ago. Increases were noted for both oranges and grapefruit shipments, but the increase in orange shipments was considerably greater than for grapefruit. It is estimated that about 30 or 32 per cent of the crop is yet to be moved. Further improvement of the orange crop in California was noted during February and the estimate of the crop has been increased approximately 4½ per cent, indicating a yield of 9,260,000 boxes. The lemon crop, on the other hand, has deteriorated and as the early season estimates have been reduced the total probable yield is now placed at 4,166,000 boxes. Advancing prices for oranges have stimulated the marketing of that fruit, whereas lower prices, coupled with unfavorable weather for picking, have reduced lemon shipments. The shipments for the season from the San Francisco district amounted to 14,405 cars of oranges, compared with 11,506 during the preceding season; and 2,113 cars of lemons, compared with 2,324 cars for the same period one year ago.

Live stock.

The marketing of live stock, as indicated by receipts of 57 markets during February, decreased as compared with January, but continued greater than in the corresponding period of last year. The marketing of live stock has been heavy during the fall and winter months, the monthly receipts averaging more than 8,000,000 head, but the February receipts were smaller than any month since August,

1922. The decline was due in part to fewer days in February, but it was also seasonal. Decreases were indicated for all animals, as compared with the preceding month, but increases were noted as compared with the same month one year ago. Detail figures for February, 1923, January, 1923, and February, 1922, are given in the table on page 506.

Pasture and range conditions showed considerable improvement in the Dallas and Kansas City districts. Heavy rains and snows relieved the drought that was prevalent throughout the Southwest during the greater part of the winter months. All stock is reported to have wintered better than usual on account of the mild weather and abundance of feed, and with the progress of the ranges the outlook is promising for the 1923 season. Conditions were not so favorable in the San Francisco district. Severe storms in the intermountain States and a protracted drought in California were the retarding factors during February and early March. Prior to this time the weather was generally favorable and, unless the cold and drought continue, but little permanent injury will be done. Lambing is in progress in all districts under favorable conditions, and some spring lambs have already reached the California markets.

MINING.

Coal.

Production of coal and coke continue to be maintained at a high level, although prices of bituminous coal have shown a steady downward trend since the first week of January. An average of the prices of 14 important grades of bituminous coal (prepared by the Coal Age) in the week ending March 19 was 9 per cent less than in the week ending February 17 and 30 per cent less than in the week ending January 6. Production of bituminous coal totaled 42,130,000 tons in February, which was 16 per cent less than in January, but 3 per cent more than in February, 1922. Export demand for gas coal has shown considerable improvement, as a result of the curtailment of production in the Ruhr and the consequent shortage throughout central and northern Europe. Domestic business has been inactive in the Middle West and Northwest, but New England industrial concerns have made heavy purchases. Commercial stocks of coal have shown a steady accumulation since September 1, 1922, and aggregated 38,000,000 tons on February 1.

Operations at anthracite coal mines are still at nearly a maximum rate, and production in

February totaled 7,773,000 tons, which was about 1,000,000 tons less than in January, but over 1,000,000 tons more than in February of last year. Despite the decline in bituminous prices, steam sizes of anthracite have been moving well and there has been no slackening in demand for domestic sizes. Prices have remained unchanged since early in the winter, although a few operators have recently shaded their quotations on certain steam sizes.

The price of foundry coke advanced slightly during March, as a result of the heavy demands of the iron industry and an increase in exports. Coke sales to householders have now practically ceased. Production of by-product coke decreased 11 per cent in February, while beehive output showed a slight increase.

Petroleum.

Advances in crude petroleum prices, which began late last fall, were checked during the latter part of February, and during March the only increase was one of 25 cents upon Gulf coast oil. Prices of refined products have recently been fairly firm, and scattered advances upon gasoline have been announced, but large stocks have held back any substantial increases, despite the higher quotations upon crude oil.

Average daily production of crude petroleum continues to increase, and each week sets a new high record. Although February output totaled less than in January, the rate of production was greater, and stocks on hand at the end of February were larger than they were a month previous. The number of new wells completed during February fell off and was the smallest since November, 1921.

The greatest increase in production during recent months has taken place in the California fields, and California oil is now being shipped east as a substitute for oil from Mexico, where the output is declining. The rate of production in Oklahoma and Kansas was also greater during February than in the preceding month, but output in Texas and Louisiana fell off during the later month. Weather conditions also retarded drilling operations in Texas, resulting in a decrease in new completions.

Metals.

Production of all nonferrous metals decreased moderately during February, but the reduction was largely due to the decrease in number of working days as compared with January. Prices, which rose sharply in February, made more moderate advances during the first three weeks of March. The price of refined electrolytic copper delivered at New York was

17.375 cents per pound on March 21, as compared with 16.75 cents on February 28 and 15 cents on January 31. Decrease in domestic demand in the first two weeks of March was offset by an increase in foreign orders. The Copper Export Association has reduced the stock of copper which it is holding and financing from 400,000,000 pounds to about 50,000,000 pounds during the last two years, as well as marketing a substantial percentage of the current production in that period. It is estimated that the association handles about 80 per cent of the copper exports of the United States. Mine production of copper amounted to 102,515,000 pounds in February, which was 9 per cent less than in January, but was almost three times as large as a year ago.

Zinc shipments totaled 48,153 tons in February, which was slightly larger than in January and twice as large as in February, 1922. As production only amounted to 42,443 tons stocks were reduced 5,710 tons, or about 34 per cent. Stocks of slab zinc on March 1 were only about one-sixth as large as a year previous and are equivalent to less than one week's supply at the present rate of consumption. The large demand for zinc has resulted in an increase in the price at St. Louis from 7.30 cents per pound on February 21 to 8 cents on March 21. Lead prices at New York increased between these same dates from 8 cents a pound to 8.25 cents. February production of lead was 10 per cent less than in January, but 9 per cent more than in February, 1922. Shipments of zinc and lead ores from the Joplin district increased during February, as a result of a further increase in ore prices.

Silver production declined 9 per cent during February, but was 22 per cent larger than a year ago. Deliveries of tin to factories were about twice as large as in February, 1922.

MANUFACTURES.

Food products.

The production of wheat flour during February was somewhat smaller than in January, due mainly to two less working days in the month, as the mills operated at slightly more than one-half of capacity, approximately the same operating ratio as in January. Although the production amounted to only 9,425,000 barrels in February as compared to 10,137,000 barrels in January, there was an increase of 193,000 barrels over February, 1922. Activity in the milling industry varied from 49.6 per cent of capacity in the Chicago district to 55.3 per cent in the Kansas City district, com-

pared with 52.2 per cent and 62.8 per cent in the respective districts in February, 1922.

The domestic flour business continued dull throughout the latter part of February, but some signs of improvement were noted in the first weeks of March through the bookings of new orders. Shipments continued slow. Export demand, although quiet in the latter part of February, seemed to improve early in March, but was mainly from countries outside of Europe.

Owing to the shortness of the month the number of animals slaughtered decreased during February, as compared with the preceding month, but considerable increase was shown over the corresponding month one year ago. The number of animals slaughtered under Federal inspection was 5,997,000, compared with 7,252,000 in January and 5,104,260 in February, 1922. Decreases in slaughter of all kinds of animals were noted in February, as compared with January, but those for cattle were slightly greater than for other animals.

Thirty-eight meat packing companies in the United States reported to the Chicago reserve bank an increase of 6 per cent in dollar sales over February, 1922, but a decrease of 4.5 per cent from the preceding month. The production of butter during February increased slightly as compared with January, and was greater than in February one year ago.

Consumption of meats per capita in the United States in 1922 was somewhat larger than in 1921 and in 1920, but exports of meat products have been seriously affected by adverse condition of foreign exchange and reduced purchasing power of European countries. Lard exports, due largely to the reentry of Germany into the market since the war, continued in large volume in 1922, falling short of the record established in 1921 by little more than 100,000,000 pounds. Storage holdings of meats on February 28 amounted to 805,523,000 pounds, an increase over both the previous month and February a year ago. Prices for pork products remained steady, while beef and lamb prices showed a tendency to decline, due to an oversupply resulting from heavy marketing of live stock.

Textiles.

Manufacturing activity in practically all textile industries was maintained at close to capacity during February and March. A slight between-season lull in buying was noted among some lines early in March, but shipments and production continued at the same rate in

order to fill orders previously received. Price advances for finished goods were numerous, following the trend of raw materials. Demands for wage increases have been made by workers in most textile industries and advances have been announced in many lines.

Mill consumption of cotton during February exceeded all previous records for that month, and the number of cotton spindles active was the largest ever reported. Operations are at close to capacity in practically all producing centers, and the volume of unfilled orders is large. The cotton goods market in the Philadelphia Federal reserve district was reported to be generally more active in March than in February, although staple cloths were somewhat duller. Many mills in the Richmond district found night operations necessary in order to keep up with orders, and business was still being booked for several months in advance. Production and shipments of cloth and yarns by certain manufacturers in the Atlanta district during February were about 20 per cent greater than a year ago, and unfilled orders on hand had increased 70 per cent. Finishers of cotton fabrics reported seasonal declines in business during February as compared with the preceding month. Raw cotton has continued to advance in price, but most of the mills are now fairly well supplied. A number of advances occurred in yarn quotations during March, although the market for yarns has not been particularly active. According to the Textile World index numbers, February cloth prices were 3 per cent higher than in January and over 20 per cent above those of a year previous, and yarn prices had advanced 5 per cent since January and nearly 50 per cent within the past year.

Fall orders for woolen and worsted goods have been practically all placed, and buying during March and late February was upon a limited scale. Manufacturers had, however, during previous weeks booked sufficient orders to enable them to continue operations at close to capacity for some months, and some have withdrawn certain lines from the market. Production consequently continued during February at about the same rate prevailing in the previous month. Activity among woolen spindles increased slightly during February, whereas active worsted spindle hours fell off some, and the per cent of loom hours active was also smaller. Consumption of wool by mills during February totaled about 7 per cent less than in January, which decline may be attributed to the shortness of the later month. Both the yarn and the raw-wool markets were

relatively quiet during March, as manufacturers are fairly well supplied for present needs. Reports from western growing centers indicate that prices demanded for the new clip are higher than those prevailing in the eastern markets. The Textile World index numbers for February indicated continued advances in the prices of raw wool and of yarn and cloths to levels respectively 33, 25, and 17 per cent above those prevailing a year ago.

Activity among silk manufacturers continued at a high rate during February, and deliveries of raw silk to mills, despite the shortness of the month, reached a total exceeded in the past three years only by that of last October. Loom activity at Paterson also attained the highest percentage reached within the past two years. The rate of production, however, declined in the North Hudson section late in January, and also fell off slightly in Paterson during the first week in March, but later recovered. Mills in the Philadelphia Federal reserve district report that the recent improvement in business continued into March, and that looms, with the exception of ribbon looms, were running at 75 per cent of capacity.

Men's clothing sales by wholesalers in the New York Federal reserve district during February exceeded those of January by 84 per cent and were 73 per cent greater than during last February. Sales of women's clothing increased 10 per cent. Reports from the Chicago district also indicate increased activity in men's clothing, and returns from certain tailors to the trade showed increases of 65 per cent in orders, production, and shipments, as compared with last year. In the St. Louis district a vigorous demand was noted for medium-priced spring garments, particularly from the cotton sections. An important event in the clothing industry was the opening early in March of fall lines by one of the largest manufacturers of ready-made men's clothing, with no change in prices on some lines and small advances on others.

Production and shipments of knit underwear were less in February than in January, and orders booked fell off over 50 per cent, leaving a lessened volume of unfilled orders on hand at the end of the month. These developments were largely seasonal. Shipments continued to exceed production by a substantial margin, but new orders received were smaller than production. Summer underwear production exceeded that of winter garments. Total output during February was somewhat less than during February, 1922. March sales of underwear by producers in the Philadelphia Federal reserve district were rather small, as the bulk of

the spring business had been previously placed. Prices of raw materials continued upward, and some advances were made on finished products.

According to reports from the Philadelphia district, the hosiery trade has not experienced the same improvement in demand noted by other textile industries. Although some mills were working at capacity, others were only operating at from 30 to 50 per cent. Statistics of production showed a decline since last February, but shipments, orders booked, and unfilled orders on hand were substantially larger. Manufacturers of cotton hosiery, however, in the Atlanta district reported that business was considerably better than last year, although seasonal declines were noted as compared with January.

Iron and steel.

Average daily production of pig iron increased considerably during February, while there was a slight reduction in the output of steel ingots. Prices of pig iron and of various kinds of finished steel registered further advances during the first three weeks of March, and a composite of the prices of 14 products (prepared by the Iron Trade Review) was 6 per cent higher on March 21 than on February 21. Demand has been very heavy in every branch of the steel industry, and reports from the Philadelphia district state that some companies which manufacture bars, plates, and shapes have already filled their order books for the second quarter of 1923. Moreover, the recent increase in building contracts awarded has resulted in a large increase of orders for structural steel. The unfilled orders of the United States Steel Corporation increased about 5 per cent in February and are now higher than at any time in the last two years. As a result of the recent curtailment of iron and steel production in Germany, there have been some foreign inquiries for American iron, whereas iron was being imported from Great Britain in the fall of 1922.

This improvement in domestic and foreign demand has resulted in a further increase in blast-furnace capacity. Sixteen additional furnaces were blown in during February, and preparations are being made to start other furnaces which have been idle for over two years.

Automobiles.

Production of passenger automobiles totaled 259,383 during February, which was 16 per cent more than in January and exceeded all

previous months except June, 1922. This rate of production appears particularly high when the facts that February has fewer working days than any other month and that the automobile industry in past years has always shown a low rate of output throughout the winter months are considered. Truck production was increased 13 per cent during February, but is still at a considerably lower level than that which prevailed during 1920.

Reports from the Chicago district indicate that orders to manufacturers for cars are at a high level and that deliveries to consumers are substantially larger than at this season last year. In order to stimulate the demand for used cars, many dealers are having the cars which they buy or receive in trade thoroughly overhauled and are giving a guarantee against mechanical defects when they sell them.

Tire factories in the Cleveland district are now working three shifts, and many plants report new production records. A shortage of labor has developed at Akron and wages have been advanced. Most of the larger companies have also announced another 10 per cent increase in tire prices.

Leather and shoes.

About the middle of March the packer hide market in Chicago became suddenly active, and sales of 300,000 hides were effected. Earlier in March and during February markets had been relatively inactive. Prices during February remained practically unchanged, but in March quotations on native hides fell off slightly. Prices on various grades of hides are now from 25 to 100 per cent above those prevailing a year ago.

In the Philadelphia district heavy leathers have been active and prices have advanced. The demand for the upper leathers during March was centered upon specialties. Tanners in the Chicago district reported that average daily output remained practically unchanged during January and February. Sole-leather production for the country as a whole, although totaling less in February, because of the shorter month, was at the same rate as in January, but less than that prevailing a year ago.

The decline in the production of shoes between January and February was so slight as to be negligible, and, in fact, increases were noted in some centers. Shipments, according to reports to the Federal Reserve Banks of Boston, Philadelphia, and Chicago, were larger than in January, but orders fell off. Production, shipments, and orders all exceeded the correspond-

ing items for February, 1922, but stocks on hand were smaller except in the Boston district. Manufacturers in the Philadelphia district reported a decline in demand during March, as Easter orders had been practically all filled, and operating schedules were also reduced. Sales of shoes by wholesalers during February were less than during January in the New York, St. Louis, and Minneapolis districts, but increased in the other reporting districts. Retail shoe sales, as reflected by reports of retailers in the Philadelphia district, and of chain stores, well distributed throughout the country, were smaller during February than in January, and the chain-store sales were below those of last February.

Paper.

Demand for paper is good and production is well maintained at high levels. Newsprint output during February, although less than in January because of the shortness of the month, exceeded that of any other February within the last six years. The production of book and wrapping papers during January was the largest on record. Paper wholesalers reporting to the Federal Reserve Bank of Philadelphia indicate that the demand was particularly good for fine, book, and wrapping papers during March, and sales exceeded those of earlier months. Printers and publishers in the Philadelphia district reported great activity growing out of an improved demand for advertising matter. Stocks of newsprint increased only slightly during February, although a fairly large increase is customary at that time of the year. Stocks of practically all grades of paper increased during January, in accordance with the usual seasonal trend. Both production and consumption of wood pulp increased during January, and stocks held by producers were enlarged slightly, although they are still very small in comparison with figures for previous months.

Lumber.

Lumber manufacturers since the middle of February have reported gradually increasing production, with declines in the volume of orders received and with shipments continuing at a steady rate. Mills have an enormous volume of unfilled orders on their books, which accumulated during the winter when production was curtailed. An unusually large cut will still be required to fill these orders, although the output of mills throughout the winter was well above that of the preceding year. Transportation conditions were reported to be hindering prompt shipments of

lumber from producing to consuming points. Prices on practically all grades of lumber have been steadily advancing for several weeks. Composite indexes show that about March 15 lumber prices were 2 per cent higher than they were a month previous to that date and 30 per cent above those of March, 1922. Lumber cut during February by 569 mills reporting to the National Lumber Manufacturers' Association totaled 977,669,000 feet, which was a decline of 5 per cent from the January cut, but an increase of 26 per cent above that for last February. Shipments were also less than in January, totaling 1,132,320,000 feet. Decreases in orders, shipments, and cut as compared with January were reported by the Southern Pine Association. Reports from the St. Louis Federal reserve district indicate a slackening in wholesale buying about the middle of February, with quietness prevailing in the market a month later. Production of lumber in the Minneapolis district increased during February, but manufacturers' stocks declined considerably. Output of mills in the San Francisco district was the maximum permitted by log supply and weather conditions. Production and shipments exceeded those of January and of last February. Orders booked were slightly less than in January, but unfilled orders increased. Shipments, many of which go by water, have exceeded production for three months and stocks of all grades were reported to be at low levels.

BUILDING.

Actual construction has been retarded somewhat in the northern parts of the country during the past three months on account of winter conditions. Plans for new construction, as shown by contracts awarded and permits issued, are very large at the present time. The value of contracts let in 10 Federal reserve districts (compiled from statistics collected by the F. W. Dodge Co.) totaled \$277,380,000 in February, which was 14 per cent more than in January. In seven districts for which comparable figures are available February contracts were 29 per cent larger than a year ago. The value of awards increased during February in all reporting districts except Boston and New York. The largest increase occurred in the Minneapolis district and amounted to 135 per cent. Statistics published on page 509 show that there was also a considerable increase in both number and value of building permits at 168 cities in February, as compared with January and a year ago.

A large proportion of the new building planned is for business or governmental purposes, as is shown by the fact that contracts awarded for residential buildings decreased 26 per cent during February, while all other contracts increased 55 per cent. The Secretary of Commerce, who has been making a study of this problem, issued a report during March in which he recommended that the National, State, and municipal governments initiate no new building projects until the present large private demand for construction has slackened. The report pointed out that Government agencies, by postponing construction, might prevent wasteful competition at present and might later alleviate unemployment.

Prices of building materials continued to advance during February and were on the average 24 per cent higher than in March, 1922. Production of brick and flooring decreased as compared with January, while cement production showed a moderate increase. Stocks of cement and brick showed some further accumulation.

TRANSPORTATION.

Increasing traffic and difficulty on the part of the railroads to keep pace with the demands of shippers are features of the present railroad situation. Car loadings have shown a definite upward trend since the beginning of January, and reached the highest figures for the current year in the week ending March 3. Loadings for the first two months of 1923 were higher than in the corresponding period of any previous year. Shipments of forest products, coke, and general merchandise have been exceptionally heavy, and an unusually large proportion of the traffic in February originated in the industrial sections of the East and Central West.

Freight-car shortage increased steadily during the last three weeks of February, but decreased in the first two weeks of March. The average shortage of all types of cars increased from 70,522 in the week ending February 8 to 80,633 in the week ending February 28, followed by a reduction to 74,442 in the week ending March 14. During this five-week period the shortage of box cars, which are chiefly used in shipping manufactured goods, increased 40 per cent, while the shortage of coal cars decreased 19 per cent. The number of bad-order cars on March 1 was 215,552, which was 3 per cent more than on February 1, but 35 per cent less than on March 1, 1922. The increase in bad-order cars during February may be ascribed partly to the damage to equipment from snow and ice and partly to the continuance of labor disputes at

certain railroad shops. Railroad equipment factories are maintaining close to a maximum rate of output, yet unfilled orders for locomotives increased from 1,788 to 2,220 during February; a total of 25,866 new freight cars were put in service during the first two months of 1923; and there were outstanding orders for 102,912 additional cars on March 1.

TRADE.

Wholesale trade.

Owing to the fact that February contained fewer business days, wholesale distribution was smaller than in the preceding month. However, pronounced increases were noted in all lines as compared with February, 1922. Although decreases during February were noted in all lines and in almost all Federal reserve districts, the extent of the decreases showed variations in all districts. Grocery sales decreased in 6 of the 11 reporting districts, the decreases ranging from 1.8 per cent in the Philadelphia district to 12 per cent in New York. The greatest increase was noted in the Kansas City district, being 26.6 per cent, and the smallest 0.4 per cent in the Dallas district. With the exception of the New York and Cleveland districts, dry goods sales decreased in all districts, the decreases ranging from 1.8 per cent in Kansas City to 12.8 per cent in St. Louis. Sales of shoes decreased in the New York, St. Louis, and Minneapolis districts, but increased in all others. Compared with February, 1922, sales of dry goods and hardware showed the greatest increases. The increases in hardware varied from 18 per cent in the Minneapolis district to 51.1 per cent in the Cleveland district, while increases in dry goods sales varied from 16.5 per cent in the Kansas City district to 53.1 per cent in the Richmond district. The increases in hardware sales reflect the influence of the large amount of building in the process of construction and increased farm activity, while increased dry goods sales reflect the influence of rising costs of raw materials. Collections were "fair to good" in all districts. The table on page 511 gives detailed figures of wholesale trade.

Retail trade.

Retail distribution during February was generally smaller than in the preceding month in all reporting lines except 5 and 10 cent chains, but continued greater than during the corresponding month one year ago. Sales by 5 and 10 cent chains increased approximately 2 per cent over January. Although the shortness of the month, combined with inclement weather in many districts, retarded

department-store trade during February as compared with January, increases over February, 1922, were noted in all districts. The increases ranged from 2.4 per cent in the Dallas district to 20.9 per cent in the San Francisco district. In addition to the San Francisco district the largest increases were in the industrial districts of Cleveland, Philadelphia, and Chicago, reflecting improved employment conditions and continued industrial expansion.

Stocks of department stores at the close of February were greater than at the close of January, due to the receipts of spring goods placed in stock during the month. Stocks on hand were, moreover, slightly larger than at the close of February, 1922, in all districts except Kansas City, where a decrease of 2.5 per cent was indicated. The increases varied from 0.4 per cent in the Dallas district to 14.2 per cent in the St. Louis district, the average increase for all sections being 6 per cent. Outstanding orders of department stores decreased in all districts except Cleveland, Chicago, and San Francisco. The table on page 511 gives detailed figures of retail trade.

PRICES.

Wholesale prices in the United States increased during the month of February, the index numbers of the Federal Reserve Board and Bureau of Labor Statistics each advancing 1 point. When the commodities in the board's index are grouped according to stages of manufacture, the level of raw materials remained unchanged, producers' goods rose 6 points, and consumers' goods declined 2 points.

Among raw materials, prices of metals continued the increases of January, while coal prices declined rapidly. Prices of grain increased, as they have for the past three months, and prices of live stock continued their opposite downward trend. Such producers' goods as steel, brick, mineral oils, cotton and woolen yarns show increases, causing the group as a whole to advance more rapidly than during any month of the past year. Among foods in the consumers' goods group, butter and eggs showed their usual large February declines. The increase in sugar prices brought the level of that commodity back to that of the early part of 1921. The cost is now 7.3 cents a pound, in contrast to 4.9 cents one year ago and 7.1 cents two years ago.

The groupings of the Bureau of Labor Statistics index number, showing the trends of

smaller groups of commodities, moved as follows: Farm products declined 1 point, foods remained unchanged, cloths and clothing increased 3 points, fuel and lighting decreased 6 points, metal products increased 6 points, building materials 4 points, chemicals and drugs 1 point, while house furnishings remained unchanged.

COMMERCIAL FAILURES.

Commercial failures during February showed a decline below the January figures by more than the usual seasonal amount and were fewer in number than during any month since September, 1921. Furthermore, during the first three weeks of March failures totaled 1,111, a decline of 34 per cent below the number reported for the corresponding period in March, 1922. Total liabilities involved in February failures were 44 per cent less than during last February and 54 per cent below the record figure reached in December, 1921. Both number and liabilities, however, were still relatively great when compared with corresponding data during the years prior to 1921. The number of insolvencies involving over \$100,000 in liabilities totaled 67 during February, as compared with 82 in January and 87 in February, 1922. The declines in both number and liabilities of February failures below the January figures were greater in the case of manufacturing establishments than with trading firms.

The number of defaults was less than during last February in all Federal reserve districts and exceeded those of January only in the Kansas City district. Liabilities were above the corresponding figures for last February in the Cleveland and San Francisco districts, and were larger than during January in the Boston, Atlanta, Dallas, and San Francisco districts, but were smaller in all other districts.

EMPLOYMENT.

Employment increased 2 per cent during February, according to reports received by the United States Bureau of Labor Statistics from 4,848 industrial establishments in all parts of the United States. Plants manufacturing fertilizer, agricultural implements, and automobiles reported the largest increases in number of workers, while meat-packing plants, car shops, and flour mills were the only industries showing any considerable reductions in forces. A substantial shortage of female

workers has developed at textile mills and garment factories in the Eastern States. Unskilled male labor also is in great demand in industrial sections, but is still in excess of the supply in States west of the Mississippi River. Almost all wage adjustments continue to be upward. Many plants manufacturing steel, lumber, railroad cars, furniture, brick, leather, and woolen goods announced wage advances in the 30-day period ending February 15.

Shortages of both male and female workers are reported from New England. The textile, shoe, metal, and machine industries report shortages of skilled male workers, while the textile, rubber, and electrical industries desire additional female workers. Cotton and woolen mills, brass foundries, and woodworking plants are working overtime, while lumber and paper mills are now on part-time schedules. The New York State Department of Labor reports that there was an increase of about 1.2 per cent in industrial employment during February, while average weekly earnings decreased 1.3 per cent. Scarcity of female factory workers and domestic workers has developed in many parts of the New York district and common labor is in great demand. Employment at sugar refineries and automobile plants was substantially increased during February, while iron and steel mills and metal plants generally report a shortage of workers. Reports from about 480 industrial establishments in the Philadelphia district show an increase of 2 per cent in number of employees in February as compared with January, while the average weekly earnings increased 4 per cent. Unemployment in four important cities of eastern Pennsylvania on March 15 was 12 per cent less than on February 15 and 21 per cent less than on January 1. Shortages of female workers in the garment industry and of skilled male workers in the metal industries and the meat-packing industry are reported, while there is a scarcity of common labor in many sections of the Philadelphia district. Iron furnaces and steel mills in the Cleveland district report shortages of common labor and of many types of skilled labor. Rubber factories in Akron are working three shifts, while other plants in the vicinity are working two shifts. Shortages of skilled cutters, loaders, and helpers have developed at mines in western Pennsylvania.

Employment in the food, steel, and lumber industries continues to increase in all parts of the Richmond district, while tobacco factories and coal mines have slightly reduced their forces. Textile mills have further increased

the number of their employees in the southern part of the district, but mills in Maryland have slightly reduced operations. There is still a surplus of general clerical workers in Washington, but the demand for male stenographers exceeds the supply. The textile, lumber, paper, and printing industries have added workers to their pay rolls in the Atlanta district. Common labor is still very scarce in Florida and Mississippi and there is a growing shortage of farm workers.

In the Chicago district the number employed by 218 firms increased about 1 per cent in February, although there was some decrease in the number of man-hours and average earnings on account of the decrease in number of working days as compared with January. The largest gains in employment occurred at plants manufacturing agricultural machinery, electrical goods, and wearing apparel, while decreases were registered by manufacturers of heavy machinery, by railway repair shops, and by tanneries. A shortage of building craftsmen is reported from the St. Louis district, and there is a large demand for farm help and female garment workers. A surplus of both male and female office help exists in the city of St. Louis. Steel mills, shoe factories, and lumber mills in the Minneapolis district increased their forces during February but there is still a surplus of agricultural workers. Demand for office help is improving in the Kansas City district, and calls for farm labor are more numerous. Coal mines, soap factories, brick yards, and flour mills are operating on part-time schedules.

The number of employed in the Dallas district continued practically unchanged during February. Some surplus of machinists and of common labor is reported. Oil companies are increasing the size of their forces. In the San Francisco district the commencement of spring farm work has reduced the surplus supply of common labor. Iron and steel mills and shipyards are employing additional workers. A surplus of common labor and commercial workers is reported from the northern part of the district.

FOREIGN TRADE.

The preliminary import figures now available for December, 1922, indicate the continuance of our import trade at a relatively high level, even if allowance is made for recent increases in commodity valuations. With the single exception of September, 1922, when large quantities of goods were rushed to this

country just before the new tariff rates went into effect, the December total of \$297,000,000 is the largest in any month since November, 1920. For the entire calendar year 1922 imports were valued at \$3,116,000,000, compared with \$2,509,000,000 in 1921.

Exports from the United States declined in value from \$336,000,000 in January to \$310,000,000 in February, the most recent month for which total figures have been compiled. Allowing for the fewer days in February, the returns for that month average slightly higher per day than do those for January. While there has been some falling off in our export trade as compared with the high levels of October and November, 1922, the reduction so far has not been sufficient to cause serious concern.

GOLD AND SILVER MOVEMENTS.

Net gold imports for the month of February totaled \$6,984,000, compared with \$24,348,000 for January. Both imports and exports were on a substantially lower scale than during the preceding months, imports from Europe and Canada showing the largest declines. Gross gold imports for the month under review were \$8,383,000. Of this total about 55 per cent, most of it in United States coin, came from Canada, about 12.5 per cent from the United Kingdom, and slightly less than 12 per cent from France. Over one-half of the total of \$1,399,000 of gold exported during the month was consigned to Hongkong, Mexico took \$546,000, or about 40 per cent of the gold exported during the month, while smaller shipments were made to Canada, Switzerland, and England.

Net imports of gold since August 1, 1914, totalled \$1,811,716,000, as shown in the following table:

[In thousands of dollars.]

	Imports.	Exports.	Excess of imports.
Aug. 1, 1914 to Dec. 31, 1918.....	1,776,616	705,210	1,071,406
Jan. 1 to Dec. 31, 1919.....	76,534	368,185	¹ 291,651
Jan. 1 to Dec. 31, 1920.....	417,068	322,091	94,977
Jan. 1 to Dec. 31, 1921.....	691,248	23,891	667,357
Jan. 1 to Dec. 31, 1922.....	275,170	36,875	238,295
Jan. 1 to Feb. 28, 1923.....	41,203	9,871	31,332
Total.....	3,277,839	1,466,123	1,811,716

¹ Excess of exports.

Silver imports during February, \$3,792,000, were lower than any monthly imports since June, 1921. About 60 per cent of the total

imported during the month came from Mexico, over 15 per cent from Peru, and about 14 per cent from Canada. Silver exports for the month, \$2,191,000, were largely directed toward China, British India, and England, these three countries together taking about 90 per cent of the total silver exports for the month.

Net silver exports since August 1, 1914, totaled \$434,756,000, as may be seen from the following table:

[In thousands of dollars.]

	Imports.	Exports.	Excess of exports.
Aug. 1, 1914, to Dec. 31, 1918.....	203,592	483,353	279,761
Jan. 1 to Dec. 31, 1919.....	89,410	239,021	149,611
Jan. 1 to Dec. 31, 1920.....	88,060	113,616	25,556
Jan. 1 to Dec. 31, 1921.....	63,242	51,575	¹ 11,667
Jan. 1 to Dec. 31, 1922.....	70,807	62,807	¹ 8,000
Jan. 1 to Feb. 28, 1923.....	9,617	9,112	¹ 505
Total.....	524,728	959,484	434,756

¹ Excess of imports.

FOREIGN EXCHANGE.

French francs, which had been declining since April, 1922, except for a brief rally in December, continued downward in January, February, and the early part of March of this year. On March 12 the franc stood at 6.03 cents, compared with 9.35 cents on April 24, 1922, the peak figure since 1919. During the latter part of March French exchange was very active, with a general upward trend, the quotation for March 30 being 6.62 cents. The course of the Belgian franc has been parallel to that of the French franc, while the Italian lira has remained fairly steady.

Sterling exchange has moved but little in March, with a general downward trend, the quotation on March 30 being \$4.68, compared with a peak of \$4.72 recorded on February 21. German marks, after being apparently pegged during the last week of February at 0.0044 cent, rose on March 7 to 0.0048 cent, where they were again stabilized for the remainder of the month.

Of the South American exchanges, Argentine pesos and Brazilian milreis declined somewhat, while Chilean pesos advanced considerably. In the Orient the Japanese yen and the Indian rupee remained fairly steady, while the Shanghai tael advanced from 71 cents in the middle of February to 76 cents in the middle of March. This advance is parallel to a corresponding rise in the price of silver.

RULINGS OF THE FEDERAL RESERVE BOARD.

Nonmember bank balances.

There is published herewith the substance of a ruling made by the Federal Reserve Board upon the question whether certain items should be considered as a sum on deposit with a nonmember bank within the meaning of that portion of section 19 of the Federal reserve act which provides: "No member bank shall keep on deposit with any State bank or trust company which is not a member bank a sum in excess of 10 per centum of its own paid-up capital and surplus."

The facts upon which the ruling was predicated were stated to be as follows:

A State member bank has been sending to a nonmember bank all its foreign items for collection and credit, these items consisting either of checks received as cash items from the member bank's customers, or the member bank's own drafts on its other correspondent banks. These items are indorsed in blank by the member bank's customers and by the member bank with the usual indorsement, "Pay to the order of any bank, banker, or trust company, all previous indorsements guaranteed." They are handled by the nonmember bank as cash items. At times, when large remittances are made, the member bank's books show balances in excess of 10 per cent of its capital and surplus with the nonmember bank, but its collected or available balance with the nonmember bank is at all times within this 10 per cent limitation. By collected or available balance is meant such portion of the items sent the nonmember bank as has been actually collected by the nonmember bank and which, under an agreement between the member and nonmember bank, may be checked against by the former. It is the practice of the member bank to charge all items to the nonmember bank immediately, and of the nonmember bank to give immediate credit for the same, subject to final payment, but by virtue of the understanding noted above, the credit thus created on the books of the nonmember bank may not be checked against until final payment of the items creating the credit has been received.

As a matter primarily of bookkeeping, the board is of the opinion that a member bank should not be permitted to show on its books that it has a balance due from a nonmember bank in excess of the 10 per cent limit allowed by law, for this constitutes *prima facie* a

violation of the law, irrespective of whether or not part of such balance may consist of items which properly do not represent sums "on deposit with" the nonmember bank within the meaning of section 19.

The further question is raised, however, as to whether items sent the nonmember bank under the circumstances stated and still in process of collection must be included in the balance due from the nonmember bank, or, in other words, whether the uncollected items properly should be deemed to constitute "a sum on deposit with" the nonmember bank, within the meaning of the above quoted provision of section 19 of the Federal reserve act.

It appears that there is an irreconcilable conflict of legal authority upon the question whether, under general principles of law, items forwarded under the circumstances described and still uncollected would be held to constitute a deposit, although the better view seems to be that the member bank would become a general creditor of and depositor in the nonmember bank with respect to all such items. Inasmuch, however, as the question under consideration is whether certain items constitute a sum on deposit with a nonmember bank within the meaning of section 19 of the Federal reserve act, the board is not concluded by general rules of law, but may properly look to the spirit and purpose of this provision of section 19 and so construe and administer it as best to carry out the intention of Congress in enacting this legislation.

One purpose of the provision limiting the amount which a member bank may keep on deposit with a nonmember bank, and perhaps the primary purpose, is to minimize the risk incurred by a member bank in maintaining a balance with a bank which is not a member bank and which consequently does not have the security and protection afforded by membership in the Federal reserve system. With this purpose in view, the board believes that, in determining whether certain items should be held to constitute sums on deposit with a nonmember bank within the proper meaning of section 19, it should be governed largely by a consideration of the risk incurred by member banks in handling items through a nonmember bank. In view of the uncertainty as to how the courts would deal with such items in the event of failure of the nonmember bank, it would seem that member banks should

count as part of the permitted balance due from a nonmember bank all items which might reasonably be held to constitute sums on deposit with such nonmember bank. In this way member banks would be protected against undue loss in case of the nonmember bank's insolvency, as was contemplated by Congress. As seen above, the items under consideration, although not conclusively established in all jurisdictions to constitute deposits under general principles of law, are properly susceptible of such a characterization, and, in the board's opinion, they should be held to represent sums on deposit with a nonmember bank within the meaning of section 19 of the Federal reserve act.

This ruling is in accord with previous rulings made by the board in connection with the provision of section 19 that "In estimating the balances required by this act, the net difference of amounts due to and from other banks shall be taken as the basis for ascertaining the deposits against which required balances

with Federal reserve banks shall be determined." In construing this provision the board has ruled that in deducting "due from" bank balances from "due to" bank balances in ascertaining the amount against which reserves must be carried, out-of-town checks placed in the mail and charged to the account of a bank's correspondent may be included as part of the balances "due from" such correspondent. Thus the board has held in another connection that items sent to a correspondent bank and charged to its account constitute balances "due from" such correspondent, or, in other words, "a sum on deposit" therewith.

The board is of the opinion, therefore, that all items forwarded to a nonmember bank under the circumstances described must be considered as sums on deposit with the nonmember bank within the meaning of section 19, and are accordingly subject to the 10 per cent limitation on nonmember bank balances contained therein.

LAW DEPARTMENT.

Textual Changes in Federal Reserve Act by Agricultural Credit Act and Act of February 6, 1923.

There is published below a compilation of the textual changes made in the Federal reserve act by the recent amendments contained in the act of February 6, 1923, and in the act of March 4, 1923, which is known as the agricultural credits act of 1923. Italics indicate matter inserted by the new amendments and canceled words show old matter stricken out.

The last paragraph of section 10 of the act of December 23, 1913, as amended, was further amended by the act of February 6, 1923, to read as follows:

No Federal reserve bank shall have authority hereafter to enter into any contract or contracts for the erection of any branch bank building of any kind or character, or to authorize the erection of any such building, *if the cost of the building proper, exclusive of the cost of the vaults, permanent equipment, furnishings, and fixtures is in excess of \$250,000, without the consent of Congress having previously been given therefor in express terms:* *Provided, That nothing herein shall apply to any building now under construction prior to June 3, 1922.*

The ninth paragraph of section 9 of the act of December 23, 1913, as amended, was further amended by the act of March 4, 1923, to read as follows:

No applying bank shall be admitted to membership in a Federal reserve bank unless (a) it possesses a paid-up, unimpaired capital sufficient to entitle it to become a national banking association in the place where it is situated under the provisions of the National Bank Act, or (b) it possesses

a paid-up, unimpaired capital of at least 60 per centum of the amount sufficient to entitle it to become a national banking association in the place where it is situated under the provisions of the National Bank Act and, under penalty of loss of membership complies with rules and regulations which the Federal Reserve Board shall prescribe fixing the time within which and the method by which the unimpaired capital of such bank shall be increased out of net income to equal the capital which would have been required if such bank had been admitted to membership under the provisions of clause (a) of this paragraph: Provided, That every such rule or regulation shall require the applying bank to set aside annually not less than 20 per centum of its net income of the preceding year as a fund exclusively applicable to such capital increase.

The second paragraph of section 13 of the act of December 23, 1913, as amended, was further amended and divided into two paragraphs by the act of March 4, 1923, to read as follows:

Upon the indorsement of any of its member banks, which shall be deemed a waiver of demand, notice and protest by such bank as to its own indorsement exclusively, any Federal reserve bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act. Nothing in this Act contained shall be construed to prohibit such notes, drafts, and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount, *and the notes, drafts, and bills of exchange of factors issued as such making advances exclusively to producers of staple agricultural products in their raw state shall be eligible*

for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than 90 days, exclusive of days of grace. *Provided*, That notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months, exclusive of days of grace, may be discounted in an amount to be limited to a percentage of the assets of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board.

Upon the indorsement of any of its member banks, which shall be deemed a waiver of demand, notice, and protest by such bank as to its own indorsement exclusively, and subject to regulations and limitations to be prescribed by the Federal Reserve Board, any Federal reserve bank may discount or purchase bills of exchange payable at sight or on demand which are drawn to finance the domestic shipment of non-perishable, readily marketable staple agricultural products and are secured by bills of lading or other shipping documents conveying or securing title to such staples: *Provided*, That all such bills of exchange shall be forwarded promptly for collection, and demand for payment shall be made with reasonable promptness after the arrival of such staples at their destination: *Provided further*, That no such bill shall in any event be held by or for the account of a Federal reserve bank for a period in excess of 90 days. In discounting such bills Federal reserve banks may compute the interest to be deducted on the basis of the estimated life of each bill and adjust the discount after payment of such bills to conform to the actual life thereof.

The fourth paragraph of section 13 of the act of December 23, 1913, as amended, was further amended by the act of March 4, 1923, to read as follows:

Any Federal reserve bank may discount acceptances of the kinds hereinafter described, which have a maturity at the time of discount of not more than 90 days' ~~three months'~~ sight, exclusive of days of grace, and which are indorsed by at least one member bank: *Provided*, That such acceptances if drawn for an agricultural purpose and secured at the time of acceptance by warehouse receipts or other such documents conveying or securing title covering readily marketable staples may be discounted with a maturity at the time of discount of not more than six months' sight exclusive of days of grace.

Section 13 of the act of December 23, 1913, as amended, was further amended by the act of March 4, 1923, by adding at the end of the section a new section to read as follows:

Sec. 13a. Upon the indorsement of any of its member banks, which shall be deemed a waiver of demand, notice, and protest by such bank as to its own indorsement exclusively, any Federal reserve bank may, subject to regulations and limitations to be prescribed by the Federal Reserve Board, discount notes, drafts, and bills of exchange issued or drawn for an agricultural purpose, or based upon live stock, and having a maturity, at the time of discount, exclusive of days of grace, not exceeding nine months, and such notes, drafts, and bills of exchange may be offered as collateral security for the issuance of Federal reserve notes under the provisions of section 16 of this Act: *Provided*, That notes, drafts, and bills of exchange with maturities in

excess of six months shall not be eligible as a basis for the issuance of Federal reserve notes unless secured by warehouse receipts or other such negotiable documents conveying or securing title to readily marketable staple agricultural products or by chattel mortgage upon live stock which is being fattened for market.

That any Federal reserve bank may, subject to regulations and limitations to be prescribed by the Federal Reserve Board, rediscount such notes, drafts, and bills for any Federal Intermediate Credit Bank, except that no Federal reserve bank shall rediscount for a Federal Intermediate Credit Bank any such note or obligation which bears the indorsement of a nonmember State bank or trust company which is eligible for membership in the Federal reserve system, in accordance with section 9 of this Act.

Any Federal reserve bank may also buy and sell debentures and other such obligations issued by a Federal Intermediate Credit Bank or by a National Agricultural Credit Corporation, but only to the same extent as and subject to the same limitations as those upon which it may buy and sell bonds issued under Title I of the Federal Farm Loan Act.

Notes, drafts, bills of exchange or acceptances issued or drawn by cooperative marketing associations composed of producers of agricultural products shall be deemed to have been issued or drawn for an agricultural purpose, within the meaning of this section, if the proceeds thereof have been or are to be advanced by such association to any members thereof for an agricultural purpose, or have been or are to be used by such association in making payments to any members thereof on account of agricultural products delivered by such members to the association, or if such proceeds have been or are to be used by such association to meet expenditures incurred or to be incurred by the association in connection with the grading, processing, packing, preparation for market, or marketing of any agricultural product handled by such association for any of its members: *Provided*, That the express enumeration in this paragraph of certain classes of paper of cooperative marketing associations as eligible for rediscount shall not be construed as rendering ineligible any other class of paper of such associations which is now eligible for rediscount.

The Federal Reserve Board may, by regulation, limit to a percentage of the assets of a Federal reserve bank the amount of notes, drafts, acceptances, or bills having a maturity in excess of three months, but not exceeding six months, exclusive of days of grace, which may be discounted by such bank, and the amount of notes, drafts, bills, or acceptances having a maturity in excess of six months, but not exceeding nine months, which may be rediscounted by such bank.

Paragraph (d) of section 14 of the act of December 23, 1913, as amended, was further amended by the repeal of the act entitled "An act to amend an act approved December 23, 1913, known as the Federal reserve act," approved April 13, 1920. The effect of this amendment is to make paragraph (d) of section 14 read as follows:

(d) To establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business and which, subject to the approval, review, and determination of the Federal Reserve Board, may be graduated or progressed on the basis of the amount of the advances and discount accommodations extended by the Federal reserve bank to the borrowing bank.

Section 14 of the act of December 23, 1913, as amended, was further amended by the act of March 4, 1923, by adding at the end of the section a new paragraph to read as follows:

(f) To purchase and sell in the open market, either from or to domestic banks, firms, corporations, or individuals, acceptances of Federal Intermediate Credit Banks and of National Agricultural Credit Corporations, whenever the Federal Reserve Board shall declare that the public interest so requires.

Section 15 of the act of December 23, 1913, as amended, was further amended by the act of March 4, 1923, by adding at the end of the section a new paragraph to read as follows:

The Federal reserve banks are hereby authorized to act as depositories for and fiscal agents of any National Agricultural Credit Corporation or Federal Intermediate Credit Bank.

Other Provisions of Agricultural Credits Act Affecting Federal Reserve System.

In addition to those portions of the agricultural credits act which make textual changes in the Federal reserve act itself, the following sections of the act also indirectly amend the Federal reserve act or otherwise affect the Federal reserve system:

DISCOUNTS AND LOANS.

"SEC. 202. (a) That Federal Intermediate Credit Banks, when chartered and established, shall have power, subject solely to such restrictions, limitations, and conditions as may be imposed by the Federal Farm Loan Board not inconsistent with the provisions of this Act,—

(1) To discount for, or purchase from, any national bank, and/or any State bank, trust company, agricultural credit corporation, incorporated live-stock loan company, savings institution, cooperative bank, cooperative credit or marketing association of agricultural producers, organized under the laws of any State, and/or any other Federal Intermediate Credit Bank, with its indorsement, any note, draft, bill of exchange, debenture, or other such obligation the proceeds of which have been advanced or used in the first instance for any agricultural purpose or for the raising, breeding, fattening, or marketing of live stock;

(2) To buy or sell, with or without recourse, debentures issued by any other Federal Intermediate Credit Bank; and

(3) To make loans or advances direct to any cooperative association organized under the laws of any State and composed of persons engaged in producing, or producing and marketing, staple agricultural products, or live stock, if the notes or other such obligations representing such loans are secured by warehouse receipts, and/or shipping documents covering such products, and/or mortgages on live stock: *Provided*, That no such loan or advance shall exceed 75 per centum of the market value of the products covered by said warehouse receipts and/or shipping documents, or of the live stock covered by said mortgages.

"(b) No paper shall be purchased from or discounted for any national bank, State bank, trust company, or savings institution under this section, if the amount of such paper added to the aggregate liabilities of such national bank, State bank, trust company or savings

institution, whether direct or contingent (other than bona fide deposit liabilities), exceeds the amount of such liability permitted under the laws of the jurisdiction creating the same; or exceeds twice the paid in and unimpaired capital and surplus of such national bank, State bank, trust company, or savings institution. No paper shall under this section be purchased from or discounted for any other corporation engaged in making loans for agricultural purposes or for the raising, breeding, fattening, or marketing of live stock, if the amount of such paper added to the aggregate liabilities of such corporation exceeds the amount of such liabilities permitted under the laws of the jurisdiction creating the same; or exceeds ten times the paid in and unimpaired capital and surplus of such corporation. It shall be unlawful for any national bank which is indebted to any Federal Intermediate Credit Bank upon paper discounted or purchased under this section, to incur any additional indebtedness, if by virtue of such additional indebtedness its aggregate liabilities, direct or contingent, will exceed the limitations herein contained."

(c) Loans, advances, or discounts made under this section shall have a maturity at the time they are made or discounted by the Federal Intermediate Credit Bank of not less than six months nor more than three years. Any Federal Intermediate Credit Bank may in its discretion sell loans or discounts made under this section, with or without its indorsement.

(d) Rates of interest or discount charged by the Federal Intermediate Credit banks upon such loans and discounts shall be subject to the approval of the Federal Farm Loan Board. On the majority vote of the members of the Federal Farm Loan Board any Federal Intermediate Credit Bank shall be required to rediscount the discounted paper of any other Federal Intermediate Credit Bank at rates of interest to be fixed by the Federal Farm Loan Board.

TITLE II.—NATIONAL AGRICULTURAL CREDIT CORPORATIONS.

* * *
SEC. 203. (a) That each National Agricultural Credit Corporation shall have power, under such rules and regulation as the Comptroller of the Currency may prescribe—

(1) To make advances upon, to discount, rediscount, or purchase, and to sell or negotiate, with or without its indorsement or guaranty, notes, drafts, or bills of exchange, and to accept drafts or bills of exchange, which—

(A) Are issued or drawn for an agricultural purpose, or the proceeds of which have been or are to be used for an agricultural purpose;

(B) Have a maturity, at the time of discount, purchase, or acceptance, not exceeding nine months; and

(C) Are secured at the time of discount, purchase, or acceptance by warehouse receipts or other like documents conveying or securing title to nonperishable and readily marketable agricultural products, or by chattel mortgages or other like instruments conferring a first and paramount lien upon live stock which is being fattened for market.

(2) To make advances upon or to discount, rediscount, or purchase, and to sell or negotiate with or without its indorsement or guaranty, notes secured by chattel mortgages conferring a first and paramount lien upon maturing or breeding live stock or dairy herds, and having a maturity at the time of discount, rediscount, or purchase not exceeding three years.

* * *
(8) To issue, subject to such regulations as the Comptroller of the Currency may prescribe, collateral trust notes or debentures, with a maturity not exceeding three years, and to pledge as security for such notes or debentures

any notes, drafts, bills of exchange, or other securities held by the corporation under the terms of this title. The regulations of the Comptroller of the Currency may prescribe the form of notes or debentures, and of notes, drafts, bills of exchange, warehouse receipts, chattel mortgages, or other instruments which may be pledged as security therefor, the provisions which may be made with regard to release, substitution, or exchange of such securities, and with regard to protection, supervision, inspection, and reinspection of the agricultural commodities or live stock pledged or mortgaged as security therefor.

(b) The United States Government shall assume no liability, direct or indirect, for any debentures or other obligations issued under this title, and all such debentures and other obligations shall contain conspicuous and appropriate language, to be prescribed in form and substance by the Comptroller of the Currency and approved by the Secretary of the Treasury, clearly indicating that no such liability is assumed.

(c) Any obligation referred to in paragraphs (1) or (2) of subdivision (a) of this section, which is secured by chattel mortgage upon live stock of an estimated market value at least equal to the face amount of such obligation, may be additionally secured by mortgage or deed of trust upon real estate or by other securities, under such regulations as may be made by the Comptroller of the Currency.

* * * *

REDISCOUNT CORPORATIONS.

SEC. 207. (a) That National Agricultural Credit Corporations having an authorized capital stock of \$1,000,000 or over may be organized under the provisions of this title, to exercise all the powers enumerated in section 203, except that in lieu of the powers conferred in paragraphs (1) and (2) of subdivision (a) of such section, such corporations shall have powers,—

(1) Upon the indorsement of any National Agricultural Credit Corporation, or of any bank or trust company which is a member of the Federal Reserve System, to rediscount for such corporation, bank, or trust company, notes, drafts, bills of exchange, and acceptances, which conform to the requirements of paragraphs (1) and (2) of subdivision (a) of section 203. Such indorsement shall be deemed to be a waiver of demand notice and protest by such corporation as to its own indorsement exclusively.

(2) To discount or purchase notes, drafts, or bills of exchange issued or drawn by cooperative associations of producers of agricultural products, provided such notes, drafts, or bills of exchange are secured at the time of discount or purchase by warehouse receipts or other like documents conveying or securing title to nonperishable and readily marketable agricultural products, and have a maturity at the time of discount or purchase not exceeding nine months.

(3) To sell or negotiate with or without recourse any note, draft, or bill of exchange discounted or purchased hereunder.

(b) National Agricultural Credit Corporations organized under the provisions of this section, shall not be subject to the limitations contained in section 204, but the Comptroller of the Currency may, by general regulations, from time to time prescribe the amount of indebtedness, direct or contingent, which such corporations may incur, and the aggregate amount of paper of different types which such corporations may rediscount for any one corporation.

(c) Corporations with powers limited, as provided in this section, shall not be subject to the requirements as to deposit of bonds or other obligations of the United States, as provided in section 208 of this title.

PERMIT TO BEGIN BUSINESS.

SEC. 208. (a) That no National Agricultural Credit Corporation, except corporations with powers limited as provided in section 207, shall commence business until it has deposited with the Federal reserve bank of the district wherein it has its place of business, bonds or other obligations of the United States in an aggregate face amount at least 25 per centum of its paid-in capital stock. Each such corporation shall at all times keep on deposit with such Federal reserve bank an amount of such bonds or other obligations of the United States at least equal in face value to $7\frac{1}{2}$ per centum of the aggregate indebtedness of such corporation, direct or contingent, said amount to include the 25 per centum deposited as hereinbefore by this section provided. Except as hereinafter provided, such bonds or other obligations shall be held by such Federal reserve bank, subject to the direction and control of the Comptroller of the Currency, in trust for the equal and pro rata protection and benefit of all holders of notes, debentures, drafts, bills of exchange, or acceptances upon which such corporation may be directly or contingently liable. Upon receipt of proper evidence that the amount of such bonds or other obligations of the United States so deposited exceeds $7\frac{1}{2}$ per centum of such aggregate indebtedness, the Comptroller of the Currency may release such excess, provided that the amount remaining on deposit shall in no event be reduced below 25 per centum of the paid-in capital stock of such corporation. Under such regulations as the Comptroller of the Currency may prescribe, a Federal reserve bank may, upon request of the corporation which deposited the same, sell any such bonds or obligations for account of such corporation, and permit such corporation to use the proceeds thereof for the protection or preservation of any property pledged or mortgaged as security for obligations owned or indorsed by the corporation. If by reason of such sale the face amount of such bonds or other obligations of the United States remaining on deposit with such Federal reserve bank shall be less than $7\frac{1}{2}$ per centum of such aggregate indebtedness of the corporation, no further advances shall be made, or notes, drafts, or bills of exchange discounted, rediscounted, accepted, or purchased, by such corporation until sufficient additional bonds or other obligations of the United States have been deposited to make good the deficiency.

BANKS MEMBERS OF THE FEDERAL RESERVE SYSTEM MAY BECOME STOCKHOLDERS.

SEC. 210. That any member bank of the Federal reserve system may file application with the Comptroller of the Currency for permission to invest an amount not exceeding in the aggregate 10 per centum of its paid in capital stock and surplus in the stock of one or more of the National Agricultural Credit Corporations, and upon approval of such application may purchase such stock. The Comptroller of the Currency shall have discretion to approve or reject such application in whole or in part.

DEPOSITS.

SEC. 212. That the moneys of National Agricultural Credit Corporations may be kept on deposit subject to check in any member bank of the Federal reserve system.

THE GOLD SITUATION.

Continued gold imports to the United States, though in reduced volume, and the unprecedented total of the gold reserves of the Federal reserve banks make it opportune to review once more the general gold situation.¹

The table below shows the gold reserves of the principal countries at the end of 1913, just

before the outbreak of the war; at the end of 1918, after the signing of the armistice; at the end of August, 1920, the close of the period when the United States lost gold to other countries after the lifting of the gold embargo, and at the end of 1922. The percentages that reserves of each country constituted of the total on each date are shown in the last four columns of the table.

GOLD RESERVES OF THE PRINCIPAL COUNTRIES.

	Gold holdings (in thousands of dollars).				Percentage distribution.			
	Dec. 31, 1913.	Dec. 31, 1918.	Aug. 31, 1920.	Latest available date 1922.	Dec. 31, 1913.	Dec. 31, 1918.	Aug. 31, 1920.	Latest available date 1922.
United States.....	691,514	2,245,720	2,129,941	3,200,372	29.4	35.5	32.1	40.3
Great Britain.....	170,245	523,632	737,416	751,841	5.0	8.3	11.1	9.5
France.....	678,856	604,017	697,108	708,403	20.0	10.5	10.5	8.9
Japan.....	64,963	225,821	411,263	608,170	1.9	3.6	6.2	7.7
Spain.....	92,490	430,072	473,309	487,278	2.7	6.8	7.1	6.1
Argentina.....	224,989	269,628	450,057	450,057	6.6	4.3	6.8	5.7
Netherlands.....	60,898	277,155	255,808	233,880	1.8	4.4	3.9	2.9
Germany.....	278,687	538,861	260,035	227,437	8.2	8.5	3.9	2.7
Italy.....	238,103	243,566	203,834	215,822	8.5	3.9	2.6	2.3
Canada.....	142,517	190,688	172,002	180,907	4.2	3.0	2.6	1.5
India.....	72,780	63,842	126,905	118,341	2.2	1.0	1.9	1.5
Australia.....	21,899	104,143	112,966	112,048	.6	1.6	1.7	1.4
Switzerland.....	32,801	80,041	104,213	103,135	1.0	1.3	1.6	1.3
Sweden.....	27,372	76,532	70,041	73,422	.8	1.2	1.1	.9
Denmark.....	19,666	52,159	60,991	61,185	.6	.8	.9	.8
Java.....	10,027	51,600	60,500	61,819	.3	.8	.9	.8
South Africa.....	39,905	33,379	54,991	74,088	1.2	.5	.8	.9
Belgium.....	59,131	51,145	51,453	51,991	1.7	.8	.8	.6
Norway.....	12,846	32,691	39,488	39,474	.4	.5	.6	.5
New Zealand.....	25,306	39,419	37,472	38,127	.7	.6	.6	.6
Brazil.....	53,202	15,571	19,454	45,119	1.6	.3	.3	.6
Egypt.....	10,381	16,312	16,614	16,604	.3	.3	.3	.2
Yugoslavia.....				12,352				.1
Czechoslovakia.....			509	12,738				.2
Greece.....	5,211	10,422	11,001	6,061	.2	.2	.2	.1
Portugal.....	8,760	9,263	9,266	9,267	.3	.2	.1	.1
Finland.....	6,948	8,293	8,299	8,371	.2	.1	.1	.1
Bulgaria.....	10,615	12,352	7,141	7,401	.3	.2	.1	.1
Poland.....			1,637	8,240				.1
Rumania.....	29,242	2	329	7,585	.9			.1
Austria.....	251,421	53,074	45,113	9,939	7.4	.8	.6	.1
Hungary.....								
Total.....	3,390,775	6,319,606	6,629,226	7,941,435	100.0	100.0	100.0	100.0

The increase in the total gold reserves from \$3,391,000,000 in 1913 to \$6,320,000,000 at the end of 1918 was due in large part to the concentration of gold previously in circulation, while the increase of gold reserves of the United States during that period was due largely to payments to this country for war supplies. The next period, ending August 31, 1920, shows a further increase to \$6,629,000,000, part of which was due to further withdrawals from circulation and hoards and part to new gold produced. During this period the United States lost gold, owing to the fact that several countries of South America and of the Orient had gold balances here which could not be withdrawn until the lifting of the embargo, but which were released at that time.

Between August 31, 1920, and the end of 1922 total central gold reserves increased by over \$1,300,000,000. This period is characterized chiefly by the heavy movement of gold to the United States. It was the repayment in October, 1920, of the \$500,000,000 Anglo-French loan that started this current of gold from Europe to America. The major part of the gold came from England, France, Sweden, and the Netherlands. This movement of gold consisted for the most part of the new gold mined in the British possessions, but included also gold from the German central reserve, paid for food supplied by the United States Grain Corporation. In addition a large part of the Russian gold reserve was shipped to various European countries, whence equivalent amounts found their way to the United States. The fundamental cause for this gold movement to the

¹ For previous reviews of the gold situation see FEDERAL RESERVE BULLETIN, June, 1921, and June, 1922.

United States was that the countries of Europe were exhausted by war; their productive plant was badly disorganized; their production and ability to export goods were, therefore, greatly reduced, and yet they were in need of food and raw materials from America. Prior to 1921 they were able to obtain much of what they required in America on credit, first, using the credits authorized by the United States Treasury, and later using large amounts borrowed privately either on open account, or by the flotation of securities.

The movement of gold to the United States was thus not the ordinary movement of funds to the most profitable channels of investment; it was the effect of the efforts of war-stricken countries to obtain goods for reconstruction. The loss of this gold by the countries of Europe, coupled with the growth of note circulation, resulted in the fall of the exchange value of most of their currencies, together with a rapid advance in prices. These factors in turn increased the difficulty of financing reconstruction, of balancing budgets, and of inaugurating and enforcing equitable plans of taxation. The distinctive thing about this gold movement is that the gold was not attracted to this

country by economic opportunities here, but rather was expelled by conditions prevailing in the older countries.

GOLD PRODUCTION.

Gold production from 1910 to 1923 is shown in the table below.

It will be noted that the decline in total production has been constant since the record year 1915. The decrease was due partly to the loss of Russian production and partly to the increased cost of operation with a fixed price of the product. The Transvaal output for 1922 was considerably reduced by the Rand strike of January-March, although Transvaal returns for the last six months of 1922 amounted to £19,400,000, as compared with £17,700,000 for the last six months of 1921. If this rate of production in the Transvaal will continue throughout 1923, it will bring the amount produced practically up to its previous maximum. In view of this and other improvements, British experts believe that the year 1922 saw the end of the decline and that 1923 will show a marked increase in world production of gold.

GOLD PRODUCTION OF THE WORLD.

[In thousands of dollars.]

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922. ¹
United States.....	96,269	96,890	93,451	88,884	94,532	101,036	92,590	83,751	68,647	60,333	51,187	50,067	49,096
Canada.....	10,206	9,762	12,649	16,599	15,983	18,978	19,235	15,273	14,464	15,850	15,853	19,109	25,800
Russia.....	35,580	32,152	22,199	26,508	28,586	26,323	22,500	18,000	12,000	11,000	1,183	930	.....
South Africa:													
Transvaal.....	175,190	191,539	188,293	181,885	173,560	188,033	192,183	186,427	174,023	172,230	172,231	168,036	145,000
Rhodesia.....			14,227	14,275	17,664	18,915	19,232	17,245	13,051	12,268	11,433	12,132	13,600
Australia:													
Western Australia.....	65,471	60,184	28,515	27,166	25,488	25,015	21,941	20,058	18,119	15,175	12,772	13,746	17,000
Other Australia.....			27,994	25,947	22,081	23,973	18,535	14,340	12,693	11,737	9,880	6,991	
British India.....	10,718	11,054	11,056	12,178	11,378	11,523	11,209	10,813	10,031	10,486	10,317	9,716	8,800
All other.....	61,805	60,359	69,752	66,499	49,806	54,929	56,752	53,515	60,578	56,710	52,163	49,188	57,004
Total.....	455,239	461,940	466,136	459,941	439,078	468,725	454,177	419,422	383,606	365,789	337,019	329,915	316,300

¹ Preliminary estimates: For the United States, by the Director of the Mint; for other countries, from the Montagu annual bullion letter, Jan. 1, 1923.

GOLD MOVEMENT AND TRADE BALANCES.

During February of this year sterling exchange in the New York market rose as high as \$4.72, or to within 3 per cent of parity. This advance from a low point of \$3.23 in February, 1920, measures the extent of England's recovery from postwar financial disorganization. The rise in sterling, particularly during the past year, has been ascribed in part to the difference in the movement of price levels in England and in the United States. In England the index of wholesale prices during the

early part of 1922 remained fairly steady and during the latter part showed a decline, while in this country there was a steady advance of prices from 142 in January, 1922, to 165 in February, 1923. It is clear that a decline in the buying power of the dollar with an increase in that of the pound must diminish the value of the dollar in terms of the pound. This is what has occurred in recent months. At the same time England has continued to send large amounts of gold to America, her other exports to the United States have been above the average and her imports from us have declined, all

of which has reduced the net balance in favor of the United States. In fact, according to a recent estimate of the London Economist, England had a favorable balance of payments with the rest of the world in 1922, when account is taken both of visible and invisible items. The figures as published in the Economist are as follows:

[In millions of pounds.]

	1913	1921	1922
Exports (including gold and silver) as returned.....	697	882	882
Add invisible exports:			
Net income from investments.....	200	100	100
Shipping earnings.....	94	80	94
Financial and insurance charges.....	30	50	40
Miscellaneous.....	20	20	20
Total visible and invisible exports.....	1,041	1,132	1,136
Imports (including gold and silver) as returned.....	843	1,145	1,049
Add invisible imports.....	5	50	25
Total visible and invisible imports.....	848	1,195	1,074
Final balance.....	+193	-63	+62

While England's exports of merchandise and precious metals were on the same level in 1922 as in 1921, her imports were nearly £100,000,000 smaller, and this, together with some improvement in the invisible balance, resulted in a final estimated favorable balance of £62,000,000, compared with an unfavorable one of £63,000,000 in 1921.

This improvement in England's financial position raises the question whether a continuation of the flow of gold into the United States, which has been uninterrupted since the latter part of 1920, may be expected. In 1921 our net gold imports were \$667,000,000; in 1922 they declined to \$238,000,000. It has been stated that if the tendencies manifest during the past year were to continue at the same rate it would not be long before the United States would export gold, for not only was the amount of gold imported during 1922 much smaller than in 1921, but exports of gold showed a material increase, especially during the fall months. Most of the gold exports went to Canada, which recently has had a favorable trade balance and a consequent high rate of exchange. Canadian banks with balances in the United States made use of the favorable rate to transfer the balances in gold to Canada, where most of the gold was added to the reserve against Dominion notes, bringing the ratio of these reserves to the highest point since 1917. Recently, however, much of the gold has returned to Canada, following the shift in Canadian exchange. Of the

oriental countries, Japan also has been reducing its foreign gold balances in an effort to help Japanese business to obtain foreign exchange bills. Last fall the Japanese Government issued a statement to the effect that a removal of the gold embargo is desirable but not yet practicable in view of the disturbed financial conditions, and this position has recently been reaffirmed. Trade conditions in British India are now favorable and she is a constant bidder for a share of the new gold offered in the London market. On the continent of Europe, however, although the rates of exchange of all the countries that remained neutral during the war are approaching parity, it is doubtful whether these countries will be active bidders for gold, as their gold reserves are high and their trade balances are not sufficiently large to demand substantial amounts of gold in settlement. The currencies of the other European countries are far below par and show little or no indication of recovery; these countries can not purchase gold except for use in the arts. In Germany the recent flotation of a \$50,000,000 gold loan indicates that the paper mark is rapidly ceasing to be a standard of value and that much of the domestic business and practically all of the foreign trade is done in terms of gold. But Germany, for many years to come, can hardly be expected to become a bidder for gold in the world market. In South America, although business and trade conditions are improved as compared with last year, exchange rates are still relatively low, especially in Brazil and Chile, and no demand for gold can be expected from that quarter. With tropical countries the United States has regularly an unfavorable balance of merchandise trade amounting to as much as \$500,000,000 a year, resulting from the import of such commodities as sugar, rubber, tobacco, fibers, coffee, fruits, tin, and other products. But this debit balance is much more than offset by the credit balances with other countries, so that the United States can pay for her imports from the Tropics by her exports to other countries.

Under the present circumstances it seems certain that an unfavorable balance of payments for the United States can be caused only through a large volume of investment by Americans in foreign securities, by the direct purchase by American capital of property abroad or of participations in foreign enterprises, or by the granting of large loans either public or private for purposes of financial reconstruction. A large volume of investment in

foreign securities has actually taken place in recent years, foreign securities bought in the American market amounting to \$576,000,000 in 1920, \$626,000,000 in 1921, and \$870,000,000 in 1922. Loans on open account carried for foreign interests by American banks have been estimated from \$1,000,000,000 to \$4,000,000,000, and while there is no way of ascertaining the extent of direct investment of American capital abroad, it undoubtedly amounts to a great sum in the aggregate. The recent revival of domestic business activity and credit demand in this country, however, which has been accompanied by a rise in our level of prices and interest rates, has tended to decrease the attractiveness of foreign securities to the American investor. Moreover, there is constantly at work as an offsetting factor to

foreign investment the payment of interest and installments of principal upon previously contracted loans.

On the basis of this brief survey it appears probable that, so long as the dollar remains at a premium in most countries of the world, and so long as the rest of the world continues to be heavily in debt to the United States, a large part of the annual increase in the world's gold supply will continue to find its way to America. And, although a diminution of America's share of the new gold may be expected as the result of the recent unfavorable change in her trade balance, there is little likelihood in the immediate future of a sufficient demand for gold abroad to cause large net exports from the United States.

GOLD IMPORTS INTO AND EXPORTS FROM THE UNITED STATES.

[In thousands of dollars.]

	Total, Nov. 1, 1918-Feb. 28, 1923.				Nov. 1, 1918-Aug. 31, 1920.				Sept. 1, 1920-Feb. 28, 1923.			
	Imports.	Exports.	Excess of imports.	Excess of exports.	Imports.	Exports.	Excess of imports.	Excess of exports.	Imports.	Exports.	Excess of imports.	Excess of exports.
France.....	250,987	4,153	246,834	.....	1,744	4,153	.....	2,409	249,243	.....	249,243	.....
Netherlands.....	32,046	34	32,012	.....	1,162	15	1,147	.....	30,884	19	30,865	.....
Spain.....	3,893	30,530	.....	26,637	.....	29,778	.....	29,778	3,893	752	3,141	.....
Sweden.....	101,278	2,722	98,556	.....	.....	1	.....	1	101,278	2,721	98,557	.....
England.....	619,334	2,325	617,009	.....	84,630	2,105	82,525	.....	534,704	220	534,484	.....
Canada.....	150,093	36,635	113,458	.....	76,158	9,483	66,675	.....	73,935	27,152	46,783	.....
Nicaragua.....	4,849	17	4,832	.....	2,260	17	2,243	.....	2,589	.....	2,589	.....
Salvador.....	3,457	3,144	313	.....	1,495	3,144	.....	1,649	1,962	.....	1,962	.....
Mexico.....	22,384	42,484	.....	20,100	8,328	28,127	.....	19,799	14,056	14,357	.....	301
Argentina.....	2,969	146,555	.....	143,586	180	146,555	.....	146,375	2,789	.....	2,789	.....
Colombia.....	29,831	6,469	23,362	.....	3,623	5,969	.....	2,346	26,208	500	25,708	.....
Uruguay.....	7,089	22,055	.....	14,966	.....	22,055	.....	22,055	7,089	.....	7,089	.....
Venezuela.....	3,352	12,350	.....	8,998	718	12,350	.....	11,632	2,634	.....	2,634	.....
China.....	27,424	67,746	.....	40,322	1	59,396	.....	59,395	27,423	8,350	19,073	.....
British India.....	32,010	53,066	.....	21,056	.....	40,804	.....	40,804	32,010	12,262	19,748	.....
Straits Settlements.....	.....	11,093	.....	11,093	.....	10,893	.....	10,893	.....	200	.....	200
Dutch East Indies.....	10,260	19,945	.....	9,685	6,440	19,430	.....	12,990	3,820	515	3,305	.....
Hongkong.....	45,886	85,583	.....	39,697	40,210	67,030	.....	26,820	5,676	18,553	.....	12,877
Japan.....	2,208	195,413	.....	193,205	.....	132,856	.....	132,856	2,208	62,557	.....	60,349
New Zealand.....	8,361	.....	8,361	.....	2,751	.....	2,751	.....	5,610	.....	5,610	.....
All other countries.....	147,216	23,222	123,994	.....	10,167	20,755	.....	10,588	137,049	2,467	134,582	.....
Total.....	1,504,927	765,541	1,268,731	529,345	239,867	614,916	155,341	530,390	1,265,060	150,625	1,188,162	73,727
Excess imports.....	.....	.....	739,386	.....	.....	.....	.....	.....	.....	.....	1,114,435	.....
Excess exports.....	.....	.....	.....	.....	.....	.....	.....	375,049	.....	.....	.....	.....

MEMBER BANK ACCEPTANCES IN 1922.

During the second half of the past year the improvement in the general business situation, and particularly the increase in the value of our foreign trade, was reflected in a considerable growth of the volume of member bank acceptances, as indicated by the condition reports of all member banks received by the Comptroller of the Currency and the Federal Reserve Board. Following a substantial decline in the early part of the year, acceptance liabilities of the member banks on June 30

showed a small increase to \$320,770,000 from \$316,755,000 on March 10, 1922. At the close of the year the total had risen to \$400,191,000, compared with \$367,294,000 at the close of 1921 and \$593,708,000 on December 29, 1920. While most of the increase for the last six months of the past year is shown for the New York City and Boston banks, substantial growth of the acceptance business is also reported from Southern centers, viz, New Orleans, Savannah, Atlanta, Dallas, and Richmond, apparently in connection with the improvement in the cotton trade. More than

average increases are also shown for member banks on the Pacific coast, especially San Francisco, Los Angeles, and Portland.

In the following table are shown acceptance liabilities of all member banks and of national and other member banks in selected cities for call dates between December 31, 1921, and December 29, 1922, in continuation of similar figures published on page 1048 of the September, 1922, BULLETIN:

ACCEPTANCE LIABILITIES OF MEMBER BANKS.

[In thousands of dollars.]

	Dec. 31, 1921.	Mar. 10, 1922.	June 30, 1922.	Dec. 29, 1922.
<i>All member banks.</i>				
New York.....	215,122	194,953	190,978	236,545
Buffalo.....	1,046	740	373	285
Boston.....	44,734	37,652	41,675	54,383
Providence.....	871	361	460	2,495
Philadelphia.....	10,745	10,350	13,278	14,270
Pittsburgh.....	1,167	899	466	979
Cleveland.....	4,608	4,979	4,408	3,513
Detroit.....	678	703	499	36
Cincinnati.....	153	200	30	32
Memphis.....	545	580	180	678
Indianapolis.....	492	478	655	553
Richmond.....	3,615	1,865	741	1,657
Baltimore.....	1,812	997	217	263
Atlanta.....	337	252	750	750
Savannah.....	964	764	917	3,459
New Orleans.....	7,697	6,755	1,914	8,626
Charleston, S. C.....	1,009	890	1,174	833
Chicago.....	35,279	27,097	38,866	33,005
St. Louis.....	1,715	823	570	1,046
Minneapolis.....	2,462	2,670	2,304	2,391
Kansas City, Mo.....	350	1,092	319	291
Dallas.....	1,306	.....	325	1,782
San Francisco.....	9,892	6,520	8,959	12,057
Los Angeles.....	1,319	847	924	3,313
Portland.....	1,507	1,123	600	1,288
Seattle.....	351	223	307	399
All other.....	17,518	12,937	9,631	15,262
Total.....	367,294	316,755	320,770	400,191

	Dec. 31, 1921.	Mar. 10, 1922.	June 30, 1922.	Sept. 15, 1922.	Dec. 29, 1922.
<i>National banks.</i>					
New York.....	111,724	103,661	98,180	91,645	110,748
Buffalo.....	512	341	70	87	159
Boston.....	35,332	28,339	33,208	30,931	43,628
Providence.....	518	110	306	102	1,126
Philadelphia.....	10,589	10,146	13,198	10,059	14,225
Pittsburgh.....	1,067	699	216	369	677
Cleveland.....	959	576	831	682	1,166
Detroit.....	453	703	499	202	36
Cincinnati.....	150	200	30	.....	32
Indianapolis.....	492	478	655	425	553
Richmond.....	3,615	1,862	738	645	971
Baltimore.....	1,812	997	217	314	263
Atlanta.....	.....	.....	.....	36	750
New Orleans.....	983	921	375	688	956
Charleston, S. C.....	1,009	890	1,174	819	833
Chicago.....	18,582	13,063	19,198	22,377	17,585
St. Louis.....	922	241	156	128	562
Minneapolis.....	2,462	2,670	2,304	2,516	2,391
Kansas City, Mo.....	350	113	.....	.....	80
Dallas.....	1,181	.....	325	642	1,782
San Francisco.....	8,393	6,139	8,216	10,078	9,273
Los Angeles.....	1,102	775	771	2,860	2,593
Portland.....	938	704	292	752	532
Seattle.....	351	228	307	402	399
All other.....	15,440	11,345	8,115	6,610	12,155
Total.....	218,936	185,201	189,381	183,369	223,475

ACCEPTANCE LIABILITIES OF MEMBER BANKS.—Con.

	Dec. 31, 1921.	Mar. 10, 1922.	June 30, 1922.	Dec. 29, 1922.
<i>State bank and trust company members.</i>				
New York.....	103,398	91,292	92,798	125,797
Buffalo.....	534	399	303	126
Boston.....	9,402	9,313	8,467	10,755
Providence.....	353	251	153	1,369
Philadelphia.....	156	204	80	45
Pittsburgh.....	100	200	250	302
Cleveland.....	3,649	4,403	3,577	2,347
Detroit.....	225	.....	.....	.....
Memphis.....	545	580	180	678
Richmond.....	.....	3	3	686
Atlanta.....	337	252	.....	.....
Savannah.....	964	764	917	3,459
New Orleans.....	6,714	5,834	1,539	7,670
Chicago.....	16,697	14,034	19,668	15,420
St. Louis.....	793	582	414	484
Kansas City, Mo.....	.....	979	319	211
Dallas.....	125	.....	.....	.....
San Francisco.....	1,499	381	743	2,784
Los Angeles.....	217	72	153	720
Portland.....	569	419	308	756
All other.....	2,081	1,592	1,517	3,107
Total.....	148,358	131,554	131,389	176,716

In Great Britain acceptance liabilities of the principal banks showed a downward trend for the first half of 1922, but a considerable recovery for the second half of the year, as may be seen from the following table giving the average acceptance liabilities of the 10 London clearing banks for selected months between June, 1921, and December, 1922:

ACCEPTANCE LIABILITIES OF THE LONDON CLEARING BANKS.

[In thousands of pounds sterling.]

	1921		1922	
	June.	Decem-ber.	June.	Decem-ber.
Liverpool & Martin's.....	4,330	5,922	4,060	7,188
Barclay's.....	7,023	6,237	5,867	5,235
Coutts & Co.....	410	204	141	56
Glyn, Mills, Currie & Co.....	1,050	1,122	1,958	1,821
Lloyds.....	9,471	9,754	7,742	14,997
London, Joint City & Midland.....	17,369	20,304	17,537	25,723
Westminster.....	13,472	17,460	13,168	12,207
National Provincial & Union.....	3,385	2,973	4,032	4,834
National.....	540	501	348	222
Williams Deacon's.....	1,100	1,313	655	784
Total.....	58,150	65,790	55,508	73,067

FEDERAL RESERVE BANK HOLDINGS OF ACCEPTANCES.

Federal reserve bank holdings of bankers' acceptances during 1922 showed a general upward trend, which became more pronounced during the second part of the year, when open-market money rates began to advance. By far the larger part (between 70 and 80 per cent) of the acceptances held by the reserve banks are based upon foreign trade transactions, but Federal reserve bank holdings of

acceptances in the domestic trade show about the same rate of growth for the year as those of acceptances in the foreign trade. At the close of the year the reserve banks held under purchase or discount a total of \$271,274,000 of bank acceptances, compared with \$145,383,000 at the close of 1921. Of the larger total \$196,121,000, or over 72 per cent, was made up of acceptances in the foreign trade, \$65,410,000, or 24 per cent, of acceptances in the domestic trade, and the remainder, \$9,743,000, of acceptances to create dollar exchange.

At the close of 1922 the reserve banks held \$189,333,000 of bills accepted by member banks, this amount representing 47 per cent of the total of such acceptances outstanding on December 29. This proportion is comparable with about 40 per cent on June 30, 1922, and about 30 per cent at the close of 1921. In addition the reserve banks held at the close of last year \$81,941,000 of bills accepted by nonmember banks, including private banks, agencies of foreign banks and discount corporations, a total to be compared with \$33,281,000 on June 30 of the same year and \$34,831,000 on December 31, 1921. It will be noted that the rate of increase during the year was much greater in reserve bank holdings of bills accepted by nonmember banks than of bills accepted by member banks. There is no evidence to show whether this relative gain of nonmember acceptances in the reserve bank portfolios has been due to a larger growth of nonmember bank acceptances, as compared with member bank acceptances, or to a preference of investors for member bank acceptances, which would leave a larger amount of bills accepted by nonmembers available for purchase by the reserve banks.

OPEN-MARKET RATES.

Open-market rates on prime eligible acceptances, which had declined to below 3 per cent about the middle of last year, remained fairly steady during July, August, and the first half of September. At that time advances in call money rates were followed by gradual increases of acceptance rates to $3\frac{1}{2}$ – $3\frac{3}{4}$ per cent. The

month of October saw a further increase of these rates, the range at the close of the month and for the rest of the year being between 4 and $4\frac{1}{2}$ per cent. London rates on three-months' bank bills, which had declined below 3 per cent early in April, 1922, continued downward in May and June and in July fell below 2 per cent. But in August the rates began to advance and continued to rise during the following month. In October rates declined slightly, and during the last two months ranged between $2\frac{1}{2}$ and $2\frac{3}{4}$ per cent. During the entire year rates were lower in London than in New York, the difference reaching at times nearly 2 per cent.

HOLDINGS OF BANKERS' ACCEPTANCES BY FEDERAL RESERVE BANKS.

[In thousands of dollars.]

Date.	Total acceptances held.				Purchased acceptances.
	Total.	Foreign.	Domes- tic.	Dollar exchange.	Total.
1921.					
June 30.....	48,586	36,249	9,169	3,168	40,130
Dec. 31.....	145,383	99,969	34,250	11,164	145,045
1922.					
Feb. 28.....	93,590	67,136	22,612	3,842	93,356
Mar. 31.....	105,287	77,015	22,841	5,431	105,110
June 30.....	160,413	124,142	31,736	4,535	160,332
Aug. 31.....	179,367	143,963	29,587	5,817	179,324
Sept. 30.....	242,917	189,688	46,415	6,814	242,884
Dec. 30.....	271,274	196,121	65,410	9,743	270,944

Date.	Purchased acceptances—Contd.				Discounted acceptances.		
	Accepted by—				Total.	Mem- ber bank acceptances.	Ac- ceptances of other banks.
	Member banks.	Non- mem- ber banks and bank- ing cor- porations.	Private banks.	Branches and agencies of foreign banks.			
1921.							
June 30....	26,787	6,960	3,391	2,992	8,456	6,033	2,423
Dec. 31....	110,264	13,656	12,319	8,806	338	288	50
1922.							
Feb. 28....	69,915	8,470	7,371	7,600	234	234	.....
Mar. 31....	75,902	12,671	9,781	6,756	177	177	.....
June 30....	127,051	16,960	8,191	8,130	81	81	.....
Aug. 31....	135,947	23,246	12,482	7,649	43	43	.....
Sept. 30....	183,506	27,900	19,139	12,339	33	33	.....
Dec. 30....	189,176	38,036	27,012	16,720	330	157	173

AN INDEX OF WHOLESALE TRADE.

In 1920 the Federal reserve banks, realizing the value to the business community of figures measuring the volume of wholesale trade, offered to compile reports for groups of wholesale dealers in their respective districts. The scope and accuracy of these wholesale reports has been steadily improving, so that they now constitute a fairly representative sample of the wholesale business of the United States, both from the standpoint of localities and of commodities covered by the figures. The trend of wholesale trade since January, 1919, is shown graphically in chart A below, together with a comparison of price changes in the same period.

The sources of the data used in constructing this index of wholesale trade are the monthly reports of individual wholesale dealers to the Federal reserve banks, which show their total sales in dollar amounts. Reports are received from groups of dealers in the following lines: Groceries, meats, dry goods, shoes, hardware, drugs, furniture, men's clothing, women's cloth-

ing, millinery, automobile accessories, stationery, jewelry, diamonds, farm implements, and machine tools. The number and distribution of reporting firms in the latest month varies from 4 firms in one district in the case of machine tools to 362 firms distributed throughout 11 districts in the case of groceries.

The following principles were employed in selecting data for inclusion in the index: (1) Each line of trade must be of importance in all sections of the United States; (2) for each line of business included there must be available reports from firms doing business in at least 6 of the 12 Federal reserve districts; (3) for each firm included annual sales must be available for 1919 and monthly sales must be received regularly. On this basis it was decided to include about 700 firms in the index, representing 6 lines of wholesale business—groceries, meats, dry goods, hardware, shoes, and drugs. These firms were located in 10 Federal reserve districts.¹

¹ No reports from districts No. 1 (Boston) and No. 8 (St. Louis) are included, but probably many firms reporting to other banks do some business in those districts.

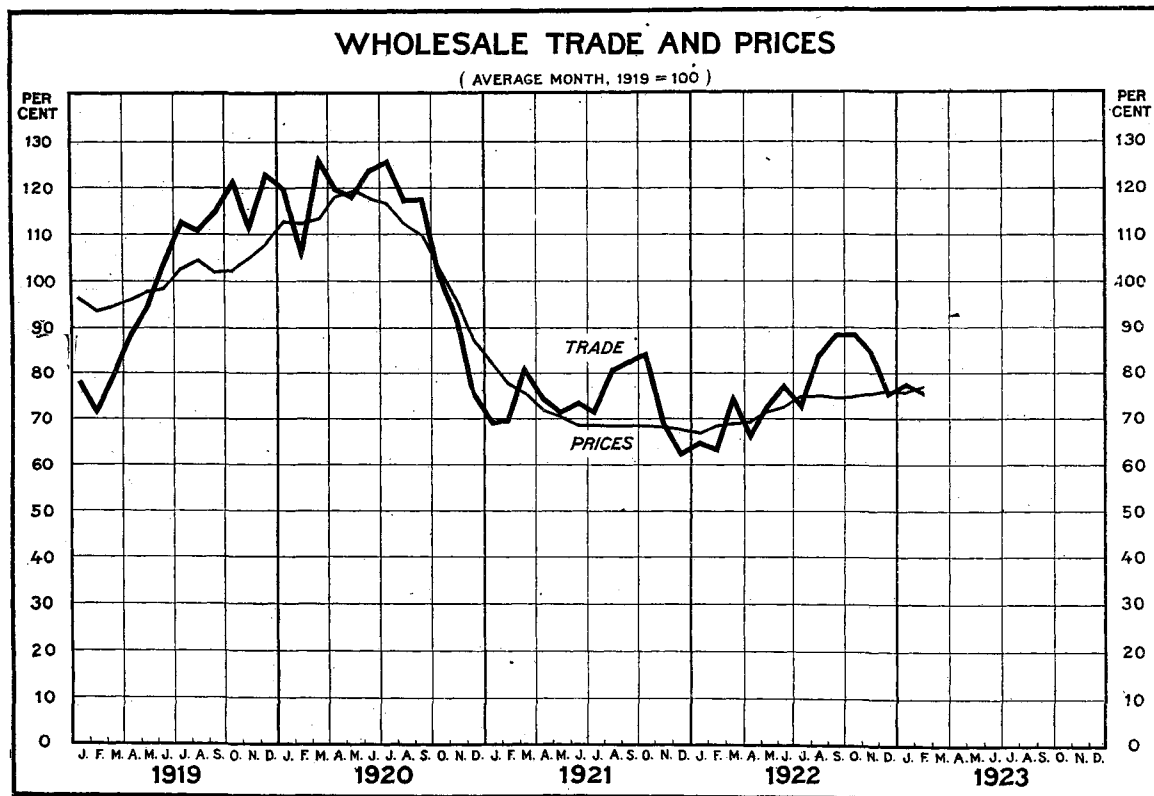
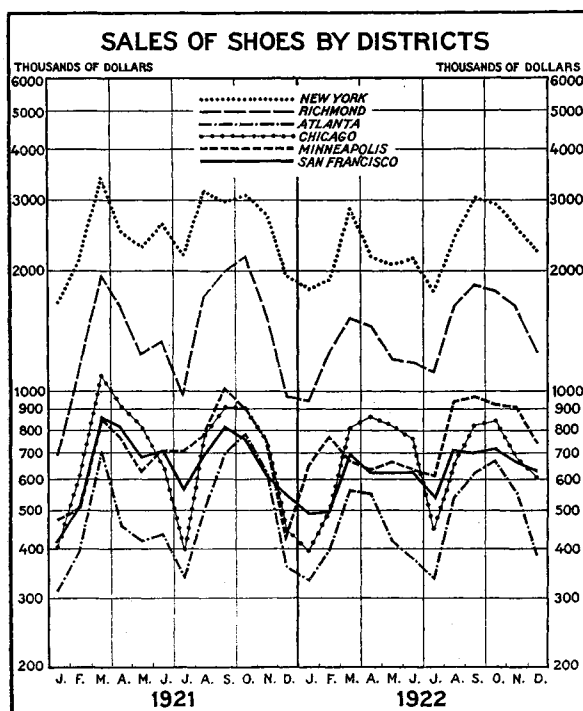


Chart A

Since there are no statistics of total wholesale trade and since the reserve banks have made no effort to secure reports covering a specified percentage of each line of business, there was no basis for determining whether the various groups of firms in different lines in the several districts did a similar proportion of the total trade in their line or district. Consequently the absolute amount of sales in dollars for the group of firms in each line of business in each district had little significance and the figures were, therefore, converted into percentages giving the relationship of the sales for a given month to the sales for the base period. Average sales in the year 1919 were considered 100 for the purpose of calculating the index. The reasons for the selection

for each line in each district, the question of the relative importance of each line and of each district presented itself. It was decided first to combine the figures by lines, since there was a remarkable similarity of movement for the same line in different districts, illustrated in the case of shoe sales by chart B. For this purpose the relatives of each district were weighted by the number of persons employed in wholesale trade in that district, according to the United States Census of Occupations for 1919. As these figures were not available by lines, it was necessary to assume that each of the six lines of trade included varied between different districts in the same proportion as all wholesale trade. The district weights applied in calculating index numbers for each line of business are shown in the following table:



of 1919 as the base period were that it was the first year for which figures were reported; that it was a census year for which many other related statistics are available, and that that year was already used as a base in other indexes of production and distribution. It must be emphasized, however, that the base period is not intended to represent the normal value of wholesale trade.

In combining the series of relatives representing monthly changes in the value of trade

District.	Weights.
No. 2—New York.....	18.0
No. 3—Philadelphia.....	5.2
No. 4—Cleveland.....	9.0
No. 5—Richmond.....	6.3
No. 6—Atlanta.....	6.4
No. 7—Chicago.....	16.4
No. 9—Minneapolis.....	5.1
No. 10—Kansas City.....	6.5
No. 11—Dallas.....	4.2
No. 12—San Francisco.....	6.7

In combining the relatives for the different lines of business into one wholesale trade index for the entire United States, the goods handled by each type of wholesaler were analyzed and weighted by the total value of production for each class of goods either from the census of 1919, in the case of manufactured goods, or from the estimates of the Department of Agriculture for 1919, in the case of unmanufactured foodstuffs. This second system of weights is shown below:

Lines.	Weights.
Groceries.....	41
Meats.....	24
Dry goods.....	18
Shoes.....	6
Hardware.....	6
Drugs.....	5

These weights were compared with the relative value of each of these commodities consumed by workingmen's families according to budget studies, and a close check resulted.

A study of the month-to-month changes in sales shows that there are regular seasonal fluctuations. However, it was not considered

advisable to make any allowance for these seasonal variations in this index, as it is desirable for many purposes to show the importance of these monthly changes in comparing wholesale trade with production, retail trade, and other related data. It is also doubtful whether statistics are yet available for a sufficient number of years to determine accurately the average size of the seasonal movements.

To recapitulate: The original series of data were combined into the final index by the following steps: (1) A base was obtained for each series of data by averaging the monthly wholesale trade in 1919; (2) the original data were divided by their respective bases to obtain a series of relatives for each line of trade in each district; (3) each relative was multiplied by a weight representing the importance of the district; (4) the weighted relatives for each line were totaled and averaged arithmetically; (5) the new series of relatives were each multiplied by a weight determined by the importance of the line represented; and (6) these weighted relatives were averaged by the arithmetic method. The weighted averages obtained by these six steps were the final index numbers. The weighted relatives for the six lines of trade throughout the United States and the index numbers for all trade are shown in the following table:

WHOLESALE TRADE.

[Average monthly sales, 1919=100.]

	Groceries.	Meat.	Dry goods.	Shoes.	Hardware.	Drugs.	Index of whole-sale trade.
1919.							
January.....	82.6	.....	72.8	52.0	80.5	99.0	78.8
February.....	71.1	.....	65.5	60.2	78.6	95.1	71.1
March.....	82.5	.....	64.1	76.9	96.5	98.3	79.8
April.....	87.0	.....	78.4	109.4	101.2	95.6	88.4
May.....	98.8	.....	84.3	89.1	101.5	94.5	94.5
June.....	105.7	.....	102.5	96.1	105.6	93.7	103.4
July.....	112.1	.....	123.5	106.1	99.8	97.4	112.4
August.....	100.3	.....	133.7	133.2	102.5	96.7	110.7
September.....	108.3	.....	120.6	151.5	103.3	110.1	114.3
October.....	117.1	.....	126.4	145.2	111.3	122.8	121.4
November.....	116.1	.....	109.6	93.1	107.6	99.6	111.0
December.....	118.8	.....	118.5	86.9	111.7	97.2	123.0
1920.							
January.....	111.7	.....	150.0	97.0	112.8	115.2	119.9
February.....	95.7	.....	125.3	105.4	101.2	117.0	105.3
March.....	118.3	.....	133.0	136.4	129.0	133.1	126.2
April.....	121.2	.....	120.5	106.7	125.5	109.0	119.4
May.....	128.1	.....	102.5	98.1	125.2	106.9	118.0
June.....	135.1	.....	114.2	77.3	129.3	115.1	123.8
July.....	130.3	.....	139.9	72.1	117.5	108.5	125.5
August.....	107.4	.....	144.5	96.3	124.7	112.5	117.0
September.....	117.5	.....	123.3	90.9	124.5	116.2	117.2
October.....	106.4	.....	85.9	75.2	112.4	123.2	100.6
November.....	99.9	.....	76.9	60.1	100.5	98.1	91.2
December.....	84.5	.....	58.4	42.6	84.2	88.6	75.3

WHOLESALE TRADE—Continued.

	Groceries.	Meat.	Dry goods.	Shoes.	Hardware.	Drugs.	Index of whole-sale trade.
1921.							
January.....	73.4	65.6	64.1	39.0	71.9	94.0	68.7
February.....	72.6	55.9	80.7	52.3	70.5	89.0	69.5
March.....	82.5	61.7	100.7	88.9	93.1	105.8	80.6
April.....	74.5	52.8	88.6	72.0	92.1	98.4	73.9
May.....	74.1	53.1	79.1	62.8	84.5	93.5	70.9
June.....	77.6	54.0	80.6	62.3	84.8	94.3	72.8
July.....	77.1	58.6	75.7	47.9	71.5	91.1	71.0
August.....	72.0	57.9	105.2	73.0	76.5	100.1	80.4
September.....	81.1	54.7	115.2	82.1	80.8	103.5	82.1
October.....	84.8	61.3	104.9	82.6	86.1	107.1	83.8
November.....	76.0	43.1	74.2	68.5	78.1	94.0	68.4
December.....	69.0	45.6	64.9	45.3	68.8	88.0	62.1
1922.							
January.....	65.6	49.3	81.4	43.5	58.1	94.4	64.2
February.....	62.2	48.9	80.2	50.0	57.7	94.2	62.9
March.....	76.3	51.3	88.2	70.4	81.9	113.7	74.3
April.....	66.2	48.3	74.6	65.1	84.6	93.6	65.8
May.....	74.1	58.2	79.0	60.5	92.7	96.6	72.6
June.....	82.2	62.6	78.9	58.8	91.7	99.6	76.9
July.....	74.5	59.2	80.2	45.2	81.3	93.6	72.1
August.....	86.4	55.9	112.7	66.0	89.5	102.9	83.6
September.....	90.5	60.5	116.1	77.6	95.1	104.6	88.1
October.....	98.7	67.8	108.3	77.2	98.9	111.1	92.4
November.....	95.8	54.1	94.4	67.4	93.1	102.9	84.0
December.....	85.0	56.8	72.8	57.3	83.1	99.0	75.0
1923.							
January.....	74.9	59.3	105.4	55.7	87.8	112.0	78.1
February.....	74.9	55.8	100.8	56.3	81.5	105.1	75.8

The similarity between the course of trade in the same line in different localities has already been noted and was illustrated in

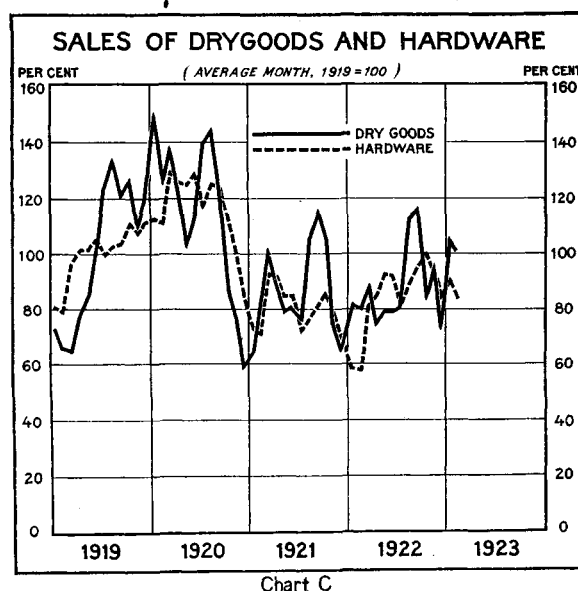


chart B. Comparisons of different lines of trade also show a certain amount of correspondence in movement as well as certain

marked differences. The main points of similarity are the long-time trend in the different lines and the seasonal movements within a year. Each of the reporting groups of wholesalers showed an upward movement of sales in 1919 and the early part of 1920, a downward movement in the latter part of 1920 and throughout most of 1921, and a slight upward trend in 1922. Although these general trends correspond for all the lines of trade studied there are marked differences in degree of movement.

All the lines of merchandise studied, except meat, showed a general likeness in seasonal movement of sales; an expansion in the spring, a decline in midsummer, a large expansion in the late summer and early fall, and a prolonged period of low sales during the winter. The differences in time and degree of these four seasonal movements are illustrated in chart C, which compares the sales of dry-goods firms with those of hardware firms. It will be noted that the seasonal changes are much sharper and more irregular in size in case of dry goods than in case of hardware. The fall season of activity is much more important than the spring in the dry-goods business, whereas the two seasons are of about equal importance for hardware dealers. In the case of both hardware and dry goods the winter period of inactivity is more prolonged than that in the summer. Grocery and drug sales are quite similar to hardware sales in the nature of their seasonal variations. Grocery sales, however, are somewhat more level throughout the year than hardware sales, while the peaks and troughs of the drug business are slightly sharper than those of the hardware business. Shoe sales also resemble hardware, grocery, and drug sales in the regularity of their seasonal changes and the equal importance of the spring and fall seasons, but they bear more resemblance to dry-goods sales in the sharpness of the peaks and troughs and the wide difference in volume of sales in different months.

It is interesting, also to compare the course of wholesale trade as indicated by the index with the course of prices, production, and retail trade during the past four years. Wholesale trade is compared with wholesale prices in chart A. While there is some difference in the commodities included in these indexes, as the price index includes a large number of raw materials and producers' goods, yet there is a very close correspondence of trend between the two indexes. This indicates that changes

in prices have a far greater influence in determining the total value of wholesale trade than do changes in the physical volume of business. In fact, if allowance be made in the trade figures for changes in prices, it appears that there has been little variation in the physical volume of wholesale trade since 1918, except for the regular seasonal swings.

A comparison of wholesale trade with production and with retail trade indicates that the sales of wholesale dealers have a much more accentuated seasonal movement than manufacturing output, but have more moderate seasonal fluctuations than sales of retail dealers. For example, sales of department stores, music stores, and cigar stores reach a much sharper peak in December than that attained in any month by wholesale stores. Stocks of department stores, however, show about the same month-to-month changes as wholesale trade. This is due to the fact that retail dealers increase their stocks and their purchases from wholesalers in anticipation of heavy seasonal purchases from consumers. Consequently seasonal changes in wholesale trade usually precede seasonal changes in retail trade and are reflected in the size of retail stocks.

COTTON FINANCING.

III. FINANCING THE MARKETING OF COTTON.¹

In previous sections of this study the methods of financing the growing of cotton were described. Cotton grown under crop liens or crop mortgages is often marketed through the same channels that credit passed to the growers. As the crop is gathered and passed from the producers into the organized channels of distribution the problem of financing gradually changes from one of agricultural finance to a commercial credit problem that involves the financial institutions of the entire commercial world.

The cotton textile industry has become of great importance to most of the modern

¹ This is the third of a series of articles describing methods of financing the production and distribution of cotton. The preceding articles appeared in the BULLETIN for February and March, 1923, and dealt with the methods of financing the production of cotton. This and the subsequent articles will deal with the methods used in financing the distribution of cotton.

Data upon which this study is based were obtained largely through replies to a number of questionnaires which were sent to merchants, banks, mills, and dealers throughout the South and in the principal textile centers of the East. To all of the contributors acknowledgment is due.

nations and the problem of financing cotton as it passes from the hands of the southern producer to the consumer is international as well as national. It is the purpose of this article, and the one following, to analyze the institutions through which raw cotton passes en route to the manufacturer; to describe the financial arrangement that each of these institutions use in marketing the crop under present conditions; and thus picture the gradual change from a domestic agricultural credit problem of the South to a national as well as an international credit task.

Before attempting to analyze the distributing system, it is desirable to study the cotton markets of the world in order to see the problems that confront those who serve as distributors of this world-wide commodity. Cotton markets can be classified into the domestic and the foreign markets. The Bureau of the Census divided the domestic markets into two divisions, (1) the cotton-growing States, and (2) all other States. The amount of cotton that is consumed in the three markets is shown in the following table:

CONSUMPTION OF COTTON IN THE UNITED STATES AND EXPORTS 1910-11 TO 1920-21.¹

[In bales.]

	United States.	Cotton-growing States.	All other States.	Exports. ²
1910-11.....	4,498,417	2,249,138	2,249,282	7,781,414
1911-12.....	5,129,346	2,653,878	2,493,468	10,681,738
1912-13.....	5,483,321	2,861,743	2,621,573	8,800,966
1913-14.....	5,577,408	2,925,294	2,652,114	8,654,958
1914-15.....	5,597,362	2,570,393	3,026,969	8,322,688
1915-16.....	6,397,613	3,527,528	2,870,085	5,895,672
1916-17.....	6,788,505	3,888,348	2,900,157	5,302,848
1917-18.....	6,566,489	3,867,098	2,869,391	4,288,420
1918-19.....	5,765,936	3,199,027	2,566,909	5,592,386
1919-20.....	6,419,734	3,532,919	2,836,815	6,545,326
1920-21.....	4,892,672	2,997,471	1,895,201	5,673,452
1921-22.....	5,909,820	3,729,777	2,810,043	6,184,094

¹ Figures from United States Department of Agriculture Year Book, 1921.

² Linters are included for the years 1910-11 to 1912-13, inclusive, but are excluded for the years 1913-14 to 1921-22.

The average annual export of cotton for the five years 1910-1914 was 62.8 per cent of the annual production.¹ Since that time the American consumption has increased while, because of the European war, the foreign consumption has decreased, until to-day approximately one-half of the crop is consumed within the United States and the remainder is

exported. The most important cotton consuming sections of the United States are the New England States and the cotton-producing States of the Southeast.

A. THE COTTON DISTRIBUTING SYSTEM.

Methods of marketing cotton have gradually changed as the industry has developed and expanded. Before the Civil War cotton was grown principally by large planters and marketed through established agencies known as cotton factors. The factors were located principally at seaports or at interior points on navigable streams where trading connections could be established with commercial and financial interests in other cities or abroad. Cotton that was not pledged to the factors for advances was often consigned to them to be sold on commission. The factors disposed of the cotton directly to northern mills or through an intermediary, the cotton broker. The factor always charged the planter a commission for selling the cotton, and when it was sold through a broker the factor always paid a commission to the broker for his services.

After the war the plantation system was supplanted largely by small farms, while the local supply merchants grew to fill, in part, the place the factor had formerly held as a money lender. Along with the decline of the factorage system and the growing prevalence of small farms, there came an increase in interior buying. Cotton mills sent buyers into the cotton States to buy cotton directly from the farmers and from the supply merchants. The middlemen or cotton merchants also sent their representatives into the field to buy cotton either from the farmers, local buyers, or supply merchants.

The methods by which a grower disposes of his cotton are determined by the financial standing of the grower, the availability of warehouses, the cooperation among the growers, and other factors which vary from year to year in each section. In the Eastern States throughout the old plantation sections it is customary for the small growers and tenants to sell their crop to local buyers or to the landlords. Some of the cotton is grown under crop lien contracts and is sold promptly by the growers to relieve pressing financial burdens.

The various agencies through which raw cotton may be handled as it passes from the pro-

¹ Atlas of American Agriculture, sec. A, Cotton.

ducer to the consumer under the present system are as follows:

1. Producer—supply store—merchant—merchant—mill.
2. Producer—local buyer—mill.
3. Producer—local buyer—merchant—merchant—mill.
4. Producer—local buyer—merchant—mill.
5. Producer—factor—merchant—mill.
6. Producer—factor—merchant—exporter.
7. Producer—factor—exporter.
8. Producer—agent—merchant—exporter.
9. Producer—mill.
10. Producer—cooperative marketing association—{merchant.
exporter.
mill.

B. FINANCING IN THE PRIMARY MARKETS.

Financing in the primary markets is the first problem that confronts the banking and financial institutions in the cotton-growing areas. As cotton itself is the basis for credit after it once begins to move, it is necessary at this point to discuss the several documents which are used as security for cotton loans.

Warehouse receipts.—Warehouse receipts are the first documents that arise in the primary markets. Warehouses are owned by many institutions and operated under the laws of the several cotton States. These factors are important in determining the value of the receipts as a basis for a loan. An analysis of the warehouse laws has been made and a digest of the sections affecting the receipts has been published by the Federal Reserve Board (see *FEDERAL RESERVE BULLETIN*, September, 1915, p. 260). It is only necessary for our purpose here

to study the types of warehouses and their location.

Warehouses have been built at many local markets, notably in the Eastern States, and at points of concentration as well as at points of exportation. In Arkansas, Oklahoma, and Texas where much of the cotton is customarily marketed as soon as it is ginned and shipped directly to mills or exported, there are few warehouses except at concentration points, where cotton is held by merchants. The same conditions are found in Mississippi, western Tennessee, and Louisiana. In the Eastern States warehouses are usually accessible to the farmers.²

The ownership of warehouses is an important feature in determining the value of the warehouse receipt. In many primary markets, as well as in concentration centers, the warehouses are owned by cotton buyers, merchants, factors, and others engaged in the cotton trade. In the mill centers the mills usually own or control the warehouses in which they store cotton while awaiting consumption. Other warehouses may be owned by independent warehouse companies and operated under the laws of the State in which they are located; others may be controlled or licensed by the State. In the State licensed warehouse the receipt is issued according to certain rules and regulations prescribed by the State and has a value that is much more readily known in the banking fraternity than a receipt issued by an independent warehouse whose standing is unknown. The following is a copy of a State bonded warehouse receipt:

² *Atlas of American Agriculture*, sec. A, Cotton.

STATE CERTIFICATE OF WEIGHTS AND MEASURES

Farmers & Merchants Bonded Warehouse

No. 1

, Texas,, 192..

Weighed for of, Texas.

One bale of cotton consigned to of, Texas.

Bonded Gin No., Gin Bale No., Gin Wt.

This is to certify that I have weighed the above cotton and that the weights and conditions, as set forth, are true and correct.

By

Deputy.

Owner's risk against fire. Storage, 1c per day.

Certified Public Weigher, Pre. No. 1, Hill Co.

WEIGHERS WEIGHT
CONDITION

Realizing the wide diversity of warehousing conditions existing throughout the country, Congress attempted to remedy the situation by passing a warehouse law that would apply to the entire country. This resulted in the United States warehouse act, August, 1916. Since the passage of the act approximately 400 cotton warehouses have become licensed (Jan-

uary 1, 1923), with a storage capacity of 2,100,000 bales. The warehouse act is a regulatory statute. It makes for the issuance of a warehouse receipt or credit instrument possessing the greatest collateral value. The following is a copy of a warehouse receipt issued by a Federal licensed warehouse:

LICENSE No. 2-578 Exporters & Traders Compress & Warehouse Company's Warehouse

EXPIRES JULY 31, 192..

Exporters & Traders Compress & Warehouse Company, Proprietors

AMOUNT BOND \$50,000.

INCORPORATED UNDER THE LAWS OF TEXAS.

PAID IN CAPITAL \$150,000

Receipt and Tag No. **109506**

Grade and weight determined by a classifier and weigher licensed under the United States Warehouse Act.

LICENSED AND BONDED UNDER THE UNITED STATES WAREHOUSE ACT

COPY—NOT NEGOTIABLE

WAREHOUSE RECEIPT FOR ONE BALE OF COTTON

Received for storage from..... of.....
the ONE BALE OF COTTON described herein, stored in the above-named warehouse, for which this receipt is issued subject to the United States warehouse act, the regulations for cotton warehouses thereunder and the terms of this contract. Said cotton is NOT INSURED by the undersigned warehouseman against loss or damage by fire and lightning unless expressly stated otherwise on the face of this receipt. Said cotton is accepted for storage for one year only from the date of this receipt but upon surrender by the holder of this receipt may be extended or a new receipt issued as provided in said regulations. The undersigned warehouseman is not the owner, either solely, jointly, or in common with others of the cotton covered by this receipt, unless expressly stated otherwise here.....

The undersigned warehouseman claims a lien on said cotton for charges and liabilities as follows:

Weighing, sampling, assorting, checking, delivery to compress and storage first 15 days or fractional part thereof, 25 cents, storage 1 cent per bale per day thereafter.* Miscellaneous—Grading, etc.:.....

*These charges are subject to change on August 1st, after the date of this receipt, without notice.

Upon the return of this receipt properly endorsed and the payment of all charges and liabilities due the undersigned warehouseman, as stated herein, said ONE BALE OF COTTON will be delivered to the above named depositor or his order.

Issued at Hillsboro, Texas, on.....192....

Exporters & Traders Compress & Warehouse Company,
Licensed Warehouseman.

By.....

Marks.....

Weight.....

Reweight.....

*Grade.....

*Staple.....

Condition.....

*According to the official Cotton Standards of the United States.

Such a lack of uniformity makes the task of loaning on warehouse receipts very difficult. Loans that are made on warehouse receipts representing cotton stored in the warehouse of the owner are more often made on the moral and financial standing of the borrower rather than upon the warehouse receipts. Such conditions confine loaning on stored cotton to the locality in which the cotton dealer is personally known to those making the advances.

The conditions under which warehouse receipts are issued by dealers and buyers in the primary markets are generally understood by the local bankers, and the system works fairly smoothly as long as cotton is stored for only a short period. When the marketing channels become jammed, and local banks as well as local dealers have to call on outside agencies for loans, the local warehouse receipt becomes less important, and some other basis for the loan must be found.

Compress receipts.—Compress receipts are documents used to secure loans on cotton in both primary and central markets. They are used generally for short periods. Cotton in transit is usually unloaded at the compress for

further compression. In order to secure the bill of lading so that the cotton can be unloaded, compress receipts are substituted at the bank for the bill of lading under which the cotton is moving. After the cotton is compressed, it is reloaded and a bill of lading presented to the bank, against which the compress receipts are released. During the time the cotton is being compressed the compress receipts are accepted by bankers as security for loans. In many cases compresses are storage places for large quantities of cotton, serving in the same capacity as warehouses. The conditions which affect the security value of compress receipts are the same as those which govern warehouse receipts.

Bills of lading.—When cotton is shipped from the primary markets a railroad bill of lading becomes the basis for loans. If cotton is sold in the primary market to a foreign consumer, a "through bill of lading" may be used in lieu of a local bill of lading to the port.

The problem of financing the primary market involves the task of financing the grower or planter who desires to warehouse his crop and dispose of it when the market is most favorable;

the local store that accepts or buys cotton from the growers; the resident buyer; the agent of cotton mills; and the representative buyer of cotton merchants and exporters. Other cotton dealers may operate in the local market, but the method of extending funds to them will not vary from those of financing the local and representative buyer.

The credit structure used in financing the marketing of cotton brings into use the entire banking system of the South, and when those banks become burdened, loans from banks in the distant cities, such as Boston, New York, Chicago, and Philadelphia, are obtained. The large cotton mills and merchants use the banks in these cities, while the local buyers rely largely upon the local banks in the primary markets and concentration centers. The crop can be marketed without violent interruptions only when the banking and credit structure works smoothly.

Financing the grower or planter.—If warehouses are available and the planter does not want to sell his cotton immediately, he stores it. When he is not in a position to finance himself until the cotton is sold, he goes to his local bank and asks for a loan, presenting warehouse receipts as collateral. Loans of this type are usually made upon a straight promissory note given by the planter to the bank and secured by the former's warehouse receipts. Although bankers' acceptances offer an attractive field for country banks in financing stored cotton, they have been used very little.

Loans by the banks on cotton stored by the growers are usually made to mature within 60 or 90 days, although in some instances they run 120 days. In many cases demand loans are made by banks to growers, the bank reserving the right to call the loan if market conditions are such that the bank's margin is reduced. The length of the loan is determined in a large measure by the market conditions and the financial standing of the grower. In order to keep the loans liquid the banks generally extend from 75 to 80 per cent of the market value of the cotton. This, however, varies, as loans are extended in most cases on a flat bale basis without regard to the staple, grade, or condition of the cotton. That is to say, if a planter presents a cotton receipt at his local bank and asks for a loan, the bank will extend usually from 75 to 80 per cent of the market value of the cotton offered, the amount being determined by the quotation for middling cotton in that market on the same day. When the cotton is graded and found to

be above or below middling grade, the bank's margin changes accordingly.

Financing the local buyer.—A local buyer may be the local ginner, warehouseman, resident buyer, or the agent of a cotton merchant or mill. The problem of financing is similar for all.

At the opening of the cotton season, generally from August 15 to September 1 in the southernmost sections and from September 1 to 15 in the northernmost areas, the local buyer arranges with his local bank for a line of credit which he expects to use in making cotton purchases. If the buyer has some capital of his own, he uses that to make his initial purchases, and after it has been exhausted he places the receipts, representing the cotton which he has purchased, with the bank and thereby secures a loan to make further purchases. Arrangements made by other buyers who depend upon the bank to finance the original cotton purchases vary with banks in different sections of the Cotton Belt. Several banks in leading buying centers of Texas and Arkansas state that original cotton purchases are made through a demand acceptance agreement. Under this agreement the buyer enters the market and buys cotton from growers at the price agreed upon by the buyer and seller. The former then signs the warehouse or compress receipt and at the same time states on the receipt or on a separate form the amount that is owed the seller. The seller then takes the signed receipt to the buyer's bank which pays the amount stated on the receipt, and at the same time takes the receipt which is held as collateral against the loan. This process is repeated throughout the day, and at the end of the day the buyer may call at the bank and present his demand note for the entire amount that the bank advanced or the bank may carry the advances on a strictly open account or acceptance basis, always holding the warehouse or compress receipts as collateral. In order to keep an adequate margin against loans of this type the bank usually requires the buyer to pledge stocks and bonds or other collateral that is sufficient to secure about 20 or 25 per cent of the loan. The bank holds the receipts and when the buyer has arranged for a sale he is granted permission to move the cotton to the railway station and receive a bill of lading. The buyer, who then becomes the seller, presents the bill of lading at the bank and at the same time draws a draft on the buyer. The bank deducts the amount it has advanced

on the cotton, the interest on the loan and the exchange charge, and credits the account of the local buyer with the remainder. Other methods of allowing the local buyer to ship cotton are reported by several banks. A trust receipt is given to the bank against which the warehouse or compress receipts are released to the buyer. The cotton is then moved from the warehouse to the railroad. The shipper or seller receives a bill of lading, presents it at the bank, and liquidates the trust receipt. A draft is drawn in the same manner as before. The economic and legal aspects of the trust receipt have been analyzed and are given in the FEDERAL RESERVE BULLETIN, January, 1922, page 32.

Another form of acceptance agreement used in some of the western markets is one which the seller of cotton draws on the buyer and which is accepted by him. The seller then presents it at the local bank specified on the acceptance and receives payment for the cotton. A copy of this document is shown as follows:

ACCEPTED.	1922	BILL OF EXCHANGE.
	Buyer's No. ———, Texas———192—	
	Pay to the order of ——— National Bank,	
	———, Texas (\$——) ——— DOLLARS,	
	account of ——— bales Cotton at ———, ———	
	bales cotton at ———, attached hereto, this	
	day sold to ———, which cotton is held for	
	account of ——— National Bank, ———,	
	Texas, and subject to their order. Value	
	received and charge same to account of	
	——— Seller.	
	To ———	
	———	
	Per. ———	

The bill of exchange may be used by either the grower or the buyer who has accumulated a number of bales and made a sale to a cotton merchant or mill representative. This, however, is used generally in the local markets by the banks that have made loans on the cotton under consideration.

Other banks in the Western States report that local buyers are financed either by demand notes or notes of definite maturity. As cotton is moving rapidly to market the demand note is generally used, the borrower paying interest

only for the actual period that he used the funds. If cotton is stored and warehouse receipts are used to secure a loan to finance "orderly" marketing, a note of definite maturity is usually given. In the Eastern States loans are made largely on demand notes, while in Texas and Arkansas loans of definite maturity are much used. The following is a copy of the cotton contract or agreement which is sometimes used by buyers and banks in some of the eastern markets of the cotton States.

COTTON CONTRACT.

Whereas ———, hereinafter called the buyer, is engaged in buying cotton in the city of ———, and desires to secure advances from the ——— Bank of ———, hereinafter called the bank, for the payment of cotton purchased by the buyer, and desires to draw checks on the bank in payment for cotton purchased;

Now, in consideration of advances to be made and the payment of checks drawn from time to time by the buyer on the bank, the buyer hereby contracts and agrees with the bank:

1. That all sums so advanced, or any part thereof, will be repaid by the buyer on demand, together with interest on the same at the rate of 8 per cent per annum from the date of such advances, respectively.

2. That no check shall be drawn by the buyer on the bank except in payment for spot cotton to be actually and at the time delivered, and the expenses of handling the same, and that each check shall show upon the face thereof the number of bales of cotton for the payment of which said check is issued.

3. That all cotton purchased by the buyer and paid for by checks on the bank will be held by the buyer in trust for the bank until bills of lading, compress or warehouse receipts, as hereinafter provided, shall be delivered to the bank, with the right in the bank at any time to demand and receive said cotton so purchased or any part thereof.

4. That the buyer will turn over and deliver to the bank not later than the day upon which the checks, respectively, are presented for payment, railway bills of lading, warehouse or compress receipts, for all cotton purchased and paid for by checks of the buyer on the bank, which bills of lading, warehouse or compress receipts, are to be held by the bank as collateral security for advances made, and for any and all other liabilities of the buyer to the bank due or to become due, as well as any indebtedness theretofore or thereafter contracted or existing, whether incurred directly or indirectly, and including notes, bills of exchange, or other evidences of indebtedness made, indorsed, or accepted by the buyer, and owned or held by the bank.

5. In case of a decline in the market price of any cotton held by the bank as security for any indebtedness of the buyer, so that the market value of the cotton pledged shall be less than \$10 per bale more than the amount due the bank, the buyer shall forthwith make a sufficient payment on account or pledge additional cotton of sufficient amount, so that the aggregate market value of the cotton so pledged shall be at least \$10 per bale more than the amount due the bank at all times.

6. In case of failure of the buyer to maintain the margin between the market value of the cotton pledged to the bank and the amount of the indebtedness of the buyer to the bank, as in the last paragraph provided, all advances made by the bank to the buyer shall immediately become

due and payable, anything herein or in any note, bill of exchange, or other obligation contained to the contrary notwithstanding, and the bank is hereby given full right, power, and authority without further demand or any notice of any kind to sell or otherwise dispose of the whole or any part of the cotton pledged by the buyer to the bank, or any cotton held in lieu thereof or in addition thereto at any cotton warehouse, cotton mill, factor's or broker's office, at public or private sale, at the option of the bank, at any time or times thereafter, without advertisement or other notice, and with the right to the bank to become the purchaser thereof at such sale or sales, free and discharged from any equity of redemption, or of any other claim of the buyer to said cotton or the proceeds thereof. All interest on the amount advanced and the costs, charges, and expenses of holding, storing, protecting, and insuring said cotton, and all expenses of collection, sale, and delivery, including attorney's fees, if incurred, shall be deducted from the proceeds of the sale of said cotton, and the residue applied on the liability or indebtedness of the buyer to the bank. The overplus, if any, shall be paid over to the buyer, except as herein provided. If after such sale, and crediting the proceeds thereof upon the liability of the buyer to the bank, there should be any deficiency, the buyer hereby promises, contracts, and agrees to pay the same to the bank forthwith.

7. The buyer further authorizes the bank at its option, at any time, to appropriate and apply to the payment of any liability of the buyer to the bank, whether now existing or hereafter contracted, any and all moneys now or hereafter in the possession of the bank, on deposit or otherwise, to the credit of or belonging to the buyer, whether the said liabilities are by their terms then due or not.

8. All receipts for bills of lading, and any and all other collaterals of the buyer, shall be returned by the bank to the buyer upon payment of all indebtedness of the buyer to the bank, unless previously sold or held under the provisions hereof.

9. All the provisions of this contract shall inure to the benefit of the holders or assigns thereof.

In witness whereof the buyer has hereunto set his hand and seal this _____ day of _____, 19____.

In addition to the above agreement entered into by the local buyer and his bank other methods of handling cotton accounts are used by some banks. The method used by a bank in an important primary market in Arkansas is shown in the following comment:

We loan money to either the grower, ginner, merchant, or cotton buyer, secured by compress receipts for cotton or shippers' b/l properly indorsed showing that the cotton is in transit to a press. Some of the loans are secured by notes, some by time acceptances, some by demand acceptances, and occasionally for a very few days possibly an overdraft. We require at least a margin of 15 per cent; the margin, however, would largely depend on whether the borrower has outside property aside from the cotton that secures the loan. It must be insured with a loss clause attached to the policy, making the policy payable to us.

Another banker comments as follows:

The cotton-buying firms give us indorsed paper each fall at the beginning of the season to make a substantial margin against their total purchases at their highest point. They buy largely from small farmers on the street, one to

a few bales at a time. They occasionally go out into the country and buy lots of twenty to a hundred bales. They render us a statement several times each week, showing the number of bales on hand on the street or have in their yard, the number of bales in the compress at _____, for which they give us the compress receipts. The greater part of their cotton is bought and sold the same day, the only cotton kept and stored being the extremely high grades, which they sometimes accumulate to the extent of 40 or 50 bales in order to sell in a lump at a good profit. The margin that we have is always from 20 per cent to 50 per cent of the buyer's account.

Formerly much cotton was paid for in actual cash in the form of coin and currency given by the buyer to the seller. But with country banks in nearly all of the principal primary markets, checks, drafts, and bank credit in various forms are used almost entirely. With the use of checks the grower builds up his bank balance in the cotton moving season and withdraws it in the growing period.

In most sections of the Cotton Belt some of the cotton is grown under crop liens and chattel mortgages. Loans secured in this manner are made to mature in the early fall, just as cotton begins to move. As the banks and others are desirous of having their loans liquidated at that period, it is necessary for the producers to sell their crop rapidly in order to meet their maturing obligations. For this reason, banks in the primary markets have not advanced much money on stored cotton. Their advances have been confined largely to cotton that is moving from local markets to interior concentration points or awaiting shipment from local markets. In some cases, however, growers have been able to store their cotton for regular marketing and banks have loaned to them. Also local dealers who have concentrated small lots of cotton have been financed by the local banks on the basis of their warehouse or compress receipts. In cases where banks have made advances on cotton stored in primary markets, the length of such loans average from 60 to 90 days. If it is stored in either State or Federal licensed warehouses or unlicensed warehouses of good standing, the banks loan from 75 to 90 per cent of the market value of the cotton, whereas only 50 to 75 per cent is usually advanced on cotton stored in other places.

The representative buyer and agent of cotton mills who buy from growers and dealers in the primary markets are financed largely through their head office or banks in distant cities. The local banks serve only as a disbursing medium for them. As the problem of extending credit to them is largely one of financing their head office, it is necessary to discuss

their financial arrangement in connection with financing the merchant in the concentration center.

C. FINANCING IN THE CENTRAL COTTON MARKETS.

Funds for financing the marketing of cotton are raised largely in the central or concentration markets, cotton-mill centers, and export cities. The local markets finance the initial movement of cotton, but as banks in the primary markets are burdened with loans to producers, the available capital is soon exhausted, and the banks have to call upon their correspondents for additional funds. Merchants who are rapidly buying cotton from the buyers in the smaller points are constantly borrowing from banks in the centers where they have their head or a branch office; factors are establishing lines in order to meet the demands made on them by the planters; and mills are borrowing from their banks in cities where they maintain offices or in near-by capital markets. The rapidity with which cotton comes to market makes the demand for excessive loans heaviest from October to January. The movement of cotton to market and the months in which the movement is most active are shown in the table on page 453.

The importance of cotton loans by spot and future cotton concerns and the relative importance of cities that extend loans on cotton are given in the following table, prepared by the Federal Trade Commission, for the three-year period ending June 30, 1922:

YEARLY AVERAGE MAXIMUM BORROWINGS OF SPOT AND FUTURE COTTON CONCERNS, BY CITIES, 1919-20 TO 1921-22.

City.	Three-year period ending June 30, 1922.			
	Rank.	Average maximum borrowings.	Per cent of total borrowed.	Number of concerns borrowing.
New York.....	1	\$46,392,336.86	38.09	83
New Orleans.....	2	13,033,172.55	10.72	42
Boston.....	3	8,357,311.44	6.86	17
Memphis.....	4	5,976,637.16	4.91	40
Savannah.....	5	5,852,837.69	4.81	25
St. Louis.....	6	4,939,153.79	4.05	13
Norfolk.....	7	3,924,834.27	3.22	14
Dallas.....	8	3,282,163.73	2.70	23
Philadelphia.....	9	2,890,866.67	2.37	3
Galveston.....	10	2,153,083.33	1.77	9
Total, 10 cities.....		96,842,477.49	79.50	269
All other cities ¹		24,967,218.18	20.50	171
Total.....		121,809,695.67	100.00	440

¹ Includes \$5,779,147.16 from Japan and England.

Financing the factor.—Factors are found principally in Memphis, Augusta, New Orleans, Savannah, Charleston, Houston, and Galveston, and their methods of financing are confined, with few exceptions, to those cities. As the cotton is picked and ginned the planter consigns it to a factor. Instead of shipping the baled cotton to the factor, the planter may store it in a local warehouse or compress and send the receipt, with samples from the bales, to the factor. Factors reporting from several of the principal cities estimate that only a small percentage of the cotton that is handled by them is received under contract for advances which were made to the planters in the growing season. Only 25 per cent of the factors reporting indicate that more than 75 per cent is handled under contract for spring advances, while the majority of the reports show that the percentage averages between 5 and 35 per cent, the remainder being on commission. If the cotton is shipped to the factor, he has it warehoused, insured, sampled, and eventually sold. But if only samples are shipped, he handles the cotton on the basis of the samples which he receives.

As soon as the factor gets possession of the warehouse receipts he often presents them to the bank, pledging them to secure such advances as were made to him. When the cotton is sold, the factor is reimbursed by draft on the purchaser, which is deposited with the bank that holds the warehouse receipt and the loan is liquidated. The net proceeds of the sale are credited against the advance which was made to the planter in the growing season or at the time when the cotton was consigned to the factor.

A contract between the planter and factor for supplies and money advanced as applying in the upland long-staple cotton areas of Mississippi and Arkansas has been given in a previous article of this study. (See FEDERAL RESERVE BULLETIN, February, 1923.)

The amount that factors will advance on cotton consigned varies with the different factors and the market conditions at the time of the consignment. The advancement is either a fixed amount against each bale or a certain percentage of the market price at the time the cotton is delivered. If advances are on a percentage basis, it is usually about 50 to 75 per cent of the value of the cotton, whereas if it takes the form of a fixed amount per bale, it varies from \$50 to \$75 a bale (1922 cotton prices).

In order to meet the drafts that are drawn by the planters the factors usually have to

borrow very heavily from the banks. The banks advance funds to factors either upon an unsecured promissory note or on one secured by warehouse receipts representing the cotton consigned to them. The degree to which these methods are used varies with the different factors. In many cases the factors are of strong financial standing and can borrow on their straight promissory note. Others, although they do not own the cotton outright, borrow from their bankers and pledge the cotton as security. The banks, when they know the factors, "as a rule do not hesitate to make loans, taking the stored cotton as security." Advances to factors by banks on cotton stored vary from 60 to 75 per cent of the value of the cotton. Banks, in many instances, attempt to advance only the amount which the factor has advanced to the farmer. When loans are greater than local banks can support, banks in other cities are called upon to aid in the financing, "and in this case arrangements are usually made with the local banks to hold the warehouse receipts in trust to secure the lender." One factor reports that loans are obtained in Chicago and New York.

Financing the cotton merchant.—The process of assembling and distributing the greater part of the American cotton crop falls upon the cotton merchant or broker. Banks in the concentration cities and other financial centers are concerned primarily in extending loans to him. The merchant or broker acts at times in the capacity of buyer, at others as a broker, and when he concentrates quantities of cotton awaiting demands from the mills he is termed a cotton merchant. The merchant is involved in a cotton transaction at three different stages, (1) buying, (2) assembling and storing, and (3) selling. Likewise the problem of financing may be analyzed under these three heads.

Buying.—Several methods of buying cotton are used by the merchants. Many of the large cotton buying firms have head offices in one of the principal southern cities and a number of branch offices in other cities throughout the Cotton Belt. From the branch offices buyers are sent into the near-by local markets to buy cotton from growers and local dealers, or supply merchants. The extent to which each of the sources is used to obtain cotton varies with the several cotton firms that are organized on an extensive basis. One large firm operating entirely in Tennessee, Arkansas, and Oklahoma says that 65 per cent of its cotton purchases are from local supply stores and 35 per cent are from the growers directly. An-

other firm that maintains offices throughout the cotton areas in the larger cities estimates that 90 per cent of its purchases are from dealers in the local markets, from 3 to 5 per cent from growers, and the remainder from cooperative marketing associations. Another large organization estimates that approximately 50, 40, and 10 per cent of its purchases are from growers, dealers, and cooperative associations, respectively. Other merchants who operate one or more offices in several of the primary markets usually deal directly with the growers in these markets and resell to the firms organized in the manner described. An illustration of the method of buying is given by one of the larger firms in the following:

We buy practically no cotton from growers, but buy nearly all from local dealers in the interior markets (principally at compress points); we estimate that about 90 per cent of our cotton is bought in this way, the balance is bought from dealers at ports such as Galveston, Houston, and New Orleans; we also occasionally buy from cooperative marketing associations. †

The merchants use various methods in paying for the cotton which they have purchased in the primary markets. Growers selling at one of the buying offices of the merchant are usually paid by check on a bank in the city in which the office is located. The usual practice in paying for other cotton purchases is shown in the following comments:

All sellers are paid by draft (with bills of lading attached) on buyer's head office or other buying office, except on purchases made in city of head office or buying office, in which case seller is paid by check on local bank. We have a few buyers working for us who buy at interior points and arrange a line of credit with the local bank to pay for their purchases and in turn reimburse the local banks with drafts and bills of lading attached on the head office. The percentage of cotton bought in this manner is very small, not over 5 per cent.

One large interior firm that sends representatives from each buying office into the surrounding local markets uses the following method in financing purchases:

If we buy direct from the grower we give him a check on a local bank with which we have made arrangements prior to the opening of the season. Every night for cotton bought by ourselves the local bank draws on our head concentrating office for the territory under consideration. After assembling all these drafts from different points in their territory, the buying offices draw on our head office for round amounts. They keep their own books, so practically each office is run on its own footing, except from the financing and selling end. The drafts are then paid by the banks serving the head office.

In contrast to this method of handling cotton purchases several merchants operating in the western sections of the Cotton Belt report the

use of acceptances in their cotton financing. This has not applied generally, but the following example as given by a merchant in Fort Worth is one instance in which the method has been employed and is similar to the plan used by other merchants:

In handling cotton from local dealers we usually pay by acceptances on interior or large banks in Texas, with which we have an arrangement to handle our acceptances. We purchase cotton from local dealers and make payments by draft on the bank we want to handle the transaction. This draft is accepted by us and the bank handles it according to the terms of the agreement, holding the bill of lading or warehouse receipts as security.

Storing and assembling.—As the cotton season progresses, the concentrating merchants accumulate stocks of cotton. While the purchases are being assembled in various centers throughout the cotton belt, the banks which are financing the purchases for the merchants are secured by bills of lading as long as the cotton is in transit and by warehouse or compress receipts when it is in storage. The merchants' demands for funds are heaviest during this period. Two sources of borrowing are used, (1) the open market and (2) banks. Of these two sources the banks in the concentrating centers support the greater burden. Borrowing in the open market is not general with all cotton merchants as it is used mainly by the large dealers who have been in the cotton business for long periods and whose standing is known throughout the entire cotton trade.

One firm reporting from the interior says that its borrowing is done both in the open market and from its own banks in the city of its head office and in New York—about 50 per cent from each source. In financing in this manner the firm states that it usually puts out its paper in the open market first, and leaves "its bank lines open." Borrowing in the open market is done in denominations of from \$2,500 to \$25,000 and usually for a period of six months, whereas the denominations of notes used with banks are \$100,000 and for a shorter period. The latter is usually on unsecured promissory notes.

Another merchant who has buying offices in several of the larger cities of the cotton belt says that all of his borrowed funds, used to buy cotton, are obtained by borrowing from banks in the cities where offices are maintained and in New York. The borrowing is done as follows:

As the cotton season opens and cotton begins to move, the buying offices borrow from the local banks, keeping the banks supplied with bills of lading or warehouse or compress receipts as collateral. As the cotton movement gets too heavy for local banks to finance entirely, borrow-

ing is done in New York, both on line of credit and on bank acceptances. The bank acceptances are usually made for a period of 90 days and are secured by bills of lading or warehouse receipts as collateral. The acceptances are sold to New York banks, sometimes to the accepting bank. These acceptances run in various amounts, usually from \$10,000 to \$100,000 each. The money borrowed by us on our line of credit is also at all times secured by bills of lading and warehouse receipts as collateral, either put up with the New York banks in New York or being held by local banks for the account of the New York banks. In addition to secured loans, we usually borrow from \$1,000,000 to \$1,500,000 on unsecured paper.

Methods of borrowing used by merchants who handle cotton in smaller quantities are not at variance with those to whom we have referred, except that their borrowings are largely local, although in some instances the merchants report banking connections in New York. Loans obtained from New York banks are secured by either depositing bills of lading, warehouse or compress receipts with the New York bank, or placing them to the credit of the New York bank with its southern correspondent. The maturity of the loans is usually determined by the activity and rapidity with which the crop is moved, whereas the denominations of notes issued depend upon the financial standing of the merchant and the size of the bank that is financing him. Reports from merchants from 40 leading cotton centers show that the loans are usually made to mature from 15 days to 6 months, the average maturity being near 90 days. The denominations of notes issued are usually in round numbers and vary from \$1,000 to \$100,000, but one merchant says that notes are made for \$250,000. The average notes given to banks are between \$10,000 and \$50,000.

The usual period for merchants to begin borrowing is between August 15 and September 15. The earlier date is used by merchants in the southernmost areas of the belt, whereas the later date is used by merchants in the northern sections of the Atlantic States. In general, the seasonal bank borrowing follows the cotton picking and ginning season. Merchants often have considerable capital and do not rely upon the bank until after it has been used. These two factors cause discrepancies between the replies of merchants and banks in different areas, but in general it can be said that the borrowing to move the cotton crop begins about September 1 and continues until the peak is reached between December 1 and 15. After December 15 the supply of cotton entering the market decreases and, with the regular takings by the cotton mills, the loans are gradually liquidated throughout the spring and early

summer months. In normal years most merchants "clean up" their accounts with banks before August 1.

Sales by merchants.—Merchants make sales to cotton mills in the United States and to foreign buyers. The percentage of cotton handled by the different merchants that is sold to domestic consumers and for foreign consumption varies with the merchants. Some merchants in the eastern cotton States report that they deal largely with southern mills, while those from the middle and western areas estimate that their sales are mainly to northern mills and for export.

When a sale of cotton has been arranged and against which the bank holds the warehouse receipts, the merchant gives a trust receipt to the bank which, in turn, releases the warehouse receipts. The latter are presented to the warehouse and the cotton is delivered to the transportation company. An inland or ocean bill of lading, according to the place of destination, is obtained. "These ladings are then returned to the bank attached to a sight draft drawn upon the consignee, which is usually discounted by the bank, and the credit closed." Practically all of the sales made to American mills are made on a cash basis, the buyers paying either by sight draft or 3 days' sight draft with bill of lading attached.

Several merchants report sales to mills on acceptances, but the percentage of sales thus made by those reporting is very small. One merchant, reporting 65 per cent of sales to northern mills, 25 per cent to southern mills, 10 per cent to foreign buyers, estimates that 70 per cent of total sales to American mills are for cash, while 30 per cent are on time. The time sales are carried on acceptance credits and against acceptance by the mill the bills of lading are surrendered.

Financing cotton mill purchases.—The methods used by cotton mills in purchasing raw cotton vary with the mills in different manufacturing regions of the country. Mills in the South are often located in the primary cotton markets or very near large supplies of the commodity. Those in other sections of the country are far distant from the source of supply, and the different methods of buying are determined in large measure by this.

Mills in the cotton-growing States.—In the South the manufacturers buy cotton from three sources: (1) Growers directly, (2) local dealers, and (3) cotton merchants. Mills which are located in the large primary markets buy con-

siderable quantities of their cotton from the growers in the local market. The importance of local buying is shown by the fact that mills reporting from several cities in South Carolina, Spartanburg, Anderson, and Pacolet, estimate that 80, 60, and 30 per cent, respectively, of their cotton is bought directly from growers who sell in those markets and through agents who are sent into the markets of the surrounding territory. Some mills in North Carolina, Georgia, Alabama, and Mississippi report that they buy large quantities of cotton directly from the producers within their territories. The remaining cotton is bought from local dealers in the smaller towns and from merchants in the concentration centers.

Growers are usually paid by checks on the local banks in the towns in which their cotton is sold. If cotton is carried by the producer to the mill, he is given a check on the mill's bank, whereas when the mill sends its representatives into the local markets they usually pay the growers by checks on the local banks in such markets.

The arrangement made with the banks is similar to that which is made by agents of cotton merchants. Dealers and merchants generally draw on the mills and attach bill of lading as soon as the cotton is shipped. The drafts are discounted by the local bank and forwarded to the mills for collection. Several mills state that when cotton is bought in large lots they often give the merchants drafts on New York or Boston banks. This, however, applies largely to some of the larger textile corporations that maintain selling offices in these cities.

In order to finance their cotton purchases, it is necessary for many mills to use borrowed funds. Some mills are able to finance all their cotton purchases, others rely largely on their banks, while others borrow in the open market through note brokers. Loans are usually made to the mills on their unsecured paper, based upon their financial statement or indorsement by members of the corporation. In but few instances is cotton pledged by the mills as security. Payments are usually made in cash for cotton, the funds being obtained in the ways mentioned. In view of the fact that acceptances are recognized as being commercial instruments of the highest type, the use that has been made of them in financing purchases of raw cotton by mills is very limited, for in only two reports were trade acceptances reported to have been used. This is in accord

with reports from cotton merchants who noted the use of trade acceptances in only a few instances.

Mills in other States.—The northern mills buy their cotton mainly through cotton merchants and brokers. These have offices or agents in the principal cotton manufacturing centers of the North and East. They obtain cotton through buyers and merchants in concentration centers in the cotton-growing States. Cotton is sold to the mills either on "spot" or "under contract calling for future delivery of the total quantity at one specified date or by monthly installments." As many mills operate plants in both the North and the South, the method followed in buying cotton for the southern plants is similar to that used for the northern mill. The cotton is contracted for through a northern broker and is delivered to the southern mill by the dealer in the South with whom the broker contracts. The seller on delivering the cotton to the southern mill draws on the northern office by sight draft.

Generally the heaviest buying season by mills is from September to January. Several of the large cotton mill corporations from New England state that the proportion of their annual consumption purchased during the crop-moving season averages about 50 per cent of the total received. The amount of cotton that is bought or contracted for by the spinners during this period is determined largely by the activity of the cotton market, the price at which raw cotton is selling, and the activity of the cotton goods' market. Yet the monthly consumption of cotton by all mills in the United States is very regular. The movement and consumption of raw cotton by months are shown in the following table:

MOVEMENT AND CONSUMPTION OF COTTON.

Month.	Cotton movement.*	Cotton consumption.
	<i>Per cent.</i>	<i>Per cent.</i>
August.....	1.4	8.3
September.....	9.5	8.0
October.....	21.0	8.3
November.....	22.2	7.9
December.....	17.4	8.1
January.....	8.8	8.7
February.....	5.6	8.1
March.....	4.9	8.9
April.....	3.2	8.3
May.....	2.7	8.7
June.....	1.7	8.5
July.....	1.6	8.2
Total.....	100.0	100.0

* Macklin, *Efficient Marketing for Agriculture*, p. 149.

As the purchases of raw material by cotton mills are normally in accordance with the demands which mills have from the consumers of cotton goods, the problem of financing cotton purchases is not one of great importance to the mills. Merchants, on delivering the cotton, are paid generally by sight drafts on the mills. If, however, cotton is bought for future delivery, the "cotton mill-sale note," or mill acceptance, is often used to finance the merchant until the mill is ready to consume the cotton or, in case of a deferred shipment, until the cotton can be delivered to the mill. The sale note provides a means for the mill to receive indirect bank credit through the cotton merchant. The merchant delivers cotton to the mill, which is stored in a warehouse of the mill, and the former is given a seller's warehouse receipt by the treasurer of the mill. This document, which is evidence of an acceptance of cotton by the mill, is presented by the merchant to his bank to obtain credit with which payment is made to the original seller of the cotton to the New England merchant. As the sale note is used more to finance sales for deferred shipment, the bill of lading is usually delivered to the treasurer of the mill against which the combination bill of lading and warehouse receipt is issued. This, in turn, is presented to the bank in the manner described. The following is a copy of the receipt that is commonly used in financing cotton through the use of the mill sale note:⁴

BILL OF LADING AND WAREHOUSE RECEIPT.

No. 5689.

FALL RIVER, MASS., March 10, 1921.

Received of Jackson, Johnson & Co., bill of lading for one hundred (100) bales cotton marked "KCB," issued by B. & M. R. R. No. 676, dated at Boston, March 2, 1921, consigned to Jaztax Cotton Mills, Ipsilanti, Vermont, which cotton is to be stored on arrival and same held for account of and subject only to the order of Jackson, Johnson & Company.

Except that any actual payment of freight charges paid by Jaztax Cotton Mills shall be a lien on said cotton for the amount paid. This cotton is covered while in store under our open policy of insurance for account of whom it may concern, storage and labor free.

JAZTAX COTTON MILLS,
By X. Y. SMITH, Treasurer.

Although mills report that they seldom borrow primarily for the purpose of making payments against cotton purchased, they indicate that borrowing is done throughout the year in connection with the general operation of the industry. Credit is obtained principally

⁴ Ryan, Franklin W., *The Cotton Mill-Sale Note*. Published by the Robert Morris Associates.

from banks and through the sale of commercial paper in the open market. Loans by banks are made principally on unsecured paper with or without the personal indorsement of the officers of the mills. The borrowings are often large in the latter months of the year, although they may be large in the early months when the mills are carrying large amounts of accounts receivable for their customers. Open-market borrowing is usually done in the same manner as borrowing from banks or an outside agency.

THE BANK OF LATVIA.¹

Up to November 1, 1922, the Republic of Latvia had no official central bank of issue, the functions of such a bank being performed by the State Savings and Credit Bank. On November 1, 1922, this institution was liquidated and all its functions were taken over by the Bank of Latvia, a brief summary of whose statutes is presented below. Latvia is one of the Baltic States which became separated from Russia after the 1917 revolution. It has an area of about 25,000 square miles and a population of about 1,800,000.

General regulations.—The Bank of Latvia is a state enterprise and the State is responsible for all the operations of the bank. Its purposes are to regulate the circulation of money, to promote industry, trade, and agriculture, to facilitate cash payments at home and abroad, and to act as fiscal agent for the Government. All claims of the bank against any of its debtors have precedence over all other claims, state as well as private, with the exception only of first mortgage liens.

Capital.—The capital of the bank is to be 10,000,000 lats (1 gold lat is equal to 1 gold franc). Twenty-five per cent of the net profits of the bank are to be added annually to the capital of the bank until the latter amounts to 25,000,000 lats. Further, 10 per cent of the net profits are to be used for the creation of a reserve. Of the rest of the net profits, 3 per cent are to be paid to the administration, 1½ per cent to the council, and 5½ per cent to the staff of the bank. In no case, however, shall this bonus exceed the annual salaries of the respective recipients. The remainder goes to the Government.

Operations of the bank.—The Bank of Latvia has the exclusive right to issue notes, which are

legal tender and redeemable in gold upon demand. The notes outstanding are to be covered as follows:

(1) Fifty per cent by gold or stable foreign currencies as long as the total amount of notes outstanding does not exceed 100,000,000 lats, the remainder being covered by prime short-term bills of exchange.

(2) When the amount of notes outstanding exceeds 100,000,000 lats, but does not exceed 150,000,000 lats, the amount in excess of 100,000,000 lats is to be covered to the extent of 75 per cent by gold or stable foreign currencies, the rest by short-term bills of exchange.

(3) Issues in excess of 150,000,000 lats must be fully covered by gold or foreign currencies.

The bank is authorized to engage in the following operations:

(1) To discount bills and short-term obligations;

(2) To open credits and grant short-term loans;

(3) To receive demand and time deposits;

(4) To buy and sell bills, drafts, and foreign exchange;

(5) To issue letters of credit; and

(6) To carry out all kinds of banking transactions for the Government.

Bills to be eligible for discount must have at least two reliable signatures, arise out of a commercial transaction, and have a maturity not longer than three months. Bills of a longer maturity may be discounted only with special consent of the directors of the bank.

Short-term loans or advances may be made against sound collateral, including among others the following types: Certificates of mortgages on real estate, agricultural and industrial implements, and staple, nonperishable commodities. Loans against private or Government bonds may be made only with the consent of the board of directors. In general the bank may engage in all kinds of commercial banking transactions and may carry out the functions of an investment bank as well as those of a trust company. With the consent of the board of directors the bank may establish branches in Latvia and abroad. A branch office, however, may be closed only with the consent of the Minister of Finance.

The administration of the bank.—The bank is managed by a board of managers (administration) and a board of directors (council). The administration consists of the general manager, his deputy, and three managers, who are not permitted to hold any other salaried positions. The council consists of the chairman, a

¹ This is one of a series of articles summarizing the laws governing the organization and operation of the banks of issue recently established in several of the countries of Europe. The new Austrian bank of issue was described in the March BULLETIN.

vice chairman, and not less than five directors. The number of the members of the board is determined by the cabinet of ministers. The general manager and one representative of the Ministry of Finance are ex officio members of the board. The members of the administration and of the council are appointed by the cabinet of ministers upon the recommendation of the Minister of Finance. The council and officers of the bank are appointed by the Minister of Finance upon recommendation by the council. The rest of the employees are appointed by the general manager. The actual administration of the bank is directed by the board of managers, and the general manager bears the responsibility for compliance with the laws and the charter. The members of the council are appointed for three years, but are eligible for reappointment. The decisions of the council may be vetoed only by the Minister of Finance. Disagreements between the council and the Minister of Finance are to be passed upon by the cabinet.

CONDITION OF STATE BANKS AND TRUST COMPANIES ON JUNE 30 AND DECEMBER 29, 1922.

In the following tables are shown comparative figures of the principal assets and liabilities of the State banks and trust companies of 46 States and of the District of Columbia for the middle and the close of last year. December figures were available for all States except New Hampshire and Missouri, and the totals are exclusive of figures for these two States. Wherever possible data for mutual savings banks were excluded from the

computation. This was done in the case of all New England States, and the States of New York, New Jersey, Pennsylvania, Indiana, Wisconsin, and Minnesota, which together had about 95 per cent of the deposits held on June 30 of last year by all mutual savings banks reporting to the Comptroller of the Currency. There were also excluded from the comparative statement data relating to private banks not under State supervision in the States of Indiana, Michigan, Iowa, Texas, and Colorado. The total number of banks for which December figures were compiled was 19,400 as against a corresponding June total of 19,378. It is therefore believed that the figures for the two dates cover practically the same ground and reflect more or less accurately the main changes in the condition of the banks of this country subject to State supervision. The June figures in the following statements were taken from data published in the annual report of the Comptroller for 1922, while December data are based upon abstracts of reports of condition furnished by the several State banking departments. These reports include data for both member and nonmember banks, and therefore, to a certain extent, overlap the December totals for member banks published in the March BULLETIN.

To give some idea of the comparative development during the second half of the past year, of the State banks and trust companies which are not members of the Federal reserve system and those that are members of the system, the totals of some of the most important items for State bank and trust company members, viz, loans and discounts, investments and deposits, have been deducted from the corresponding totals for all State banks and trust companies, with the following results:

[In thousands of dollars.]

	Total member and nonmember banks.		All member banks.		State banks and trust companies. ¹					
	June 30, 1922.	Dec. 29, 1922.	June 30, 1922.	Dec. 29, 1922.	Total.		Members.		Nonmembers.	
					June 30, 1922.	Dec. 29, 1922.	June 30, 1922.	Dec. 29, 1922.	June 30, 1922.	Dec. 29, 1922.
Number of banks.....	27,665	27,666	9,892	9,859	19,378	19,400	1,605	1,593	17,773	17,807
Loans and discounts.....	24,184,455	24,672,156	17,282,290	18,061,459	12,735,448	12,869,314	5,833,283	6,258,617	6,902,165	6,610,697
Investments.....	9,537,544	10,624,626	7,062,071	7,687,716	4,893,018	5,517,374	2,417,545	2,580,464	2,475,473	2,936,910
Total loans and investments.....	33,721,999	35,296,782	24,344,361	25,749,175	17,628,466	18,386,688	8,250,828	8,839,081	9,377,638	9,547,607
Due to banks.....	3,204,859	3,577,888	3,150,385	3,492,383	661,822	774,467	607,348	688,962	54,474	85,505
Other deposits (exclusive of U. S. deposits).....	31,515,511	32,916,995	22,210,184	23,317,622	17,534,566	18,274,881	8,229,239	8,675,508	9,305,327	9,599,373

¹ Exclusive of data for State banks and trust companies in New Hampshire and Missouri.

Before an analysis of the member and non-member bank figures is started, it is but proper to state that the grouping and classification of items in the abstracts of the several State banking departments is far from uniform and that in several cases, as shown in the footnotes, the item used as heading is inclusive of other items given separately in most of the other State abstracts. "Cash on hand," for instance, in the case of four States includes amounts "due from banks," and "bills payable" in a number of cases are shown together with "notes and bills rediscounted." Figures for New York State banks and trust companies shown under the head of "individual deposits" are inclusive of "certified and cashiers' checks," also of "Government deposits." Furthermore, the Federal Reserve Board's classification of items for State and trust company members differs in some respects from those followed by the principal State banking departments. Some allowance for these differences should therefore be made, when comparisons are attempted between the figures of member and nonmember banks, or between the totals by States and geographic sections.

It is seen that whereas loans and discounts of all member banks show an increase of about 4.5 per cent, from \$17,282,000,000 to \$18,061,000,000, those of nonmember banks declined during the same period about 4.2 per cent, from \$6,902,000,000 to \$6,611,000,000. A somewhat different development is also shown for investments in Government, corporate, and other securities. While both classes of banks report larger figures at the close of the year than six months before, the member banks show an increase of 8.9 per cent, from \$7,062,000,000 to \$7,688,000,000, while the nonmember banks show an increase in their investments of 18.7 per cent, from \$2,475,000,000 to \$2,937,000,000. Total loans and investments of all member banks show an increase for the six months of 5.8 per cent, while those of the nonmember banks show an increase of 1.8 per cent.

In the deposit block it was possible to segregate in most cases amounts "due to banks" from other deposits, including individual and Government deposits. It is of interest to note that bank deposits are to a very large extent held by the member banks, which, as a rule, are larger in size, and of which a relatively larger portion is located in the financial

centers, and that the amounts due to other banks by the 18,000 State banks and trust companies outside the system included in the tabulation represent but relatively small amounts, though the December total for the nonmember banks is considerably larger than the total shown for the earlier date. Other deposits of the summary table are made up of aggregate demand, time, and savings deposits, certified checks, and cashiers' checks, but exclusive in most cases of United States Government deposits. Between the middle and end of the year member banks increased these deposits by \$1,108,000,000, or about 5 per cent, while the nonmember banks report an increase of only \$294,000,000, or about 3 per cent.

Although less than 10 per cent of all State banks and trust companies are members of the Federal reserve system, these members report between 47 and 48 per cent of the total loans, investments, and individual deposits of these institutions. Total credit expansion of the State bank and trust company members during the six months, as measured by comparative figures of loans and security investments, was about \$588,000,000, or 7 per cent, compared with about \$170,000,000, or less than 2 per cent for the nonmember institutions.

A comparison of the totals of loans and discounts of all State banks and trust companies shows some variety of change between the two dates for the several geographic sections of the country. Loan liquidation appears to have been largest in the East, particularly in the States of New York, New Jersey, Pennsylvania, and Maryland. A small decline in the total of the loan account is also shown for the Western States. The banks increased their security investments between June and December in all sections of the country, nearly two-thirds of the increase being shown for the banks in the Eastern States. Larger deposit figures for December are shown for all sections except the Eastern States. The decrease in deposits was especially large in New York State, though it should be noted that figures for the New York State banks and trust companies refer to November 15 instead of the end of the year. As explained above, in many cases it was impossible to compile fully comparable totals for the several items in the summary statement and for this reason some caution in comparing the more detailed figures should be used.

PRINCIPAL RESOURCES AND LIABILITIES OF STATE BANKS AND TRUST COMPANIES IN EACH STATE AS OF JUNE 30 AND DECEMBER 29, 1922.

[From abstracts of condition reports made to the Comptroller of the Currency and the several State banking departments.]

[In thousands of dollars]

	Number of banks reporting.		Loans and discounts.		Overdrafts.		United States Government securities.		All other securities.		Total investments.	
	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.
Maine.....	55	56	65,887	65,364	57	59	6,773	10,821	41,480	39,641	48,253	50,462
Vermont.....	39	39	47,539	47,022	44	42	4,895	5,445	8,460	8,350	13,355	13,795
Massachusetts.....	105	101	512,914	551,198	198	205	49,913	.....	101,438	154,328	151,351	154,328
Rhode Island.....	15	15	98,287	101,719	9	17	30,204	34,412	62,315	60,426	92,519	94,838
Connecticut.....	78	79	83,877	88,577	87	61	8,094	8,724	80,479	86,557	88,573	95,281
Total New England.....	292	290	808,504	853,880	395	384	99,879	59,402	294,172	349,302	394,051	408,704
New York.....	336	340	2,404,491	2,332,831	711	682	.....	.....	1,198,039	1,299,902	1,198,039	1,299,902
New Jersey.....	162	171	364,087	312,543	44	62	66,564	70,943	214,193	284,471	280,757	361,414
Pennsylvania.....	636	649	885,963	829,406	398	521	126,982	.....	560,079	875,165	687,061	875,165
Delaware.....	39	41	35,300	38,531	1,350	19	5,921	6,196	27,184	28,084	33,105	34,230
Maryland.....	145	145	161,830	136,762	88	116	18,231	.....	66,539	116,129	84,770	116,129
District of Columbia.....	35	36	64,285	68,179	41	47	5,674	6,418	21,096	20,624	26,770	27,042
Total Eastern.....	1,351	1,382	3,915,456	3,718,252	2,632	1,447	223,372	89,557	2,087,130	2,624,325	2,310,502	2,713,882
Virginia.....	330	334	140,680	158,832	153	182	.....	.....	15,899	17,114	15,899	17,114
West Virginia.....	225	224	146,567	156,591	393	395	7,256	7,290	20,251	21,040	27,507	28,530
North Carolina.....	496	544	184,405	190,017	403	410	5,478	7,449	7,283	8,265	12,761	15,714
South Carolina.....	372	359	114,716	107,962	881	1,015	3,812	4,345	5,045	5,336	8,557	9,681
Georgia.....	589	599	180,104	192,048	186	461	4,085	4,177	9,927	11,130	14,012	15,307
Florida.....	218	222	66,677	76,286	79	61	.....	.....	15,342	16,701	15,342	16,701
Alabama.....	249	253	79,044	85,477	106	132	2,031	.....	5,039	8,600	7,070	8,600
Mississippi.....	319	322	91,040	94,568	1,131	7,014	4,799	4,837	12,992	15,678	17,791	20,515
Louisiana.....	230	230	195,820	218,431	801	1,289	7,881	11,438	21,360	26,892	29,241	38,330
Texas.....	983	970	216,580	202,668	1,081	1,283	9,983	.....	5,930	17,890	15,913	17,890
Arkansas.....	402	402	101,032	106,693	255	509	3,558	4,555	4,589	4,488	8,147	9,043
Kentucky.....	465	465	153,341	158,328	690	632	.....	.....	32,803	37,319	32,803	37,319
Tennessee.....	470	467	153,644	166,887	603	642	.....	.....	15,469	17,087	15,469	17,087
Total Southern.....	5,348	5,391	1,832,648	1,912,788	6,792	14,025	48,883	44,091	171,929	207,540	220,812	251,631
Ohio.....	750	752	936,191	970,678	475	650	60,272	80,650	224,432	230,147	284,704	310,797
Indiana.....	681	696	293,368	306,830	575	577	21,954	23,777	47,792	50,123	69,746	73,900
Illinois.....	1,406	1,412	1,173,997	1,236,110	1,331	1,332	149,918	165,302	274,011	280,622	423,929	445,924
Michigan.....	576	581	370,889	347,224	372	2,088	18,413	26,164	439,699	516,013	458,112	542,177
Wisconsin.....	841	841	325,296	326,747	534	859	23,219	27,121	57,439	57,950	80,658	85,071
Minnesota.....	1,165	1,159	307,110	323,048	1,053	1,248	14,934	12,206	51,244	34,450	66,178	46,656
Iowa.....	1,332	1,329	579,942	594,023	892	1,064	24,731	23,482	567	577	25,298	24,059
Total Middle Western.....	6,751	6,770	3,991,793	4,104,660	5,232	7,758	313,441	358,702	1,095,184	1,169,882	1,408,625	1,528,584
North Dakota.....	664	665	105,083	102,567	247	239	929	.....	4,298	6,236	5,227	6,236
South Dakota.....	562	561	142,316	145,250	998	721	.....	.....	2,687	2,908	2,687	2,908
Nebraska.....	970	955	209,352	213,641	1,070	1,130	.....	.....	10,145	10,947	10,145	10,947
Kansas.....	1,097	1,084	222,224	222,424	693	852	7,570	.....	12,580	22,216	20,150	22,216
Montana.....	268	265	72,382	67,521	294	296	1,531	.....	8,002	12,448	9,533	12,448
Wyoming.....	99	97	19,566	19,495	112	100	.....	.....	1,139	1,287	1,139	1,287
Colorado.....	235	229	60,829	62,703	154	138	10,004	12,138	14,159	14,334	24,163	26,472
New Mexico.....	63	64	16,714	16,532	33	40	597	504	949	1,036	1,546	1,540
Oklahoma.....	486	464	68,947	57,477	330	368	.....	.....	9,779	10,476	9,779	10,476
Total Western.....	4,444	4,384	917,413	907,610	3,931	3,884	20,631	12,642	63,738	81,888	84,369	94,530
Washington.....	284	277	90,027	88,340	113	57	12,595	.....	18,992	35,249	31,587	35,249
Oregon.....	181	182	67,002	68,458	121	127	6,663	8,161	15,174	15,594	21,837	23,755
California.....	429	432	979,012	1,079,970	795	1,296	.....	166,947	394,799	266,655	394,799	433,602
Idaho.....	119	114	27,024	23,734	47	42	1,735	.....	2,392	4,753	4,127	4,753
Utah.....	97	97	59,810	63,927	213	268	3,646	.....	8,476	12,827	12,122	12,827
Nevada.....	24	24	14,300	14,642	134	140	457	.....	1,532	2,003	1,989	2,003
Arizona.....	58	57	32,459	33,053	32	70	.....	.....	8,198	7,854	8,198	7,854
Total Pacific.....	1,192	1,183	1,269,634	1,372,124	1,455	2,000	25,096	175,108	440,563	344,935	474,659	520,043
Total United States.....	19,378	19,400	12,735,448	12,869,314	20,437	29,493	731,302	739,502	4,161,716	4,777,872	4,893,018	5,517,374

¹ December reports not available for New Hampshire, and Missouri. Figures for these States not included in totals.

PRINCIPAL RESOURCES AND LIABILITIES OF STATE BANKS AND TRUST COMPANIES IN EACH STATE AS OF JUNE 30 AND DECEMBER 29, 1922—Continued.

	Banking house, furniture, and fixtures.		Other real estate owned.		Due from banks.		Reserve with Federal reserve or other banks.		Checks and other cash items, including clearing-house exchanges.		Cash on hand.	
	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.
Maine.....	1,789	1,883	266	362	6,853	707					2,921	3,200
Vermont.....	805	744	145	232	2,827	3,706			184	133	707	763
Massachusetts.....	14,653	15,163	3,379	514	27,614	22,848	43,718	58,527	23,578	15,313	12,740	13,270
Rhode Island.....	3,422	3,450	135	153	16,260	1,181		14,099	2,319	1,823	5,535	6,367
Connecticut.....	5,174	5,962	858	1,179	2,059	1,633	10,656	11,729	2,271	2,063	4,082	4,851
Total New England.....	25,843	27,202	4,783	2,440	55,613	30,075	54,374	84,355	28,352	19,332	25,985	28,451
New York.....	86,375	90,431			99,441	118,790	462,540	429,366	424,111	306,716	65,291	71,778
New Jersey.....	16,721	17,767	2,660	2,752	33,205	67,556	23,166		6,063	5,069	13,423	15,740
Pennsylvania.....	63,191	71,663	24,043	19,351	27,863	30,943	127,910	149,463	18,522	16,977	37,282	44,004
Delaware.....	2,693	2,798	847	800	1,383	2,425	4,358	3,352	660	473	1,023	1,255
Maryland.....	7,644	7,847	1,136	1,175	16,085	5,635	33,333	32,825	1,076	3,366	4,228	4,833
District of Columbia.....	10,410	10,229	372	982	8,572	8,757		272	1,371	1,044	2,362	2,752
Total Eastern.....	187,034	200,735	29,058	25,060	186,549	234,106	651,579	615,211	451,803	333,645	123,609	140,362
Virginia.....	6,042	6,498	1,501	1,559	14,104	19,589			1,304	1,441	3,768	4,768
West Virginia.....	7,563	7,745	930	1,102	21,916	26,969		6,403	1,162	1,701	5,155	
North Carolina.....	7,592	7,716	1,412	1,720	27,735	37,187			1,834	1,975	5,451	7,947
South Carolina.....	3,867	3,561	1,377	1,582	13,839	16,727			1,366	1,552	2,193	2,693
Georgia.....	7,873	8,862	2,353	3,262	6,223	8,919	25,244	32,048	2,781	3,479	4,572	6,422
Florida.....	4,376	4,320	853	1,117	19,422	22,544			829	1,578	3,603	4,122
Alabama.....	3,505	3,597	1,789	1,920	10,892	27,851	3,835		1,589		3,574	4,737
Mississippi.....	2,798	2,883	928	1,051	857	32,390	25,496		426	738	2,963	4,535
Louisiana.....	13,822	14,067	2,386	2,267	42,664	54,204	7,617		7,272	8,515	6,130	6,646
Texas.....	11,672	16,871	4,021		44,382					79,585	7,563	
Arkansas.....	4,544	4,681	1,544	2,067	20,136	2,922	2,346	32,407	3,101	6,068	3,117	4,594
Kentucky.....	5,338	5,517	546	673	23,726	31,048			1,327	2,059	6,891	6,277
Tennessee.....	6,878	6,905	1,617	1,831	30,315	41,282			4,072	8,213	5,044	5,269
Total Southern.....	85,870	93,223	21,257	20,151	276,216	321,632	64,538	80,209	27,063	116,904	60,224	58,010
Ohio.....	39,756	41,122	12,454	12,950	29,267	29,157	100,493	110,697	32,295	39,461	29,683	36,157
Indiana.....	15,095	15,995	2,830	3,181	48,470	52,983			3,211	3,123	11,174	12,916
Illinois.....	35,890	40,003	6,377	6,061	190,300	254,153	72,095		50,867	85,730	39,833	45,447
Michigan.....	26,278	27,833	2,025	2,358	3,220	2,764	81,036	83,881	16,676	18,149	20,721	23,062
Wisconsin.....	12,110	12,447	1,375	1,590	1,614	1,626	44,254	50,827	5,778	5,847	9,785	10,846
Minnesota.....	10,999	11,002	4,702	5,392	38,443		2,078	2,016	3,411	2,438	12,835	14,497
Iowa.....	18,511	18,626	3,948	5,434	67,634	66,950					14,669	16,870
Total Middle Western.....	158,639	167,028	33,711	36,966	378,948	407,633	299,956	247,421	112,238	154,748	138,700	191,795
North Dakota.....	4,006	3,985	3,694	4,490	483	760	7,099	11,642	403	607	1,528	1,751
South Dakota.....	4,915	5,099	2,902	3,825	26,555				797	1,006	3,153	27,642
Nebraska.....	7,123	7,099	2,454	3,514	42,428	38,925			125	181	9,274	9,812
Kansas.....	7,476	7,760	2,214	2,652	42,441				2,667	3,264	6,896	48,998
Montana.....	3,633	3,627	2,478	2,725	503		12,101	16,487	414	628	2,615	2,872
Wyoming.....	668	682	318	312	3,472	5,356			182	375	736	841
Colorado.....	3,005	3,023	535	698	309	530	13,660	15,222	1,305	1,066	3,467	3,573
New Mexico.....	677	690	291	329	2,318	2,591	128		235	151	524	608
Oklahoma.....	2,553	2,436	745	925	15,635	17,925			740	2,449	2,566	2,799
Total Western.....	34,056	34,401	15,631	19,470	134,144	66,087	32,988	43,351	6,868	9,767	30,759	98,896
Washington.....	5,950	5,928	1,576	1,406	1,261	1,510	18,201	17,929	1,240	1,476	4,122	4,379
Oregon.....	2,400	2,556	964	1,107	5,404	16,012	11,139	2,810	1,362	1,112	4,097	4,624
California.....	47,494	53,251	5,429	5,929	99,410	106,887	38,950	45,549	30,280	39,981	38,229	45,832
Idaho.....	1,340	1,308	857	880	5,080	5,158	641	549	254	217	1,218	1,385
Utah.....	2,409	1,940	1,205	1,847	9,055	14,023	2,224		695	933	1,171	1,371
Nevada.....	540	552	99	90	3,257	3,830	34		178	113	989	1,091
Arizona.....	2,064	2,167			7,453	11,027					4,726	
Total Pacific.....	62,197	67,702	10,130	11,259	130,920	158,447	71,189	66,837	34,009	43,832	54,552	58,682
Total United States.....	553,639	590,291	114,570	115,346	1,162,390	1,217,980	1,174,624	1,137,384	660,333	678,228	433,829	576,196

* Includes other real estate owned.

* Includes cash items.

* Includes lawful reserve.

* Includes items due from banks.

PRINCIPAL RESOURCES AND LIABILITIES OF STATE BANKS AND TRUST COMPANIES IN EACH STATE AS OF JUNE 30 AND DECEMBER 29, 1922—Continued.

	Other resources.		Aggregate resources and liabilities.		Capital stock paid in.		Surplus.		Undivided profits.		Due to all banks.	
	June.	Decem-ber.	June.	Decem-ber.	June.	Decem-ber.	June.	Decem-ber.	June.	Decem-ber.	June.	Decem-ber.
Maine.....	17,672	7,339	143,698	129,376	5,165	5,215	3,858	4,058	4,244	3,740	1,127	1,249
Vermont.....	1,008	1,211	66,614	67,648	2,516	2,591	2,371	2,405	1,926	1,731	82	94
Massachusetts.....	11,713	13,083	801,856	844,449	41,668	40,550	39,476	39,753	13,988	10,961	25,248	25,292
Rhode Island.....	1,341	2,405	219,827	226,052	9,610	9,611	13,196	12,053	8,774	3,629	2,451	1,419
Connecticut.....	483	521	198,120	211,887	13,635	14,210	9,240	9,583	8,524	5,791	2,305	1,915
Total New England.....	32,217	24,559	1,430,117	1,479,382	72,594	72,177	68,141	67,852	31,456	25,852	31,213	29,969
New York.....	219,015	228,780	4,960,014	4,879,276	218,058	223,303	* 300,479	* 322,376	.....	.....	257,169	329,813
New Jersey.....	6,839	6,670	746,965	789,573	36,900	40,575	29,477	29,243	14,815	17,668	8,652	10,007
Pennsylvania.....	21,688	20,459	1,893,921	2,057,952	147,049	149,218	203,124	215,828	49,273	47,469	30,121	34,946
Delaware.....	321	1,059	81,040	84,942	8,444	6,605	5,469	6,157	2,365	2,189	975	1,115
Maryland.....	2,132	3,693	311,822	312,381	19,564	19,940	20,117	21,157	5,876	7,097	5,574	5,958
District of Columbia.....	579	539	115,034	119,776	13,937	14,210	6,567	6,682	3,490	4,311	890	840
Total Eastern.....	250,574	261,200	8,108,796	8,243,900	440,952	453,851	565,233	601,443	76,809	78,734	303,321	382,679
Virginia.....	1,776	4,393	185,227	214,376	23,920	25,935	12,957	14,110	5,506	5,094	2,386	9,347
West Virginia.....	745	739	211,935	229,975	17,840	18,184	11,655	11,974	3,936	5,227	4,153	5,181
North Carolina.....	1,975	1,937	243,566	264,623	23,672	22,989	10,304	10,319	4,741	4,861	9,645	13,420
South Carolina.....	1,953	2,287	149,049	147,060	17,300	16,534	7,674	7,414	3,315	3,103	1,375	1,772
Georgia.....	3,489	9,714	252,842	280,522	32,987	31,962	17,083	16,715	7,827	7,302	12,720	19,834
Florida.....	713	653	111,894	127,382	10,250	11,183	3,321	* 4,660	1,474	.....	2,590	3,998
Alabama.....	325	694	111,729	131,008	11,489	12,245	6,234	* 8,675	2,518	.....	2,975	.....
Mississippi.....	3,497	* 3,107	146,927	166,801	12,465	12,517	5,994	6,026	2,353	2,760	3,954	6,424
Louisiana.....	4,226	11,763	312,979	364,863	22,987	23,228	12,209	12,191	5,320	5,583	26,713	35,120
Texas.....	9,922	* 20,397	311,134	338,694	45,075	44,349	13,877	* 20,194	5,346	.....	9,969	.....
Arkansas.....	1,246	1,286	145,698	170,270	16,277	16,306	6,228	6,229	2,766	3,830	6,700	14,517
Kentucky.....	2,033	2,579	228,695	244,432	21,588	21,870	12,767	12,872	2,794	3,316	3,026	2,898
Tennessee.....	10,459	11,558	228,101	259,674	22,779	22,123	* 13,008	* 14,042	.....	.....	.....	.....
Total Southern.....	42,359	71,107	2,637,779	2,939,680	278,529	279,425	133,311	145,421	47,996	39,076	89,156	112,521
Ohio.....	16,387	15,515	1,481,705	1,567,184	97,213	98,982	65,313	66,004	20,837	22,219	42,307	49,500
Indiana.....	49,297	60,249	493,766	529,754	42,241	43,082	15,796	16,390	8,151	5,777	8,937	10,205
Illinois.....	43,608	31,583	2,043,227	2,146,343	142,412	144,057	82,999	83,905	58,156	44,782	81,903	82,698
Michigan.....	23,678	20,951	1,003,007	1,070,437	62,848	64,325	44,842	45,958	13,081	15,305	12,589	15,800
Wisconsin.....	431	1,158	497,835	497,018	34,728	35,309	13,051	13,682	8,999	9,898	8,764	9,387
Minnesota.....	5,474	11,837	452,283	450,134	35,605	35,184	13,787	13,444	3,787	4,584	5,995	6,199
Iowa.....	2,465	1,696	713,359	728,712	55,915	55,550	25,751	25,668	13,633	12,454	.....	.....
Total Middle Western.....	141,340	142,989	6,669,182	6,989,582	470,962	476,499	261,539	265,051	124,644	115,189	160,495	173,789
North Dakota.....	1,138	.....	123,908	132,277	11,307	11,300	* 4,091	4,027	.....	100	290	368
South Dakota.....	5,812	9,557	190,135	196,018	12,980	12,954	4,664	4,283	4,664	9,729	7,777	7,270
Nebraska.....	6,530	7,495	288,521	292,744	25,255	24,755	7,600	7,449	8,026	8,535	7,638	6,961
Kansas.....	2,424	* 2,716	307,185	310,882	28,541	28,051	15,225	15,015	5,349	5,775	9,196	.....
Montana.....	996	489	104,949	107,093	11,595	11,300	3,499	3,221	1,236	1,446	2,331	4,241
Wyoming.....	550	895	26,743	29,343	2,953	2,949	1,168	1,102	1,003	1,339	431	664
Colorado.....	449	764	107,876	114,229	9,532	9,342	4,273	4,208	1,536	1,680	1,329	2,416
New Mexico.....	186	239	22,652	22,720	2,850	2,765	805	845	146	301	208	191
Oklahoma.....	65	91	101,360	94,946	9,800	9,187	2,089	1,966	613	1,086	2,384	2,220
Total Western.....	18,170	22,256	1,278,329	1,300,252	114,813	112,603	43,095	42,116	22,473	29,991	31,584	24,331
Washington.....	2,838	1,980	156,915	158,254	13,447	13,263	4,827	4,702	1,768	1,663	3,980	4,374
Oregon.....	1,730	3,502	116,056	124,063	9,529	9,934	3,542	3,478	2,421	2,604	4,003	4,207
California.....	23,542	25,913	1,657,940	1,838,210	100,065	107,065	43,097	46,726	18,003	31,684	35,835	38,122
Idaho.....	318	1,481	40,906	38,507	4,185	4,060	1,380	1,216	393	396	746	642
Utah.....	816	509	89,720	97,645	7,868	7,992	3,578	3,694	1,265	1,148	2,815	3,685
Nevada.....	122	538	21,642	22,999	1,761	1,761	550	550	284	766	132	148
Arizona.....	.....	.....	54,932	54,171	4,560	4,548	1,940	2,098	907	844	1,542	.....
Total Pacific.....	29,366	32,923	2,138,111	2,333,849	141,415	148,623	58,914	62,464	25,041	39,101	49,053	51,178
Total United States.....	514,026	555,034	22,262,314	23,286,645	1,519,265	1,543,178	1,130,233	1,184,347	328,419	327,943	661,822	774,467

* Includes undivided profits.

† Includes guaranty fund.

PRINCIPAL RESOURCES AND LIABILITIES OF STATE BANKS AND TRUST COMPANIES IN EACH STATE AS OF JUNE 30 AND DECEMBER 29, 1922—Continued.

	Certified and cashiers' checks.		Individual deposits (including dividends unpaid and postal savings).		United States deposits (exclusive of postal savings).		Notes and bills rediscounted.		Bills payable.		Other liabilities.	
	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.	June.	December.
Maine.....	305	396	106,811	109,383	.....	.....	1,022	1,048	3,688	3,810	17,478	477
Vermont.....	146	217	57,809	58,919	.....	.....	10	149	1,255	928	499	614
Massachusetts.....	8,942	.....	641,199	669,798	3,602	.....	9,471	26,337	4,113	7,369	14,151	24,388
Rhode Island.....	1,033	672	185,853	190,470	506	1,060	584	.....	4,75	1,665	745	5,473
Connecticut.....	2,149	1,597	161,170	174,042	.....	.....	463	401	2,335	2,720	1,299	1,598
Total New England.....	12,575	2,882	1,152,842	1,202,612	4,108	1,060	11,550	27,935	11,466	16,492	34,172	32,551
New York.....	.....	.....	* 3,976,435	* 3,727,174	.....	.....	8,534	12,151	12,366	28,020	186,973	236,439
New Jersey.....	4,500	4,549	638,054	661,981	1,092	.....	870	956	6,721	15,970	5,784	8,624
Pennsylvania.....	11,025	10,302	1,377,088	1,528,099	8,173	.....	4,094	547	28,837	32,395	35,137	39,148
Delaware.....	360	.....	64,164	66,705	495	431	.....	.....	665	273	1,193	1,467
Maryland.....	.....	.....	255,530	250,501	.....	.....	620	872	1,829	3,046	1,712	3,810
District of Columbia.....	551	440	87,846	90,143	202	431	55	46	701	1,457	895	1,216
Total Eastern.....	16,536	15,291	6,399,117	6,324,603	9,872	862	14,173	14,572	51,119	81,161	231,664	290,704
Virginia.....	1,132	1,052	129,156	142,157	.....	.....	2,607	4,277	5,272	6,460	2,341	5,944
West Virginia.....	1,142	2,769	162,687	175,377	.....	.....	2,699	1,830	5,295	6,194	2,531	3,239
North Carolina.....	2,705	1,588	170,894	195,904	.....	.....	1,982	2,828	14,884	8,552	4,889	4,152
South Carolina.....	421	779	99,459	104,326	.....	.....	2,255	1,716	11,083	6,680	6,197	4,786
Georgia.....	828	1,615	154,150	171,782	.....	.....	6,788	6,600	15,182	15,509	5,477	9,203
Florida.....	1,050	1,566	90,278	101,599	.....	.....	486	.....	1,276	* 3,365	1,189	1,011
Alabama.....	393	.....	81,074	107,656	.....	.....	1,793	.....	4,456	1,826	497	606
Mississippi.....	313	646	112,202	133,435	.....	.....	1,816	580	5,195	1,868	2,635	2,545
Louisiana.....	1,604	2,864	231,076	268,674	.....	.....	627	1,100	6,813	3,531	5,630	16,372
Texas.....	2,456	.....	206,282	262,478	.....	.....	.....	.....	22,018	* 6,507	6,111	5,166
Arkansas.....	725	1,230	98,852	121,827	.....	.....	3,344	1,218	9,040	3,401	1,766	1,652
Kentucky.....	1,243	830	171,007	185,772	.....	.....	785	1,186	4,245	5,910	9,240	9,778
Tennessee.....	.....	.....	556,126	576,922	.....	.....	.....	.....	* 9,925	* 16,065	12,263	13,319
Total Southern.....	14,012	14,939	1,877,193	2,163,112	.....	.....	25,162	21,335	114,604	85,878	60,816	77,973
Ohio.....	9,746	13,020	1,207,968	1,270,215	2,618	5,370	4,918	6,221	11,771	14,794	19,014	20,859
Indiana.....	2,232	2,020	357,951	377,886	.....	.....	4,690	4,693	6,938	7,598	46,830	62,103
Illinois.....	21,034	34,745	1,581,884	1,666,110	.....	.....	8,060	5,576	22,391	22,205	46,388	69,195
Michigan.....	4,993	5,998	808,406	864,169	1,856	10,223	5,193	5,470	10,903	17,372	38,296	25,817
Wisconsin.....	2,635	3,208	392,574	406,080	290	324	3,999	3,693	12,900	10,063	3,895	5,374
Minnesota.....	4,415	6,201	366,061	360,997	.....	.....	* 21,121	.....	.....	19,294	1,512	4,061
Iowa.....	.....	.....	556,126	576,922	.....	.....	.....	.....	* 51,729	* 49,385	10,205	8,733
Total Middle Western.....	45,055	65,192	5,270,970	5,521,379	4,764	15,917	47,981	25,653	116,632	140,771	166,140	190,142
North Dakota.....	1,047	1,663	85,435	93,063	.....	.....	589	518	25,720	20,706	429	532
South Dakota.....	1,265	1,680	137,329	140,567	.....	.....	3,153	3,693	16,733	14,737	1,892	1,105
Nebraska.....	.....	.....	225,647	231,793	.....	.....	.....	.....	* 12,165	* 11,235	2,190	2,016
Kansas.....	2,164	.....	226,794	241,522	.....	.....	10,154	.....	1,617	* 11,247	8,142	9,272
Montana.....	639	.....	70,363	76,657	.....	.....	* 14,990	.....	.....	10,015	296	213
Wyoming.....	.....	.....	19,909	22,643	.....	.....	.....	.....	* 1,379	* 646	.....	.....
Colorado.....	1,637	1,522	86,373	92,578	.....	.....	462	168	1,810	1,455	924	860
New Mexico.....	184	.....	16,895	16,931	136	.....	530	668	818	875	80	144
Oklahoma.....	1,414	1,514	74,571	74,574	.....	.....	8,622	3,418	1,777	868	90	113
Total Western.....	8,350	6,379	943,316	990,328	136	.....	38,500	8,465	62,019	71,784	14,043	14,255
Washington.....	1,373	1,259	124,075	126,770	.....	.....	2,030	1,754	1,893	1,674	3,522	2,795
Oregon.....	1,198	.....	91,077	98,701	17	53	1,141	461	1,567	1,950	1,561	3,679
California.....	.....	.....	1,424,865	1,580,435	5,452	.....	6,058	5,254	6,435	4,487	18,130	24,437
Idaho.....	320	470	27,439	28,133	26	.....	1,795	1,060	4,420	2,376	202	154
Utah.....	712	.....	63,067	70,155	.....	.....	1,152	954	2,152	1,803	7,111	8,214
Nevada.....	283	379	17,920	18,665	.....	.....	269	.....	204	.....	239	730
Arizona.....	.....	.....	42,269	43,197	.....	.....	1,453	.....	2,054	.....	207	13,484
Total Pacific.....	3,886	2,108	1,790,712	1,966,056	5,495	53	13,898	9,483	18,725	11,290	30,972	43,493
Total United States.....	100,414	106,791	17,434,150	18,168,090	24,375	17,892	151,264	107,443	374,565	407,376	537,807	649,118

* Total deposits.

* Includes rediscounts.

* Includes cashiers' checks.

* Includes bills payable.

* Includes United States deposits.

* Includes bills payable and rediscounts.

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 March 28, 1923, on which date 1,642 State institutions were members of the system:

	Capital.	Surplus.	Total resources.
<i>District No. 2.</i>			
The Watsessing Bank, Bloomfield, N. J.	\$1,000,000	\$1,000,000	\$1,985,810
<i>District No. 3.</i>			
Peoples Trust Co., Philadelphia, Pa.	634,450	100,000	3,399,895
<i>District No. 4.</i>			
Pearl-Market Bank, Cincinnati, Ohio.	400,000	200,000	7,327,501
<i>District No. 5.</i>			
Hardy County Bank, Moorefield, W. Va.	50,000	1,850	146,615
<i>District No. 6.</i>			
Bank of Commerce, Tampa, Fla.	200,000	40,000	1,376,154
<i>District No. 8.</i>			
Citizens Bank, Gillett, Ark.	25,000	2,500	27,500
First State Bank, Palmyra, Ill.	25,000	25,000	191,738
Webster Groves Trust Co., Webster Groves, Mo.	100,000	25,000	1,380,018
<i>District No. 11.</i>			
First State Bank, Sylvester, Tex.	50,000	800	160,213

Changes.

Absorbed by national bank.—The Jefferson State Bank, Menan, Idaho.
Banks closed.—Walton County Bank, Social Circle, Ga.; First State Bank, Malone, Tex.; First Savings Bank, Sutherland, Iowa; Eden State Bank, Eden, Idaho.

Change of name.—Susquehanna Trust & Safe Deposit Co., Williamsport, Pa., to Susquehanna Trust Co.

Change of name and location.—Sacramento-San Joaquin Bank, Sacramento, Calif., to United Bank & Trust Co. of California, San Francisco, Calif.

Consolidations.—The Irving Bank of New York and the Columbia Trust Co. of New York, both member institutions, have consolidated under the name "Irving Bank-Columbia Trust Co." The Commercial Bank of San Luis Obispo, Calif., has consolidated with the Pacific Southwest Trust and Savings Bank, Los Angeles, Calif.

Converted into national banks.—Farmers and Commercial Savings Bank, Clayton, Mo.; The First State Bank of Stigler, Okla.; Federal Trust Co., Boston, Mass.; Trust Company of Orange, Orange, N. J.

Reopened.—Ewart State Bank, Ewart, Mich.

Withdrawals.—First State Bank, Prescott, Ark.; State Bank of Wayne, Wayne, Nebr.; Bank of Independence, Independence, Ky.; Penelope State Bank, Penelope, Tex.

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 February 24 to March 23, 1923, inclusive:

	Number of banks.	Amount of capital.
New charters issued.....	11	\$2,267,500
Restored to solvency.....	0	0
Increase of capital approved.....	31	3,840,000
Aggregate of new charters, banks restored to solvency, and banks increasing capital.....	42	6,107,500
Liquidations.....	17	4,695,000
Reducing capital.....	5	185,000
Total liquidations and reductions of capital.....	22	4,880,000
Consolidations of national banks under act of Nov. 7, 1918.....	0	0
Aggregate increased capital for period.....		6,107,500
Reduction of capital owing to liquidations, etc.....		4,880,000
Net increase.....		1,227,500

Fiduciary Powers Granted to National Banks.

During the month ending March 28, 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.
Caldwell, N. J.	2	Citizens National Bank..	1 to 8.
Lynbrook, N. Y.	2	Peoples National Bank..	1 to 9.
Owego, N. Y.	2	First National Bank.....	1 to 8.
Owego, N. Y.	2	Owego National Bank.....	1 to 8.
Schenectady, N. Y.	2	Union National Bank.....	1 to 8.
Honeybrook, Pa.	3	First National Bank.....	1 to 9.
Souderton, Pa.	3	Union National Bank.....	1 to 9.
Meyersdale, Pa.	4	Citizens National Bank..	1 to 9.
Somerset, Ky.	4	First National Bank.....	1 to 9.
Salisbury, N. C.	5	First National Bank.....	1 to 9.
Parkersburg, W. Va.	5	First National Bank.....	1 to 9.
Amboy, Ill.	7	First National Bank.....	1 to 9.
Rushville, Ind.	7	Peoples National Bank..	1 to 9.
Sioux City, Iowa.	7	Security National Bank..	1 to 9.
Benton Harbor, Mich.	7	American National Bank..	1 to 9.
Evanston, Ill.	7	City National Bank.....	1 to 9.
Unionville, Mo.	8	Marshall National Bank..	1 to 3, 5 to 7.
Dillon, Mont.	9	First National Bank.....	1 to 7 and 9.
Oklahoma City, Okla.	10	Tradesmens National Bank.	1 to 7 and 9.
Mancos, Colo.	10	First National Bank.....	1 to 9.
Albuquerque, N. Mex.	11	Citizens National Bank..	1 to 9.
Colorado, Tex.	11	Colorado National Bank..	1 to 3, 5 to 7.

BUSINESS AND FINANCIAL CONDITIONS ABROAD.

An important factor in the foreign business situation has been the recent upward movement of prices in nearly all the principal countries of the world. This movement was particularly strong in Germany and France, but in both countries the rapid advance of prices early in the year has been checked recently, as the exchange value of the mark and the franc increased. Index numbers received up to April 10 indicate that in many other countries, including the United States, England, Switzerland, Denmark, Norway, Sweden, and Japan, the upward trend has continued into March.

British prices, which had remained steady during the first half of 1922, while American prices advanced, started to rise toward the end of 1922, while the price level in this country remained fairly stable, and have risen more rapidly than American prices in the past two or three months. Thus the Federal Reserve Board's index for England shows an increase of 3 points in February following a 1-point rise in January, while the board's American index rose 1 point in both January and February. These advances are entirely due to higher prices of raw materials and producers' goods in England and in the United States, stimulated by an increased demand resulting from the revival of business. On the other hand, many finished products and consumers' goods, especially foodstuffs, have been either stable or lower in price during the last two or three months. The lag in the rise of British prices compared with American prices corresponds to the later and more gradual recovery of British business. Although business conditions in England are still far from normal, there has recently been growing evidence of somewhat greater industrial activity. The percentage of unemployed workers in insured trades dropped from 12.7 in January to 11.8 in February; the amount of coal mined in that month exceeded that mined in January, despite the shortness of February; pig-iron production also averaged higher per day than during the preceding month; and bank clearings and foreign trade were satisfactory for the season of the year. Both in England and in the United States expanding business activity has been reflected in a growing demand for credit, evidenced by increasing bank loans and a tendency toward higher interest rates.

In Germany the temporary stabilization of the mark at about 20,000 to the dollar, or 0.02 per cent of parity, following its extreme depreciation at the end of January, was reflected in a decline in prices during February, which continued into March. The index number of the Federal Statistical Office declined from 5,967 (1913=1) at the beginning of February to 4,827 on March 24, a decrease of about 20 per cent. This decrease was largely confined to commodities manufactured from imported raw materials, while prices of domestic commodities in many instances increased and exceeded the prices of similar goods in other countries. The decline of prices and the scarcity of coal and iron, due to the isolation of the Ruhr district from the rest of Germany, have brought about a slackening of business activity in practically all trades. The slowing down of industry, together with the fall in prices, has in turn reduced the demand for bank credit, which is reflected in an easier money market and somewhat lower interest rates. Notwithstanding the stabilization of the value of the mark abroad, the volume of notes in circulation and the floating debt of the Government have continued to increase rapidly, the floating debt rising from 3,694 billion marks on February 20 to 6,841 billion marks on March 20.

In France the revival of business, which set in on a moderate scale a year ago, has necessitated large imports, especially of raw materials, and has had a depressing effect on the exchange value of the franc, with a consequent rise in prices. Both imports and exports have been much higher in recent months than a year ago, but imports continued greatly to exceed exports,

THE TREND OF BUSINESS ABROAD.¹

Items.	United Kingdom.	France.	Germany.	United States.	Items.	United Kingdom.	France.	Germany.	United States.
I. CREDIT.²					III. PRODUCTION AND TRADE.				
COMMERCIAL BANK LOANS:					PIG-IRON PRODUCTION (relatives³):				
1921—February.....	1,172	12,955	.....	12,795	1921—February.....	54	67	.....	76
1922—February.....	1,152	12,822	.....	10,851	1922—February.....	35	74	.....	64
May.....	1,061	13,102	.....	10,906	May.....	48	102	.....	90
August.....	1,020	13,051	.....	10,761	August.....	48	103	.....	71
November.....	1,031	13,265	.....	11,219	November.....	58	118	.....	111
December.....	1,031	.....	.....	11,329	December.....	62	118	.....	121
1923—January.....	1,046	.....	.....	11,425	1923—January.....	66	112	.....	126
February.....	1,023	.....	.....	11,639	February.....	64	.....	.....	117
COMMERCIAL BANK DEPOSITS:					COAL PRODUCTION (relatives³):				
1921—February.....	1,754	12,856	.....	10,495	1921—February.....	79	114	83	77
1922—February.....	1,802	12,747	.....	10,245	1922—February.....	89	100	79	103
May.....	1,745	12,962	.....	11,049	May.....	87	101	84	51
August.....	1,688	12,884	.....	10,942	August.....	87	108	71	69
November.....	1,667	13,121	.....	11,094	November.....	98	110	73	114
December.....	1,685	.....	.....	11,255	December.....	94	112	67	117
1923—January.....	1,693	.....	.....	11,537	1923—January.....	96	.....	12	126
February.....	1,644	.....	.....	11,525	February.....	99	.....	.....	106
CENTRAL BANK DISCOUNTS:					UNEMPLOYMENT:⁴				
1921—February.....	95	2,961	56	2,396	1921—February.....	10.0	44,525	206	80
1922—February.....	82	2,726	136	721	1922—February.....	15.7	4,385	145	90
May.....	75	2,319	171	471	May.....	13.5	1,636	107	85
August.....	76	2,194	271	404	August.....	12.0	606	109	89
November.....	68	2,818	919	614	November.....	12.4	235	155	96
December.....	78	2,401	1,607	630	December.....	12.2	414	.....	98
1923—January.....	66	2,662	2,306	597	1923—January.....	12.7	684	.....	99
February.....	79	2,634	4,777	596	February.....	11.8	666	.....	101
CENTRAL BANK NOTE ISSUES:					BANK CLEARINGS (actuals⁵):				
1921—February.....	444	37,808	67	3,052	1921—February.....	2,775	591	70	14,577
1922—February.....	400	36,151	120	2,197	1922—February.....	3,088	489	110	14,042
May.....	402	35,982	152	2,142	May.....	3,307	454	179	16,322
August.....	396	36,385	238	2,153	August.....	2,885	512	375	15,849
November.....	390	36,114	754	2,330	November.....	2,989	783	1,464	17,133
December.....	405	36,359	1,280	2,464	December.....	2,769	630	2,079	19,586
1923—January.....	381	36,780	1,984	2,204	1923—January.....	3,262	726	3,826	19,666
February.....	381	37,055	3,513	2,247	February.....	3,006	792	.....	16,905
CENTRAL BANK DISCOUNT RATE (per cent):					RAILWAY FREIGHT TRAFFIC (actuals⁵):				
1921—February.....	7	6	5	7	1921—February.....	1,363	47,741	2,953	3,043
1922—February.....	44	54	5	44	May.....	1,379	49,055	3,994	3,522
May.....	4	5	5	44	August.....	1,455	50,875	3,864	3,930
August.....	3	5	7	4	November.....	1,568	56,046	3,796	4,105
November.....	3	5	10	4	December.....	.....	55,848	.....	3,635
December.....	3	5	10	4	1923—January.....	.....	54,432	.....	3,813
1923—January.....	3	5	12	4	February.....	.....	.....	.....	3,393
February.....	3	5	12	44	VALUE OF EXPORTS (actuals⁵):				
March.....	3	5	12	44	1921—February.....	68,222	1,970	.....	486,454
II. PRICES AND EXCHANGE.					1922—February.....	58,335	1,853	298	250,620
WHOLESALE PRICE INDEX (relatives³):					May.....	58,045	1,887	416	307,569
1921—February.....	226	364	.....	157	August.....	60,032	1,676	255	301,775
1922—February.....	167	283	4,599	146	November.....	66,491	1,706	255	380,000
May.....	171	302	7,384	158	December.....	58,883	2,779	423	344,324
August.....	168	298	13,978	165	1923—January.....	66,939	1,696	311	335,894
November.....	165	307	94,492	164	February.....	57,510	2,329	.....	310,000
December.....	166	315	166,495	164	VOLUME OF EXPORTS (relatives³):				
1923—January.....	167	324	205,417	165	1921—February.....	54	87	.....	104
February.....	170	354	715,881	166	1922—February.....	67	83	28	83
RETAIL PRICE INDEX (relatives⁴):					May.....	65	84	34	99
1921—February.....	251	382	1,033	158	August.....	70	97	23	97
1922—February.....	188	307	2,209	142	November.....	.....	111	25	112
May.....	181	317	3,462	139	December.....	73	132	29	97
August.....	181	289	7,029	139	1923—January.....	.....	103	21	96
November.....	180	297	40,047	145	February.....	.....	135	.....	83
December.....	180	305	61,156	147	VALUE OF IMPORTS (actuals⁵):				
1923—January.....	178	309	108,400	144	1921—February.....	97,010	1,614	.....	214,530
February.....	177	316	240,800	142	1922—February.....	69,375	1,847	360	215,743
FOREIGN EXCHANGE (per cent of par⁵):					May.....	88,814	1,810	565	252,817
1921—February.....	79.64	37.17	6.884	.....	August.....	82,661	1,960	545	281,376
1922—February.....	89.63	45.24	2.020	.....	November.....	95,600	2,348	536	291,906
May.....	91.36	47.25	1.444	.....	December.....	94,912	2,923	590	293,464
August.....	91.74	41.23	.415	.....	1923—January.....	98,700	2,144	564	319,000
November.....	92.06	35.54	.058	.....	February.....	83,855	2,343	.....	.....
December.....	94.73	37.46	.062	.....	VOLUME OF IMPORTS (relatives³):				
1923—January.....	95.65	34.60	.031	.....	1921—February.....	71	77	.....	130
February.....	96.39	31.84	.016	.....	1922—February.....	80	112	24	183
March.....	95.49	32.77	.020	.....	May.....	92	119	63	178
					August.....	87	122	77	194
					November.....	.....	124	75	204
					December.....	86	132	71	224
					1923—January.....	.....	112	78	.....

¹ A full explanation of this table, including a list of the sources employed, appears in the BULLETIN for February, 1923, pp. 182-185.² Amounts stated in millions of pounds sterling, millions of francs, billions of marks, and millions of dollars.³ Monthly average in 1913 is taken as 100, except for Germany, where July, 1914, is used.⁴ United Kingdom and France—July, 1914=100; Germany—Oct. 15, 1913-June 15, 1914=100; United States—1913 average=100.⁵ 1913=100.⁶ United Kingdom—percentage of unemployed in insured trades; France—number of unemployed in the city of Paris; Germany—number of applicants for every 100 available positions; United States—an index of employment in 12 representative trades, 1919 being taken as 100.⁷ United Kingdom—total net ton miles during the month, expressed in millions; France—average daily number of freight car loadings; Germany and United States—total number of freight car loadings during month, expressed in thousands.⁸ Amounts stated in thousands of pounds sterling, millions of francs, millions of gold marks, and thousands of dollars.⁹ 1913=100. Figures for United Kingdom refer to quarterly period.

causing a decline of franc exchange in January and a corresponding rise in commodity prices. In February, however, the sudden increase in exports, occasioned probably by the extreme decline in the exchange, resulted in virtually balancing the foreign trade. This effectually checked the decline of the exchange, and in the middle of March the franc showed a sharp advance, which brought about declines in the prices of raw materials and in security values. During the period of advancing prices business in France has been very active, and it is too early to determine whether the recent rise of the franc will be reflected in a general decline in prices, and if so whether such a decline would result in a setback to French business.

RECENT PRICE MOVEMENTS IN THE UNITED KINGDOM AND FRANCE.

The general course of wholesale prices in the United Kingdom and in France since 1920 is familiar to readers of the BULLETIN. Changes in the business situation in these countries have also been set forth from time to time in these pages. But the departure of the European countries from the gold standard obscures the relation between British, French, and American price movements and the connection between prices and the business situation. How are paper pound and paper franc prices, gold prices here and abroad, and foreign exchange interrelated? And what is the bearing of these movements upon the business and industrial conditions prevailing in each country? These are the questions upon which the present article will attempt to throw some light.

Before the war price levels in different countries were kept in close correspondence with one another through the movements of gold and commodities between countries. Falling prices in one country tended to attract buying power in the form of gold from abroad, leading to increased exports of commodities, and tending to raise prices by creating shortages of goods or by bringing about credit expansion based upon the newly imported gold. Conversely, if prices were rising in one country, it became increasingly profitable to purchase goods in foreign markets, thus leading to greater exports of gold and imports of commodities, which tended to stop further price advances. So long, therefore, as the gold standard was generally maintained, any deviation of prices in a single country from the prices at which similar goods could be bought elsewhere soon set in motion forces tending to bring prices in all countries to the same level in terms of gold. Just how completely this tendency was worked out it is impossible to say accurately, but it is probable that, allowing

for the effect of such barriers as tariffs and transportation costs, an approximate equality of general price levels was commonly attained.

Now that the currencies of most countries have departed more or less widely from the gold standard, the problem of international price relationships is complicated by the fact that prices in different countries are quoted in a variety of monetary units which are constantly changing in value with reference to gold and consequently among themselves. The enormous gold movements which were taking place until recent months have acted primarily, like other commodity movements, to reduce the adverse trade balances of those countries which exported gold rather than immediately to reduce their price levels. Gold does not function, as formerly, as a regulator of international price movements. Prices throughout the world still tend to adjust themselves to a common level of gold prices, but such adjustments of prices between countries are now effected through the movement of commodities.

Under present conditions, therefore, it is the foreign trade in commodities, influenced by relative prices in different countries, which tends directly and through the medium of rates of foreign exchange to bring prices everywhere to an equivalent basis. The adjustment of international prices to a common gold basis, however, was only approximate even before the war. Now that such adjustments depend upon the exchange of certain commodities between different countries, with all the barriers and delays which hinder the effective operation of the demand for and the supply of goods, and upon an exchange market influenced by innumerable speculative factors, maladjustments of prices and foreign exchange between countries may be great. Under these conditions the extent of the adjustment between the price levels of any two countries depends upon the closeness of their trade relations and the stability of their currencies.

WHOLESALE PRICES IN UNITED KINGDOM.

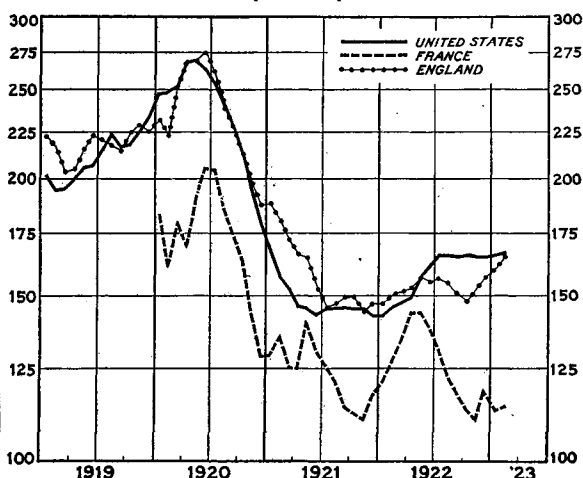
In the case of the United Kingdom we have a country closely linked to the United States by ties of trade and similarity of financial system. How and why, then, has its recent industrial and price history, particularly during the last year, differed from that of this country? How great has been the actual difference in price levels; to what extent is this responsible for the contrast in business conditions; and what of the relative adjustment of prices within the two price systems? In considering these questions it is proposed first to describe the relative course of prices in the two countries, allowing for the effect of a depreciated currency and fluctuations in exchange; and then to seek an explanation of the recent divergencies of business conditions in the two countries, so far as such an explanation can be found in the relationships of prices.

The movement of British wholesale prices since 1919, in terms of the pound sterling, has been roughly parallel with that of prices in the United States, but on a much higher level, except for a lag in the decline in 1919 and the absence of a marked rise during 1922, such as occurred in this country. The Statist, Economist, and Board of Trade index numbers agree with the Federal Reserve Board index in showing a steady and rapid rise of prices from March, 1919, to the spring of 1920 (although they differ as to the date of the peak), an equally rapid fall until the spring of 1921, a more gradual fall during 1921, and a period of comparative stability during 1922, with an uneven tendency to rise up to June and then to fall slightly. The figures for January and February, 1923, in all cases show a definite though slight rise to a point near the mid-year peak. Whether this represents a temporary fluctuation or the beginning of a longer upward movement of prices will be determined by the course of business activity in England, conditions of foreign trade, and the influence of foreign price movements.

COMPARISON OF BRITISH AND AMERICAN PRICE LEVELS.

The way in which price movements in different countries are related to each other in the absence of a common gold standard is pointed out above. The purchasing power of any monetary unit in different countries is equalized, so far as it is equalized, through the movement of commodities, just as its gold value is equalized through exchange movements. Thus, the purchasing power of the

CHART I. INTERNATIONAL PRICE INDEX, GOLD BASIS.¹
[1913=100.]



pound sterling in England is related to its purchasing power in the United States through the buying and selling of goods, just as its purchasing power in terms of gold in the two countries is equalized by the buying and selling of sterling or dollar exchange. In so far as the same factors affect these two, the prices of commodities and the price of gold in terms of pounds, we can properly compare price levels in the two countries by the reduction of the British price index to a gold basis. The index of British gold prices, shown graphically in Chart I, is computed by multiplying the Federal Reserve Board index for Great Britain by the rate of sterling exchange expressed as a percentage of par. There is but one difference between such a comparison and a similar study of relative prices under pre-war conditions. When both countries were on a gold standard, variations between the two price levels were due solely to factors affecting prices, while they are now sometimes ascribable to other factors which influence exchange rates directly.

From the graph of the course of gold prices in Great Britain and the United States since 1919, it may be seen that the British price level has approximated the American during these years. The chief divergencies are the higher peak of the British curve, its more gradual decline, and its lower level after the rise in American prices in 1922. Except for these and other slighter variations, the fluctuations in the exchange rate have just counter-

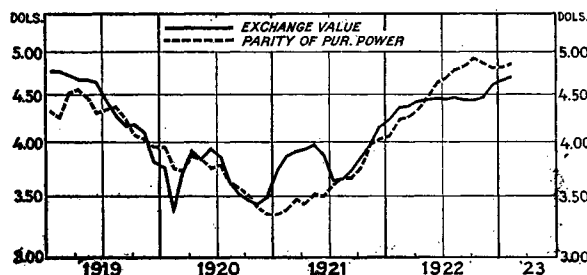
¹ This chart and the four charts following have all been drawn on the same (logarithmic) scale in such a way that equal vertical distances anywhere on any of the five charts represent equal percentual increases or equal percentual decreases. A given slope of line anywhere on any of these charts thus indicates always the same rate of increase, or decrease if the direction of the line is downward.

acted the depreciation of the pound in terms of commodities as compared with the dollar. They have kept the internal and external value of the pound nearly equal.

PRICES AND EXCHANGE.

The question remains whether the variations in the two price levels in terms of gold have been due to actual price movements or to exchange movements. One way of determining this question is through a comparison of the actual course of sterling exchange with the course of a theoretical exchange rate (the purchasing power of the pound) computed from relative prices in the two countries and the par of exchange. Such a comparison is made in Chart II. Until January, 1921, the English price level rose relative to the American level and since then has been falling relative to it; while sterling exchange rose and fell similarly until the positions of the two were actually reversed in October, so that sterling exchange would have had to be above par to equalize the two price levels.

CHART II. THE POUND STERLING.



Up to the beginning of 1921, \$4.86 would have purchased a larger quantity of a general assortment of commodities in the United States than in England, but at the average prices of that month that sum would have purchased more in England. The differences between the actual and theoretical exchange rates are due either to special influences operating upon the exchange rate and not affecting prices, such as political news, or to influences affecting prices in one country and not the other. The relative sharpness and permanence of the movements of exchange and of purchasing power parity often suggest which set of the influences above mentioned is responsible. The rapid rise of exchange in the first half of 1921, for example, from \$3.49 to \$3.98, seems to have been dictated by the heavy exports of gold during these months rather than by commodity price influences, for there was no such sharp movement of

either English or American prices to account for it. Such a discrepancy between the external and internal value of the pound could not continue long, however, and the exchange rate fell as rapidly as it rose until it approximately equaled the purchasing power of the pound in terms of dollars. High exchange evidently reacted upon prices during this period, facilitating the decline of English prices relative to the American level, but exchange moved upward faster than prices downward. It is this exchange movement which is responsible for the check in the fall of English gold prices as shown in Chart I, and obscures the fact that actual English prices were falling relative to American prices at this time. Similarly, the sharp fall of English gold prices in February, 1920, as shown on the chart, was due not to a price but to an exchange movement.

On the other hand, the fall of English prices relative to American prices in the third quarter of 1922 took place in spite of the stability of exchange during this period and is traceable to the diverse influences under which American prices rose and British prices did not. As has been pointed out before in these pages, this divergency is one of the causes of the recent rise in sterling exchange. In spite of this exchange movement, which would naturally tend to encourage buying in the United States and discourage buying in England, English prices are now moving upward while American prices are remaining fairly stable, and the theoretical rate of purchasing power parity is falling to meet the actual exchange rate. From such instances it would seem that the course of sterling exchange has comparatively slight influence upon prices, but rather is itself eventually adjusted to the price situation. Therefore, in order to understand the recent divergencies of the English and American prices, it is necessary to study the business, industrial, and trade factors differently affecting them, just as was the case before the war.

As a matter of fact, the variations between the two price levels on a gold basis in the last four years do not seem to have been generally very much greater than such as occurred during pre-war cyclical movements, so far as previous analyses of these movements show. It must be remembered that our comparison is based upon the assumption that in 1913 the two price levels were nearly identical, an assumption which the facts, so far as known, seem to justify. If this were found to be untrue, however, it would be necessary to allow for the variation at that time in making later comparisons. Moreover, it must be

remembered that equality of price levels does not mean equality of prices of the same commodities or groups of commodities. This last is particularly true when price levels are kept in contact by means of goods rather than gold movements, for a change in one country's level makes itself felt first and most vigorously upon the prices of commodities most commonly traded in and affects very slowly, if at all, commodities produced and marketed locally. So the Federal Reserve Board indexes of cotton prices for England and the United States show a very nearly perfect correlation, the former rising proportionately but earlier than the latter in 1921-22. The prices of steel are much less closely correlated, the American price rising sharply from March, 1922, while the English continued to fall until December. In the case of sheep, as an example of commodities which are exported and imported by neither country, it is difficult to trace any definite relation between price movements in the two countries. It is the influence of certain world trade commodities like cotton which gives similar form to the general price movements in the two countries, while others more subject to local causes account for the differences. To understand the significance of these differences, it is necessary to go behind the general price levels and observe the relation of actual price movements to business conditions.

PRICES AND BUSINESS CONDITIONS.

It is common knowledge that 1922 has been a period of inactive business and excessive unemployment as well as price stability in England, while in the United States increasing business and industrial activity has preceded and accompanied rising prices. The production of basic commodities in Great Britain, the volume of her internal trade as evidenced by banking and transportation figures, the profits of business concerns, and the quantity of her foreign exports and imports have all been far below pre-war standards, and it has been common to link up this situation with the course of English prices. Yet all reliable evidence goes to show that the decline in the English price level was arrested over a year ago and that a period of stability, such as is usually considered to be conducive to healthy business and industrial conditions, has ensued. What is there in the price situation, if anything, to prolong the period of business depression in the United Kingdom? One source of difficulty may lie in maladjustment within the price system.

Stability of price level, of course, does not necessarily mean stability of the prices or relations between the prices of individual commodities or groups of commodities. The recent period of a stable price level in England, as shown by price indexes, has, of course, been a period of continually changing prices. Cotton has risen sharply, for example, as have rice, rubber, lard, sugar, wool, and sheep; coffee, kerosene, gasoline, brick, and cement, among others, have fallen; various other commodities have fluctuated back and forth. In so far as the depression of business is related to prices, it may be the fault of price movements within the price system, as well as of general price movements. Profitable business and active trade require the proper adjustment of prices to each other and to interest rates, wages, and other incomes. Industrial inactivity is generally traceable to some maladjustment of these.

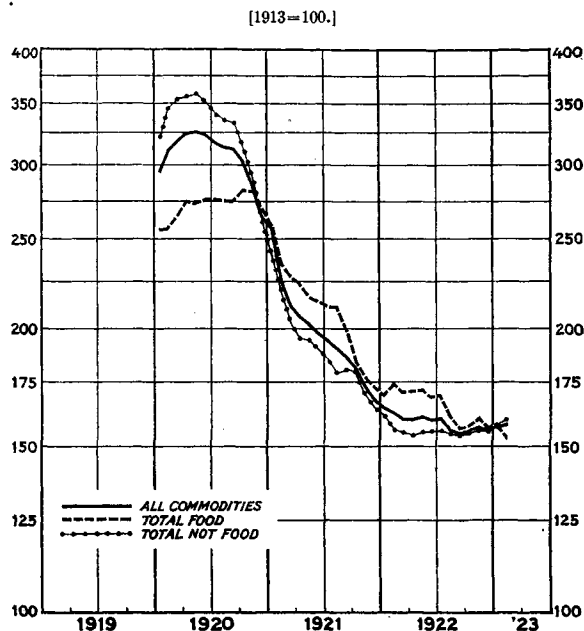
A previous article, in the January issue of the BULLETIN, has examined the relation between prices and certain costs of production, and between wholesale and retail prices. The present discussion will confine itself to the relations between the wholesale prices of certain commodities and groups of commodities. In order to reach definite conclusions from such a study it is necessary to make use of some tests or standards of correct price relationships. The only tests available are a comparison of the present situation in this regard with previous periods and a comparison of price changes with movements in production and trade. The latter is difficult because of the lack of detailed statistical data. As to a standard drawn from pre-war conditions, it is probably inaccurate to assume that normal price relationships now would be the same as those of 1913, for example. Changes in relative costs as well as markets have taken place, which may make necessary an adjustment of industry to a new system of prices. Nevertheless, some significant observations may be made, first, as to the fluctuations which have taken place in the prices of certain groups of commodities relative to each other, and, second, as to the relations between these prices and the volume of production and trade.

Relative prices of groups of commodities.—The Board of Trade group index numbers, plotted in Chart III, show that food prices were much higher than the general level during the high-price period and other commodity prices much below it, but that their

positions were reversed after the end of 1920, so that food prices exceeded the general level. During 1922 food prices fell, however, and other prices rose so that the two groups were practically equal at an index of 157 and 157.3, respectively, in January, 1923. Thus, they had returned to the 1913 relationship. If that constitutes a normal situation under present conditions, considerable progress was made last year toward a proper price adjustment between food and other prices. Within the food group, however, there have been wide fluctuations and the year 1922 ended with the relative prices of meat and fish considerably above those of cereals, which had fallen below the general price level. This is the reverse of their relation at the time of the 1920 price peak, and accounts for the disadvantageous position of grain farmers in Great Britain, as in the United States.

Of the other commodities, not food, textiles were relatively high priced during 1922 as in 1920, and they still remain above the general level with cotton leading. It is the metals and minerals which bring the "other than food" index down, with iron and steel lower than other metals and minerals, whereas it far exceeded them before 1922. Iron and steel prices have risen definitely in January and February, but the close approach of the food and "other than food" groups to each other, which is noticeable since September, results chiefly from the rise of textiles, especially cotton, and the continued fall of cereal prices. So long as foreign demand for textiles is sustained both of these movements are advantageous to a country in whose industry textile manufacture plays such a large part, while she must import the greater part of her cereal food. They further aggravate the departure of these prices from their 1913 relationship, however, and raise the question whether a return to that relationship is to be expected. It is notable, in this connection, that according to the group indexes computed by the Bureau of Labor Statistics for the United States, food prices have been continually below the general price level and have risen less rapidly than the latter, while cloth and clothing prices have risen more rapidly; so that the recent relative movements of these groups of commodities have been similar to their movements in England. The prices of metals and metal products in the United States, unlike the corresponding English prices, rose throughout 1922 even more than the general price level, but in the last two months iron and steel prices in

CHART III. BOARD OF TRADE PRICE INDEX.



England have risen very sharply. In general, this comparison indicates that while in some respects English prices have tended to return to their 1913 relation, in many instances they are still far from it, and tend rather to follow the adjustments which have taken place in the United States.

Prices and production.—In the United States, it will be remembered, production and general business activity began to improve some time before prices generally commenced to rise. What reliable information is available as to business conditions in the United Kingdom shows that there was some progress toward more active business there during 1922 without any consistent rise in prices. By December the number of insured unemployed had dropped to a quarter of their number a year before and bank clearings had increased perceptibly; but general prices were still below what they were in June, 1922. In the United States, steel prices began to rise about six months after pig-iron production began to increase. Iron and steel production in England had been increasing for a year and a half before the recent rise in steel prices. Coal production, interrupted by the strike in the spring and early summer, has risen rapidly since August. Unfortunately, production figures for the most important products of British manufacture are not available. Since business and industrial

conditions in Great Britain are so peculiarly dependent upon foreign trade, however, the relations of the volume of that trade to prices is of the greatest significance, and detailed trade statistics are gathered and published regularly.

Prices and foreign trade.—The relation between the depressed character of British trade and the prices of her goods may be seen by the following comparison of the relative quantities of certain groups of imports and exports and their relative prices as computed by the Board of Trade Journal.

The table below shows the average quantities of goods entering into British foreign trade during 1921 and 1922, relative to the average quantities in 1913 taken as 100.

RELATIVE QUANTITIES OF COMMODITIES IMPORTED AND EXPORTED BY THE UNITED KINGDOM.

[1913=100.]						
Groups.	Imports.		Reexports.		Exports.	
	1921	1922	1921	1922	1921	1922
Food, drink, and tobacco..	93.3	99.5	139.8	106.6	48.9	52.7
Raw materials and articles mainly unmanufactured.	64.9	80.8	74.6	85.2	45.1	94.7
Articles wholly or mainly manufactured.....	59.0	72.4	53.4	59.8	50.7	66.5
Total.....	74.3	85.8	78.6	81.5	49.8	68.9

In 1921 exports were very much less in proportion to their 1913 volume than reexports or imports and although they gained more than the latter last year, they were still only 69 per cent of their pre-war quantity while imports amounted to 86 per cent of the 1913 figure. When we observe the composition of this trade, we see that the high figures for imports and reexports are due chiefly to the relatively large quantities of food and of raw materials which entered into trade. The quantity of manufactured goods was low throughout. Among exports the volume of food, raw materials, and manufactured goods was about equally reduced in 1921 but in 1922 raw materials more than doubled in volume while other commodities increased only moderately. Since manufactured goods make up the bulk of England's exports (78 per cent in 1913), their small quantity has been the chief factor keeping down the volume of her total exports. Her food exports, which have also remained small, are themselves chiefly products of manufacturing processes, while the food imported and reexported, the volume of which has been near or above their pre-war level, consists largely of products

in their natural state, such as grains and animals. Thus it is apparent that the low state of English trade is due chiefly to the low state of demand for manufactured goods, on which her industrial activity so largely depends. From the following analysis it will be seen that this diminished demand is due at least in part to the disparity in price between the articles which Britain sells and the commodities with which her customers must pay.

The table below shows the average prices of goods entering into British foreign trade during 1921 and 1922, relative to their average prices in 1913 taken as 100.

RELATIVE PRICES OF COMMODITIES IMPORTED AND EXPORTED BY THE UNITED KINGDOM.

[1913=100.]

Groups.	Imports.		Reexports.		Exports.	
	1921	1922	1921	1922	1921	1922
Food, drink, and tobacco..	205.9	160.9	133.1	125.6	225.9	203.5
Raw materials and articles mainly unmanufactured.	154.9	136.7	105.3	101.5	212.9	162.8
Articles wholly or mainly manufactured.....	206.5	157.9	168.9	152.0	280.2	207.0
Total.....	190.3	152.2	124.3	116.2	268.8	199.1

This price table shows that the prices of manufactured goods have been generally above the level of the prices of other goods, particularly raw materials, and that this is most notably the case among exports. It would seem that under the character of demand that has been existing the prices of these goods have been much too high. This is quite consistent with the 1922 rise in prices of American exports, still chiefly consisting of unmanufactured goods, partly in response to a growing foreign demand. Countries impoverished by the war, while unable to buy highly finished articles, still demand the essential foods and materials for their own reviving industries. Under these conditions, it is encouraging for British trade that the average 1922 prices of manufactured articles showed considerably more of a decline from the 1921 prices than those of the other articles of trade, and that the prices of her exports fell in comparison with those of her imported goods. The Federal Reserve Board index also shows a discrepancy between the prices of British exported and imported goods during 1921 and 1922, although not to such a marked degree. According to this index, the prices of imported goods rose above those of exports in September and the

prices of the two groups are now near their 1913 relationship. This is a movement in the direction of a more satisfactory adjustment of prices and one that is aiding toward a recovery of British trade, judging by the improvement of its volume in 1922 over 1921. Whether a complete return to pre-war conditions is possible depends upon the growth of demand for British products which the disturbed state of her markets permits, and the reduction in prices which her costs of production will allow. It is evident that the price relationships of 1921 and 1922 have had an unfavorable bearing upon British foreign trade.

The conclusions from this survey of price relations within the English price level during the last few years are rather indefinite. There is a tendency toward an adjustment of prices on a pre-war basis in some respects, while in others the tendency seems to be to approximate the American price relationships, which are quite different from those of 1913. The very definite improvement in industrial and business activity in the United Kingdom indicates that there has been some progress toward an adjustment of prices which will make business again generally profitable.

WHOLESALE PRICES IN FRANCE.

The movement of French prices, which was parallel to that of England and the United States from 1915 down to the middle of 1922, has since that time shown a tendency distinctly divergent from either. French prices have continued to rise sharply after British and American prices, especially those of raw materials, virtually ceased to advance.

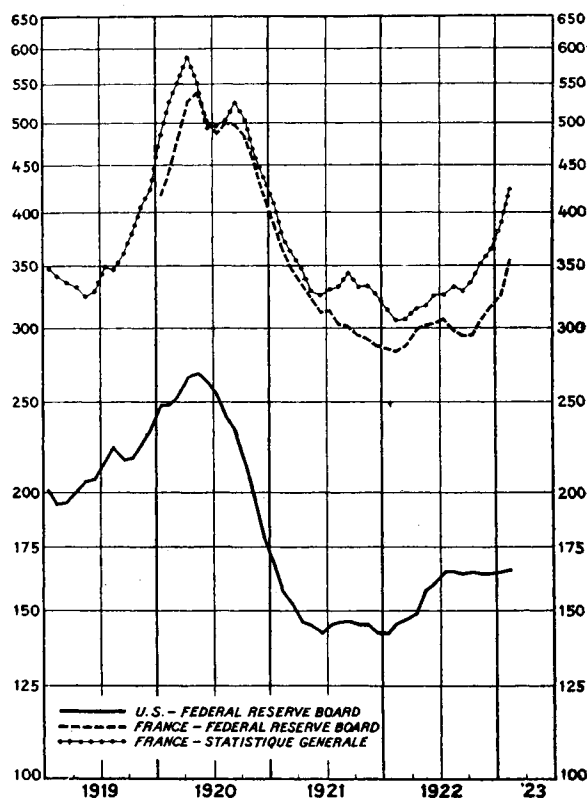
In both France and the United States prices declined for a brief period after the armistice. Then, in April, 1919, prices turned upward in England and the United States, followed in June by those of France. The upward movement in France continued until April, 1920, according to the index of the *Statistique Générale*, or until May, by the Federal Reserve Board index, in which month the peak was also reached in England and the United States. (See Chart IV.) From that date French prices fell rapidly to February, 1922, though the low point for the United States had been touched eight months before (June, 1921), and was not reached in England until eight months later (October, 1922). Prices in the United States started upward in February, 1922, rose steadily until July, since when the price level as a whole has shown almost negligible fluctuations. French prices started upward in March, 1922,

one month after the American movement began, and have since that time risen almost without interruption. In February, 1923, the American index was one point above the figure of July, 1922, the British index was one point below its July figure, while since that date the Federal reserve index for France shows an advance of 44 points and that of the *Statistique Générale* 97 points. For the first time since 1915 French prices show a sustained trend radically different from those of the United States.

The study of prices in the United States during recent years is a study of the relation of the value of commodities to gold. In England it is the study of the relation of commodities to a currency which, having left the gold standard temporarily, has nearly returned to it. In France it is the study of the relation of prices to a currency which departed from the gold standard further than did that of England, and has as yet been unable to make headway in returning to it. The index number of commodity prices in France measures not only the

CHART IV. PRICES IN FRANCE AND THE UNITED STATES.

[1913=100.]



depreciation of gold in terms of commodities since 1914 but also the depreciation of the franc in terms of gold.

Prices derive their sole significance from their relation to other prices, either within or without the country considered. The price of raw materials in France has been and still is above the price of other groups, while the general price index, stated on a gold basis, is far below the level of world prices. In these two facts are to be found the reasons why the index in France has continued to rise rapidly in recent months while the price levels of England and the United States have shown only minor changes.

RELATIVE POSITIONS OF PRICE GROUPS IN FRANCE.

The index of the Federal Reserve Board offers a means of studying the relation of internal prices to each other, as three of its groups show the prices of commodities at stages of the process from production to distribution. The three groups are those of "raw materials," "producers' goods," and "consumers' goods." Since January, 1920, the "raw materials" index has been above the general average, that of "producers' goods" has always been below the general index, while the "consumers' goods" have several times crossed the general index, and have usually tended to remain close to it. A study of the index numbers for recent months shows, as might be expected, that the raw materials index forecasts by several months the movements of the group of "producers' goods," while the latter is from four to eight months ahead of the "consumers' goods." In March, 1922, the "raw materials" group, already considerably above the general index, began a long rise which still continues. In June this movement had been communicated to the "producers' goods," but not until November was its influence shown in "consumers' goods." At present all three groups are moving upward together. It is the price of "raw materials" which eventually determines the price of "producers' goods" and the price of "consumers' goods," and the course of all three together determines the general movement of prices.

French prices in general have risen, therefore, because of the rise of raw materials in France, and raw materials prices in France first rose because their world or gold price rose and later because since April, 1922, French exchange has undergone an almost continuous decline in

terms of gold. To put it more concretely, the world price of raw materials rose in terms of dollars, and when this advance was arrested in August, 1922, the rise continued in terms of francs, because French exchange continued to decline.

THE RELATION OF FRENCH PRICES TO WORLD PRICES.

Although France, like the United States, and unlike Germany and England, is a self-contained country, its price movements are controlled by world price movements. As the foreign trade of France is only a minor fraction of its total business, it is necessary to explain in some detail the manner in which world price movements are communicated to French price movements.

The prices of the great basic raw materials are determined in world markets. The price of wheat is fixed in the primary markets of Chicago and Liverpool; of wool, in Boston and Bradford; of copper, in New York; of cotton, New York and Liverpool; of sugar, New York. France must purchase all her cotton abroad, but only a part and often only a small part of her requirements of most other raw materials. The world market sets the price of those produced at home as well as those which may be or must be purchased abroad. For instance, wheat is produced all over the world and is universally in demand; France raises nearly enough for her needs, though there is usually a marginal requirement to be met abroad. If the price of native French wheat should rise above the level of comparable grades in the world market, the latter would be drawn into the country; if French wheat should drop below the world price, buying from abroad would immediately bid it up unless the supply of the cheaper French wheat should be great enough to depress the world price to its own level. This equalizing process would obtain even if France raised exactly the amount of wheat, or wool or sugar required by her own needs, provided no embargo was laid on the movement of those commodities. This assimilation of the French price of raw materials is no less true of wheat, of which France produces most of her requirements, than it is of cotton, entirely an imported commodity. The situation is quite comparable with that of the United States. Only a small percentage of the American wheat crop is actually exported, but the price of that fraction determines the value of the

entire crop. There are a few exceptions to this rule in France, as in the case of wine, which France produces in great quantities and for which there is no world market, properly speaking. The free movement of a heavy commodity like coal is affected by transportation costs, and in other cases tariff restrictions may be an important factor. But in general the basic raw materials tend toward a common gold price all over the world. A movement in that gold price is almost instantly communicated to the markets of the world in terms of their various exchanges.

A comparison of the indexes of raw materials in France and the United States shows their relation distinctly. The price of raw materials began to rise in the United States with September, 1921. The same month the raw material index of France registered an advance. But while prices of raw materials in the United States continued upward, in France they inclined downward until February, 1923, after which they too turned upward, parallel with the American movement. But in the United States raw materials reached their peak in August, 1922, since when they show little change; while in France they have continued to rise sharply. These movements, apparently contradictory, are easily explained. From August, 1921, to August, 1922, raw materials were advancing in their primary markets, but at almost the same time that raw materials were rising the franc began to rise in New York, and rose even more rapidly, in terms of dollars, than did the price of raw materials. Put another way, the dollar was declining in terms of raw materials, but it was declining still more sharply in terms of francs. For several months the rise in the franc, occasioned by trade conditions and stimulated by bullish speculation and by the loans floated in New York and London, was able to counteract the advance in the rising gold prices of raw materials; and the price of raw materials in France actually declined. But by May, 1922, the factors which had moved French exchange upward had exhausted their power, and French exchange began the long decline, which, except for the brief rally in December, 1922, continued through February, 1923. Simultaneously, the price of raw materials in France began to advance.

FRENCH PRICES AND EXCHANGE.

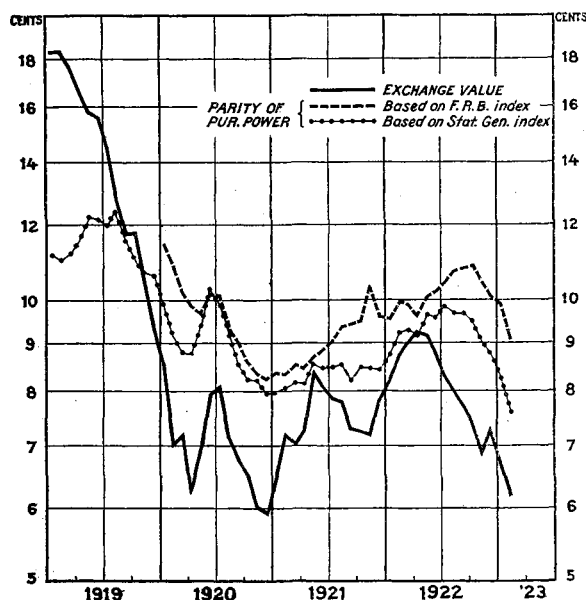
It is through raw materials, whether actually produced at home or abroad, that the exchange

exerts its heaviest influence on French prices. But the exchange is merely the statement of the external value of the franc, while the price index is the expression of its internal value, reflecting, as was stated above, the depreciation of French currency in terms of gold and also the depreciation of gold in terms of commodities. The primary cause of the depreciation of the currency in terms of gold is, as everyone knows, the enormous increase of the note circulation. But for nearly two years the note circulation has remained virtually on a level, and during most of that period the level of internal prices showed only moderate fluctuations. Meanwhile, the external value of the franc has gone through a series of very wide movements. This raises the question of the relation of the internal value of the franc to its external value. In the first place, it may be said that the internal value of the franc limits the fluctuations of its external value. As long as the franc retains, say, one-third of its pre-war purchasing power at home, franc exchange could hardly drop to and remain any length of time at 1 cent; nor could it rise to and remain even for a brief period at 15 cents, for example. The quantity of French purchasing power having remained about constant during the last two years, French exchange has during most of the period remained in a zone between 6 cents and 9 cents, but at no time since 1920 has the exchange gone high enough to touch its purchasing-power parity. (See Chart V.) This fact forms an interesting contrast to the case of England, where the exchange has several times crossed its purchasing-power parity, and until recent months has usually remained above it. The situation in France is, rather, comparable to the case of Germany, where the disparity between the internal and external value of the mark is a familiar phenomenon.

While the internal value of a currency in France limits roughly the zone of French exchange and the purchasing power parity indicates the approximate location of this zone, the actual rate of exchange will depend entirely upon the supply of and demand for French bills of exchange. This supply and demand emanates from five possible quarters—merchants or others engaged in actually buying or selling commodities or services, speculators, financial interests desirous of artificially enhancing or depressing the exchange, tourists, and security holders. Owing to the large trade balance against France, the supply of commercial bills has greatly exceeded the demand,

though at certain seasons pressure on the exchange from this side is heavier than at others. Speculators buy and sell hoping to guess the course of a market whose real trend is determined by fundamental factors; such operators do not cause movements, but they often exaggerate them. The most conspicuous example of an artificial bolstering of the exchange occurred during 1918, when it was "pegged" somewhat below par. Another instance of interference with the normal trend can probably be found last spring at the time of the large loans floated in England and the United States. Although the main purpose of these loans was quite different, they actually imparted to the exchange a brief artificial

CHART V. THE FRENCH FRANC.



strength. Tourists are an important source of demand for francs and are one of the most important factors influencing the exchange, especially during the spring and summer. The necessity of meeting the interest and dividend payments of security holders is another factor, though the influence of buying or selling for this cause is unascertained. But the outstanding fact is that the French exchange since 1920 has always been below its purchasing-power parity, and this indicates that up to the present the greater insistence has come from those who supplied French bills of exchange than from those who demanded them. Of course, in sum, supply and demand

one way or another must be equalized and for every seller of exchange there must be a buyer; exactly as for every stock sold in the security market there is a buyer. The trend is determined by the relative insistence of buyer and seller.

If the rate of exchange were stable at its purchasing-power parity, whether that were 3 cents or 16 cents, the American seller and the French buyer of commodities would be on an equality. But with the actual exchange below its purchasing-power parity, the French buyer in the world market, or specifically, in the American market, is at a great disadvantage.

The course of the price of wheat and cotton illustrates concretely the effect of this situation. Wheat is an example of a commodity whose price in the primary market has changed only slightly in the past year. It is also a commodity, as was mentioned earlier in this article, whose price is set in a world market, though most of the wheat consumed in France is home grown. Cotton, which advanced sharply in price during the year, is an example of a commodity not produced in France. Its price, in France, will therefore illustrate the effect both of a rise of the gold price and of the decline of the franc. The price of wheat will, on the other hand, illustrate the effects of a nearly stable gold price on a home-grown commodity, in a period of declining exchange.

As February, 1922, was the last month in which the temporary rise of French exchange was powerful enough to counteract the rise in the dollar price of raw materials, it will serve as a base. In that month the price of upland middling cotton in New Orleans was \$0.1647 a pound; in February, 1923, the price was \$0.2912. Taking the former figure as 100, the price of cotton in the United States, the primary market, rose to 176.8. In the same period at Havre it rose from 246 francs per 50 kilos to 572 francs; that is, from 100 to 232.5. Of this advance of 132.5 points, 76.8 may be said to represent the decline of the dollar in terms of cotton and 55.7 points to represent the effect of the decline of the franc in terms of the dollar.

The situation of wheat illustrates another phase. The price of wheat (No. 2 red winter, cash, Chicago market) in February, 1922, was, \$1.3816 per bushel; in the same month in 1923 it was \$1.36 per bushel. This represents, in the American wheat, a decline from 100 to 98.4, a conspicuous drop in view of the general advance in commodities. In the same period French wheat (native, red, Chartres market, a

grade comparable though not identical) rose from 67.06 francs per 100 kilos to 90.50 francs; that is, from 100 to 134.95 in terms of francs, but exchanged into dollars at the average rate of the respective months it indicates a real decline from \$5.85 per 100 kilos to \$5.56, a course similar to the trend of the grade of American wheat compared.

While cotton was advancing from 100 to 232.5 and wheat from 100 to 134.9 the general average (on a February, 1922, base) rose only from 100 to 124.7. These figures illustrate how a decline of the franc can force above the general index not merely the prices of imported raw materials but of home-produced raw materials, even when the world price has actually declined. They further explain why, almost solely as a result of the exchange, the price of raw materials in France has continued to advance for half a year after the raw materials index of the United States stopped rising.

EFFECT OF THE CURRENT PRICE MOVEMENT.

The initiation of the present price movements in France was caused by the rise in the world price of commodities, especially raw materials. Its continuation and exaggeration in France is due to the influence of an exchange which has declined so far below its purchasing power parity as to make the gold index of France for February, 1923, almost 30 per cent lower than the American price level.¹ (See Chart I.) It might be expected that this would occasion a flood of French exports, and, in fact, there has been a notable increase in recent months. Nevertheless, French foreign trade labors under two handicaps, the high cost of raw materials bought with depreciated currency, and especially the difficulty of determining costs and fixing prices in a currency subject to wide and rapid fluctuations in both directions.

French exchange has declined steadily for nearly 10 months, with only one brief recovery. In the past these declines have always been followed by more or less sustained advances. A half-cent rise in the franc could change the result of the most carefully planned transaction between France and America from profit to loss for one party or the other. Further, the building up and organizing of a general foreign trade require considerable time. Connections must be established, credit facilities arranged, and the exact nature of the market ascertained.

All of these advantages most French producers lack. Before the war France was not a great exporting country, and even at present it is a practical question for the average French producer whether it is worth while to go to the expense of holding up an export organization which a movement of the exchange might render unprofitable almost overnight. But the remarkable increase in French exports in December and February shows how quickly French trade responded to the low exchange rates prevailing in November and January.

While the French export trade has been able to profit considerably from this situation, domestic business has enjoyed those uncertain benefits that come in the early stages of a rapid upward price movement. Industrial stocks on the Bourse have gone up, companies fortunate enough to have accumulated large quantities of raw materials at lower levels have seen their inventories increase in value, and all producing concerns have been actively employed. Curiously enough, the French farmer has found his condition improved by the very cause that has marked the disadvantage of the American farmer, namely, the fact that the price of wheat is set in a world market. For while the price of his wheat in dollars has not advanced, the depreciation of the exchange has lifted the franc-value of his crop above the general price level.

The full effect of this rise in raw materials has not yet reached consumers' goods. Except in a few instances, such as sugar and to some extent textiles, it is doubtful if it has made itself felt in retail markets. It remains to be seen whether or not the French public will be able to purchase freely at such a retail price level as is indicated by present prices of raw materials. If it can not, in one way or another prices will settle to a level at which the public can buy.

The index of raw materials in America reached its peak in August, 1922; that is, the gold price of the commodities composing it has not since risen. But raw materials have continued to advance in France, because the franc has been continuously declining in gold value. The recent rise in French raw material prices is almost solely a reflection of the movement of the exchange. The French index of raw materials will stop rising when the cause of the rise ceases to operate; that is, when the decline of the exchange is checked. As long as the world prices of raw materials remain fairly stable, the French raw material

¹ This calculation assumes that the price levels in France and the United States were identical in 1913, which is open to question.

index will move almost exactly with the dollar in French exchange. If the dollar begins to decline—that is, if French exchange begins to rise—raw materials whose prices are set in world markets must decline in terms of francs. In fact, a sudden advance in the franc, if that were justified by the condition of the exchange market, would cause so serious a drop in the franc prices of raw materials that such a movement would hardly be welcome to those businesses which are carrying large inventories of raw materials or to the banking interests that finance them.

CONCLUSION.

From this analysis of the current price movement in France, two distinct conclusions stand out. The rise was set in motion by the advance in world prices; it has been prolonged by the continuous decline of French exchange. As a result of this decline of the exchange, and in spite of the recent enormous rise in French prices, the gold index shows that the purchasing power of the dollar in France is nearly 30 per cent greater than in the United States. Whether the relation will ultimately be corrected by a movement of the exchange or by a movement of prices, or by a combination of the two, it is impossible to predict.

The price level can not be stabilized until the exchange is stabilized and vice versa. Their relation is reciprocal, since both are statements of what is fundamentally the same thing, the value of the franc. It is sometimes stated that the first essential in the stabilization of the franc is to determine its relation to gold. This would be desirable, but it is difficult to see how that is possible until the relationship of the franc to commodities is more positively defined. The establishment of a fairly well stabilized goods value for the franc would, ipso facto, give the franc an ascertainable gold value. The free movement of gold would of course stabilize the exchange, for gold is the one commodity that is always acceptable in every country. But it would probably be possible to achieve a workable stabilization of both the internal and external value of the franc, that is, the price level and the exchange rate, long before France was able to return to the free movement of gold.

There are more immediate obstacles to stabilization of price levels and exchange rates than the gold problem. The internal value of the franc can not come to a level until it appears that the French Government can finance its

expenditures without further inflation of the circulating medium. The external value of the franc can not become stabilized until the supply of and demand for French bills of exchange becomes equalized not only in amount but in urgency. Apparently they already are nearly equal in amount, since, for nearly a year France has met her trade balance and other charges without resort to foreign loans and by the shipment of very little gold. To be sure, even after these bills were equal in amount, there would still be a seasonal difference in pressure. In the fall France is a heavy purchaser of cotton and other crops; at the holidays and spring the luxury goods which France exports are in demand and the requirements of tourists strengthen the exchange. But seasonal fluctuations would not necessarily involve the ruinous movements to which the exchange is now subjected; being comparatively small, they could be nearly smoothed out by financial intervention of the sort suggested by the governor of the Bank of France in his annual report.

Given the first essential, namely, the internal stabilization of the franc, the stabilization of the exchange becomes readily practicable, though its perfection would require a little time. The whole future of French prices and exchange, therefore, is contingent upon whether or not the French Government can avoid further increases of its circulating medium.

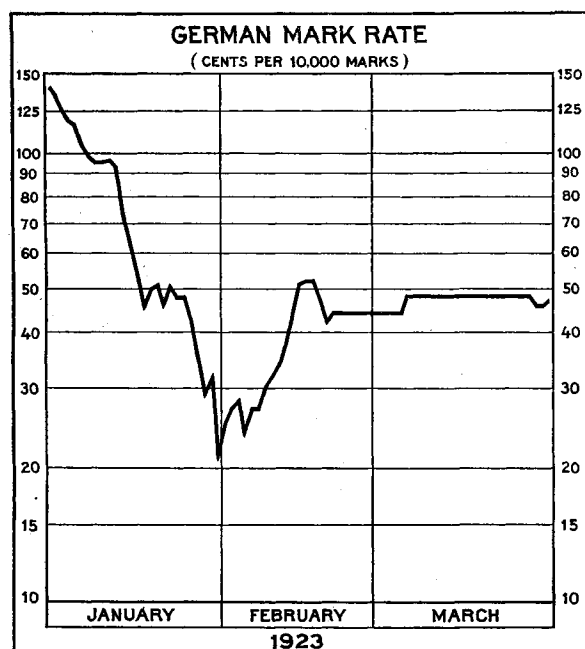
GERMANY.

TEMPORARY STABILIZATION OF THE MARK.

In a discussion of stabilization of the German mark it can not be emphasized too much that final stabilization depends mainly upon the settlement of the reparation question, upon the balancing of the budget, and upon foreign trade, and that so long as these questions remain unsolved it is impossible to put German currency on a sound basis.¹ It is, therefore, the more interesting to study the temporary stabilization of the mark at a time when the most important industrial district of Germany is economically severed from the rest of the Reich. While it is too early to determine the effects of the present currency and exchange situation upon the business activity of the country, its effects upon credit and especially upon prices are already manifest and will be analyzed in this article.

¹ This matter was discussed in detail in the FEDERAL RESERVE BULLETIN for January, 1923, p. 61.

The decline of the mark from \$1.39 per ten thousand on January 2, 1923, to 21 cents per ten thousand on January 31 was followed by a rapid recovery during the first two weeks in February. (See accompanying chart.) On February 14 the mark was quoted at 44 cents per ten thousand, an improvement of about 40 per cent in two weeks, and with the exception of slight fluctuations during the third week in February, it remained stable at this point until March 6. On this date the mark showed a further improvement, being quoted at 48 cents per ten thousand, a rate at which it was maintained until March 29. On March 31 the mark stood at 47 cents per ten thousand. The improvement of the mark and its stabilization can be



better understood if the causes of its precipitous fall are first made clear. The depreciation of the mark during January was not warranted, either by the volume of mark transactions, which was not large, or by any other economic factor. It was the result of a comparatively small, but very insistent, demand for foreign bills in Berlin, and at times of an absolute lack of supply. In short, it was due to a panic among the sellers and a strike among the buyers of German exchange. Under such conditions almost any rate became possible, as many holders of marks threw them on the market at any price. It was when mark exchange reached its lowest point and a

large quantity of marks was accumulated by representatives of German banks in the most important foreign-exchange centers that the Reichsbank started an active foreign-exchange policy.

The exact means used by the Reichsbank in supporting the mark are not known. Sales of gold, however, did not take place, for in the weekly statements issued by the Reichsbank its gold holdings show no decrease. Apparently, it sold foreign bills mainly in New York, though similar transactions took place also in Berlin, Amsterdam, and London. The larger supply of foreign bills was first felt in Berlin, where the market was almost unable to absorb all the bills offered, and an improvement of mark exchange set in almost immediately. Furthermore, the Reichsbank did everything in its power to curb the demand for foreign exchange for speculative purposes. It declined to make advances against foreign bills of exchange and to discount certain finance bills. This, combined with the high cost of money (300 per cent per annum was charged for loans intended for foreign exchange speculation), made speculation in foreign exchange unprofitable and resulted in a slackened demand for foreign currencies. The foreign-exchange policy of the Reichsbank affected the value of the mark indirectly as well as directly. Purchasers of foreign currencies, when the mark was at a lower level, sold them in order to avoid further losses. Thus the supply of foreign bills increased, while the demand for them decreased, for holders of marks were unwilling to sell so long as the mark was on the upward swing. The increased demand for marks from French sources may also be mentioned as a cause of the recovery of mark exchange.

FEASIBILITY OF TEMPORARY STABILIZATION.

Temporary stabilization of the mark can be accomplished by the use of a comparatively small amount of gold, and the Reichsbank has at its disposal more than enough gold for this purpose. On January 1 notes in circulation amounted to about 1,300,000,000 paper marks, corresponding to approximately 670,000,000 gold marks. At that time the gold reserves of the Reichsbank exceeded the total value of all its outstanding notes by about 334,000,000 gold marks. Under these conditions it would not have been difficult for the Reichsbank to buy enough mark bills to prevent the catastrophic decline of the mark in January. Therefore, the statement that

foreign holders of mark exchange determine the value of the mark and that the Reichsbank would be powerless if the latter should throw their holdings on the market does not seem to be correct. The amount of marks held abroad, if compared with the total amount of notes in circulation at present, is comparatively small and their value in gold almost negligible. The total amount of German bank notes held abroad and the amount of mark deposits of foreigners with German banks at the end of 1921 were estimated by the Reichsbank at between 25 to 30 billion and 35 billion marks, respectively. No estimates are available as to the amount by which these two items increased during the past year. In view, however, of the general attitude of foreigners toward the mark and German securities during the past year, it is not likely that the total amount of notes held abroad and of mark deposits of foreigners with German banks would exceed 100 billion paper marks at the end of 1922. Thus, figured at the January 1, 1923, rate, all marks owned by foreigners amounted to not more than \$14,000,000. Fifty million gold marks would therefore be sufficient to absorb practically all the notes offered for sale abroad and the influence of foreigners on the quotation of the mark could thus be almost entirely eliminated.

Furthermore, the violent decline of mark exchange during January has made the task of stabilizing the mark easier. On January 31, 1923, Reichsbank notes in circulation amounted to about 1,900,000,000,000 paper marks, representing a value of about 140,000,000 gold marks. The total amount of marks held abroad, estimated above at 100,000,000,000 paper marks, thus represents a value of about \$2,100,000 or about 8,500,000 gold marks, which, when compared with the gold reserve of the Reichsbank, is insignificant.

Although the amount of marks held abroad or for foreign account in Germany is very small in terms of gold, and could readily be bought up by the Reichsbank, nevertheless under present conditions the Reichsbank can not for long continue its active foreign exchange policy. For in the long run the exchange value of a currency on a paper basis is determined by the demand for and supply of foreign bills. It is true that the Reichsbank is able to absorb all the marks offered for sale abroad, since this amount increases only comparatively slowly, owing to the fact that practically all imports into Germany are billed in foreign currencies, but this very fact tends to increase the demand

for foreign exchange in Berlin. How great the demand is, even if one disregards reparation payments, may be seen from the fact that during 1922 the balance of trade was more than 2,000,000,000 gold marks against Germany. These figures are only approximate, but they make it clear that in Berlin the demand for foreign bills greatly exceeds the supply. This situation is further aggravated by the French occupation of the Ruhr region, which forces Germany to import foreign coal in increasing quantities. Monthly average imports of coal from England from July to December, 1922, were estimated at about 1,300,000 tons. Due to the extreme decline of the mark during January, the importation of British coal during that month decreased to about 600,000 tons, but it increased rapidly during February, and at present surpasses the average monthly imports for the second half of 1922. The larger imports of coal from Great Britain into Germany have also increased the total value of the trade between the two countries. During the calendar year 1922 Great Britain exported to Germany goods representing a value of £32,000,000, as compared with £18,000,000 in the preceding year. What steps the German Government or the Reichsbank will take to meet this situation is unknown. It is worth emphasizing, however, that the large unfavorable balance of trade is, aside from the reparation question, the most difficult problem in the final solution of the German currency question.

RELATION OF STABILIZATION TO CREDIT AND PRICES.

Effects upon credit.—Despite the temporary stabilization of the value of the mark abroad, domestic currency inflation in February and March proceeded more rapidly than in previous months. On January 6, 1923, the total amount of Reichsbank notes in circulation was 1,336,501,000,000 marks, while on March 7 it had risen to 3,871,256,000,000, an increase of 2,534,755,000,000 marks for the two months. This rise is due mainly to the rapid increase of discounted private notes held by the Reichsbank, which during the same period increased by 1,598,859,000,000 marks. The steady depreciation of the currency and the rising price level cause bankers and business men to borrow increasing amounts from the Reichsbank, for at the time of repayment the value of the liquidated borrowings amounts only to a fraction of the funds originally bor-

rowed. While private banks have been able to protect themselves against this depreciation by a progressive commission charge or even in some instances by participating in the profits of the borrower, the Reichsbank was unable to adopt such measures. To curb this great demand for credit the Reichsbank raised its discount rate on January 18, 1923, from 10 to 12 per cent. This increase of the discount rate, however, can have no effect on the demand for credit so long as the open market rate ranges between 40 and 300 per cent per annum. Thus, the Reichsbank was forced to adopt other means to restrict borrowing. One of them was a careful scrutiny of all bills presented for discount and the adoption of the rule that all bills must bear three signatures and have their origin in useful and essential business transactions. Furthermore, the Reichsbank established more or less definite lines of credit for all persons and firms seeking accommodation. These measures tended to decrease the amount of bills presented for rediscount, but they were entirely offset by the free discounting of bills of Westphalian industrialists.

The rise of the discount rate of the Reichsbank from 10 to 12 per cent shows how abnormal are credit conditions in Germany. This situation appears even more striking when one compares the bank rate at Berlin with rates prevailing in other countries with highly inflated currencies. These rates, with the dates when they were fixed, are as follows: Germany, January 18, 1923, 12 per cent; Austria, September 4, 1922, 9 per cent; Poland, September, 1921, 7 per cent; Rumania, September 4, 1920, 6 per cent.

When one considers that at the present time the discount rate in England and Switzerland is 3 per cent and in Holland 4 per cent, the contrast with Germany becomes even more striking. The above figures also indicate the extent to which the international money market is disturbed, so that practically no relationship exists between the credit situation and the discount rate prevailing in the different countries in Europe.

Effects of stabilization upon prices.—The breakdown and recovery of mark exchange during the first two months of the year were immediately reflected in the movement of prices. The wholesale index number of the Frankfurter Zeitung advanced from 205,417 on January 1 to 715,881 on February 1, an increase of 348 per cent, while the dollar as expressed in marks increased during the same time by 458

per cent. As usual, prices of commodities based upon imports moved automatically with the foreign exchanges, while those of domestic raw materials and industrial products lagged considerably behind. The relation between prices of domestic and foreign products in a rising market may be seen from the following figures, taken from the Frankfurter Zeitung. The index of 10 typical domestic products (rye, potatoes, eggs, hay, hides, alcohol, bricks, cement, potash, and industrial alcohol) increased during January from 150,657 to 466,558 or about 210 per cent. The index of 10 typical imported commodities (rice, cocoa, coffee, cotton, jute, rubber, copper, tin, maize, and petroleum) increased during the same period from 222,115 to 986,278, or 334 per cent. In many instances the prices of imported goods exceeded the prices in other countries, as may be seen from the following table:

PRICES OF SELECTED COMMODITIES IN THE UNITED STATES AND GERMANY.

[Expressed in marks.]

Commodity and market.	June 15, 1914.	Jan. 2, 1923.	Feb. 6, 1923.	Feb. 13, 1923.	Feb. 16, 1923.
Wheat, per quintal:					
New York.....	14.40	35,644	176,363	132,313	94,043
Berlin.....	14.39	36,033	180,080	139,510	92,590
Corn, per quintal:					
Chicago.....	11.70	20,266	108,532	78,540	56,826
Hamburg.....	14.50	31,200	138,000	124,000	70,000
Lard, per quintal:					
Chicago.....	94.90	176,082	916,708	652,796	473,863
Berlin.....	119.00	194,010	632,500	475,000	345,000
Flour, per quintal:					
New York.....	17.90	44,719	230,222	163,578	119,538
Berlin.....	17.90	45,321	235,650	172,920	117,980
Sugar, per quintal:					
New York.....	31.90	89,627	451,616	414,888	275,897
Berlin.....	28.77	89,000	462,200	340,000	236,000
Cotton, per kilogram:					
New York.....	1.24	4,186	23,344	16,239	12,078
Bremen.....	1.28	4,796	26,003	19,110	13,035

The prices given in the above table are only approximate, mainly owing to the different methods of grading and quoting in the two markets, but they indicate clearly the close relation between prices of imported goods and the exchange rate. In practically all cases prices of such commodities as expressed in marks were higher in Berlin than in New York. The price difference, however, if expressed in dollars, is negligible and reflects merely the additional cost of transportation, insurance, and other minor items. The higher pre-war prices in Berlin as compared with New York were due to the protective tariff of the former German Government.

The improvement of the mark in February resulted in a decrease of prices for the first

time in 20 months. The decline of the general price level, however, was more erratic and much slower than the upward movement of the mark. The index of all commodities of the Frankfurter Zeitung showed a decrease of 5.4 per cent, while the value of the mark increased during the same period about 40 per cent. Imported commodities decreased more rapidly and thus reflected very well the method of price calculation at present prevailing in Germany. Prices, at least of imported goods, are calculated almost entirely in gold or on a dollar basis, and the amount of marks they command depends upon the relation of the mark to the dollar or the "gold mark." Thus, for instance, textiles and leather, which depend upon imports of raw materials, decreased in price by 33.2 per cent during February, moving almost as rapidly as the exchange rate. On the other hand, domestic products or those based mainly upon domestic labor changed in price very slowly, and in most cases did not decline, but even increased. The index of the group of "industrial finished products" and of "miscellaneous articles" increased during February 15.7 and 30 per cent, respectively, despite the rapid improvement of the mark abroad.

The reasons for this situation are manifold and deserve closer attention. In the first place the rise in prices of domestic commodities during January was considerably behind the increase of the dollar. While the dollar as expressed in marks increased during January sevenfold, prices of domestic products increased only threefold, so that gold prices of domestic goods on the eve of the mark recovery were lower than before, and the decrease of the dollar from about 48,000 marks to about 20,000 tended to bring about an equalization of prices. The adaptation of such commodities to the valuation of the dollar is much slower, and this process continued after the mark started on its upward course. Furthermore, whenever the mark shows an improvement abroad there is a general tendency of prices to approach the world market level.

Secondly, prices of coal and iron have increased very rapidly. During January, coal rose from 38,044 marks per metric ton to 68,411 marks, hematite iron from 181,200 to 334,800 marks, steel ingots from 197,300 to 623,000 marks, and bars from 270,000 to 860,000 marks. Due to the occupation of the Ruhr and the scarcity of these commodities in the unoccupied parts of Germany, prices of these commodities did not respond to the improvement of the mark.

Thirdly, the cost of labor could not be decreased so long as the cost of living did not show the same tendency. Doctor Kuczynski estimated the weekly expenditures of a family of four in Berlin during the first and second half of February at 81,671 marks and 90,350 marks, respectively, as compared with 30,000 marks for the first half of January. True, certain commodities like rationed bread decreased, but many other items, such as rent and fuel, increased. The costs of labor, coal, steel, and iron are mainly responsible for the increase in prices of industrial finished products during February.

The rise of domestic prices is also due to some extent to the continuous increase in the cost of transportation. During the past year the Federal railway administration increased its rates with each decline in the value of the mark. The following table showing increases of freight rates during 1922 and the beginning of 1923 will best illustrate this situation.

INCREASES IN RAILWAY FREIGHT RATES.

Date.	Per cent.	Date.	Per cent.
1922.		1922.	
Feb. 1.....	334	Oct. 15.....	60
Mar. 1.....	20	Nov. 1.....	50
Apr. 1.....	40	Dec. 1.....	150
May 1.....	20		
June 1.....	25	1923.	
July 1.....	25	Jan. 1.....	70
Sept. 1.....	50	Feb. 15.....	100
Oct. 1.....	100		

As compared with pre-war freight rates, the rate of February 15 represents a 7,400-fold increase, which corresponds to a valuation of the dollar at about 30,000 marks.

The above causes are not peculiar to the price development during the first three months in 1923, for tendencies leading to the same causes have been apparent ever since the mark began its downward course. The artificial stabilization of the mark abroad and the continuing increase of paper notes in circulation, however, have created an entirely new situation which will have great effects on prices in Germany. A stabilized mark abroad will tend to make imported commodities subject only to the international price movement, while continued issues of huge quantities of paper money will tend to raise domestic prices in Germany. If the mark should remain stable and notes in circulation should increase to the same extent as during the last few weeks, the internal and external value of the mark would soon approach

each other and prices of German domestic products would reach or even exceed the gold price level. Up to the middle of February the exchange value of the mark was an important factor in determining prices in Germany. Since the exchange factor has been for the time being eliminated, future price developments in Germany will be watched with great interest. Under normal conditions the present currency situation would soon lead to a point where German prices would exceed prices in other countries, which would result in an increase of imports and a decrease of exports. It should not be overlooked, however, that prices in Germany are to a considerable extent controlled and that a large part of the newly issued paper marks are used in the occupied parts of Germany.

It is difficult to say what effect the improvement of mark exchange and its temporary stabilization will have on the business activity of the country. The fall of the mark during January and its recovery in February were so violent and rapid that it could not affect to any large extent orders placed from abroad. During the entire first quarter of the present year, however, there was a general tendency toward slackening of activity in many industries, especially textiles and steel and iron. This tendency was further accelerated by the Ruhr occupation and the comparative scarcity and high prices of coal. The decrease in business activity is also reflected in the increase of unemployment. On February 1, 252,783, or 4.4 per cent, of the union men were unemployed, as compared with 2.8 per cent in January, 1923. Unions also report that at the end of January 13 per cent of their members were working on a part-time basis.

GOLD AND COMMODITY LOANS.

The instability of the mark has shaken the belief of German nationals in their currency to such an extent that in spite of the recent temporary stabilization of the mark there is an insistent demand for a stable currency and a stable standard of value. This demand became very general after the passing of the foreign exchange act of October, 1922, which made it almost impossible for the average German citizen to invest his savings in a stable currency or security.

Commodity loans.—In an effort to find a relatively stable basis for investment securities, a number of public and private institutions in Germany have floated loans based upon some primary commodity, such as rye, coal, coke,

and wheat. The first commodity loan was floated by the Staatliche Kreditanstalt Oldenburg (State Credit Office of Oldenburg) which issued the Oldenburgische Roggenanweisungen, representing a value of 6,000,000 kilograms of rye in the form of nontransferable certificates of 125 kilograms each. The shares are redeemable at a sum equivalent to the price of 150 kilograms of rye, corresponding to the average price of rye in the Berlin produce exchange during the three months preceding the date of redemption. The assets of the Oldenburg Credit Office serve as security for the issued certificates, which are already listed on the Bremen and Berlin stock exchanges. On the Berlin stock exchange the shares sell for about the current price of 125 kilograms of rye, plus freight from Berlin to Oldenburg.

The example of the State of Oldenburg was followed by the Hanoverian State Credit Institution, by the free State of Mecklenburg-Schwerin, by the free State of Saxony, and by a number of private enterprises, among which the most important are the Roggenrentenbank, A. G. Berlin, and the Deutsche Aktiengesellschaft für Landeskultur of Berlin. All the floated commodity loans are similar in principle to the one above described. There are, however, slight exceptions. Thus, for instance, the certificates of the Deutsche Aktiengesellschaft für Landeskultur have the advantage of being convertible into gold marks if the value of 100 kilograms of rye, according to the average daily quotation of the Berlin exchange for the three months preceding the date of redemption, is below the value of 468 grams of fine gold.

The main advantage of such commodity loans lies in the protection they offer against losses through further currency depreciation, a fact which induced many Germans to buy these bonds, notwithstanding the many disadvantages inherent in this type of loan.

The dollar loan.—The most important "stable" loan floated in Germany is the \$50,000,000 loan of the Government. It is a gold obligation of the Reich in the form of short-term treasury bonds and is to run for only three years, 1923-1926. The bonds bear no interest, but are redeemable at maturity at 120, so that they yield practically 6 per cent. To induce the general public to subscribe to the loan, the treasury certificates are guaranteed by the Reichsbank, are of denominations as low as \$1, and may be rediscounted with the Darlehnskassen. Subscriptions, however, can not be made in paper marks, but only in gold or in

currencies of the United States, Great Britain, or of the former neutral countries. The loan is floated by a syndicate comprising practically all German banks of any importance. The syndicate took over one-half of the loan unconditionally and offered the rest to the general public. According to newspaper reports, only about \$12,500,000 of the loan was subscribed by private individuals. The floating and the absorption of a loan of \$50,000,000, unimportant as it may appear in the United States, is a difficult task for present-day Germany. The difficulty of such a loan becomes more apparent if the loan is converted into paper marks and compared with the general resources of the Reichsbank. Fifty million gold dollars at the present rate of exchange amount to about 1,000 billion paper marks, a very large sum, if one considers that the total deposits of the Reichsbank on February 7 amounted only to about 800 billion paper marks. There is reason to believe that a certain part of the loan will be taken in Holland and Switzerland. Some of the treasury bonds have also been offered for sale in the United States. The purpose of this loan is twofold. First, and mainly, to strengthen the Reichsbank in its effort to support the mark, and, secondly, to provide the general public with a class of security which is not subject to depreciation.

Relation between gold and paper currency.—Simultaneously with the floating of the gold loan comes the request of the Central Association of German Wholesale Traders to the Federal Ministry of Economics that the Reichsbank issue bills of exchange and open current accounts on a gold basis. Although it is not as yet known what the attitude of the Reichsbank is toward this request, it is nevertheless a proof of the impossibility of doing business on the basis of a highly depreciated currency and expresses very well the desire of the German business world to return to the gold standard. The impossibility of doing business on a paper mark basis was realized long ago by bankers and merchants, who, since the mark started on its downward course, have used gold as a general standard of value, while the paper mark served merely the function of a medium of exchange. As a matter of fact, in some instances the price of certain commodities has become the standard by which the value of the paper money is determined. This situation became more pronounced during 1922, when practically all of the wholesalers put their calculation on a gold basis and received payment in paper marks in accord-

ance with the daily quotation of the dollar. This method of doing business prevails in all countries with highly depreciated currencies. Practically all dealings of any importance in Russia, Poland, Austria, and other central and eastern European countries are carried out on a gold or dollar basis, while actual payment is made in the paper currency of the country.

ECONOMIC CONDITIONS IN CHILE DURING 1922.

INDUSTRIAL CONDITIONS.

The uncertain situation in the nitrate industry at the beginning of 1922, the effects of which were felt throughout the entire country, is generally regarded as the principal reason for the relatively depressed commercial situation and the unsatisfactory condition of the Government's finances. In 1921 the position of the nitrate industry was extremely unsatisfactory, and at the close of that year there were about 2,200,000 tons of nitrate available for export as compared with a total of 1,783,000 tons at the end of 1920 and 872,000 tons on December 31, 1913. The result was that a considerable number of oficinas were closed in 1921 and production was therefore substantially diminished in 1922. The decline in production, however, has not reduced the available stocks to a point which can be reasonably regarded as a normal level. By March the total stocks at the coast had been reduced to 2,149,000 tons and by December to about 1,230,000 tons, which, while substantially below the stocks held on the corresponding date during the two previous years, was still considerably larger than the supply at the end of 1913. Nevertheless, greater activity had developed in the nitrate market by the close of 1922. Export sales announced by the Nitrate Association totaled 2,974,804 metric quintals¹ in December, an increase of 1,451,112 quintals over the previous high mark established in November. Total exports for the calendar year reached 1,300,782 metric tons, as against 1,100,000 tons in 1921. In this connection attention must be called to the fact that exports during the first half of 1922 reached only 260,000 tons, whereas during the second semester about 1,040,782 tons were exported. According to the Nitrate Association, orders for future delivery on December 31 totaled

¹ A metric quintal is one-tenth of a metric ton.

448,612 metric tons. The delivery dates on these contracts are as follows:

Months, 1923.	Metric tons.
January.....	141, 713
February.....	127, 582
March.....	42, 156
April.....	9, 144
June.....	128, 017
Total.....	448, 612

At the close of the year stocks at the coast had been reduced to 1,230,000 tons, while the visible supply on hand in Europe, Egypt, and the United States totaled only 512,712 tons. These figures compare most favorably with those for 1921. The figures for December 31, 1921, were 1,489,802 tons on the Chilean coast and 938,223 tons in foreign countries, including stocks in transit. The cost of nitrate production in Chile has been further reduced by the fall in the price of coal, oil, bags, etc., as well as by the cheapness of labor. It may be safely stated, therefore, that at the end of 1922 the nitrate industry of Chile was in a sounder condition than it had been for the two years past, and although selling prices were comparatively low the producing companies, aided by reduced costs and low Chilean exchange, were working on a profitable basis. The Nitrate Association, furthermore, has reported that, while the production of artificial nitrate in Germany has been greatly assisted by the fall of the German mark, the production costs have advanced to such an extent that the product can not be sold profitably at a price lower than that of the Chilean nitrate. In view of this, Chilean producers hope that Germany will again in the near future assume the important place which she occupied before the war as a purchaser of the Chilean product.

The firm tone of the American copper market was reflected in the Chilean copper industries during the last two months of 1922, with the result that increasing activity in this line of production was apparent at the beginning of the current year. Reliable estimates have placed current production in December at 70,000 tons per month and domestic consumption, plus exports, at 80,000 tons. At the end of November, local stocks of refined copper were placed at approximately 100,000 tons. Total copper shipments during 1922 amounted to 120,000 metric tons, as compared with the total exports during 1921 of 123,000 metric tons. This reduction is explained by

the fact that the depression of 1921 continued until about the middle of 1922, and the bulk of the copper exported in 1922 was shipped during the latter half of the year.

As a result of the considerable improvement in the condition of the nitrate and copper industries of Chile and the rapid development of the wool industry in the South, unemployment had been almost eliminated at the close of 1922. On December 7 the last group of unemployed laborers maintained at public expense in temporary shelters at Santiago since the nitrate crisis of 1922 were sent back to the nitrate region. Since the demand for native coal has not increased to any extent, the majority of the coal miners of central Chile were working on a four-day-a-week schedule at the end of 1922. In the southern region, however, a slight surplus of labor became apparent during the last three months of the year, with the result that the governor of Magallanes Territory urged the local steamship companies to discourage the coming of additional workmen to that region.

The condition of the 1922 crops is considered satisfactory. The wheat crop is estimated at 598,146 tons or only 5,000 tons less than that of the previous year. Wool production for the past year is estimated at 38,000,000 pounds, of which a large part was sold at prices considerably higher than those prevailing in the previous year.

During 1922 no change of importance occurred in the manufacturing industries of Chile. Several local industries established during the war are, however, feeling the effects of the competition of foreign manufacturers. A noteworthy event in the industrial situation of Chile was the decision of the Government to purchase 2,000 railway cars of steel construction to be built locally. Reports indicate that the railways of the central section of Chile at the end of 1922 were in a better condition than they were at the close of 1921, and the many railway labor troubles that have been so disturbing during the past few years have been settled for the time at least. The British-owned system of railways in Chile reported unsatisfactory earnings at the beginning of the year, but showed improvement during the last half of 1922. An outstanding feature in the railroad situation of Chile during that year was that the Government issued a decree unifying and extending the concession of the Nitrate Railways under which the property is to be handed over to the Government at the end of 1972, while £1,000,000 will have to be spent on improvements within the next few years.

FOREIGN TRADE AND EXCHANGE.

The Central Statistical Office of Chile has so far released the foreign-trade figures only for the first 10 months of 1922. These indicate that the volume of trade in 1921 was not as large as in the previous year and that conditions in 1922 showed little improvement. The following table shows the quantity and value of imports and exports of principal articles in Chile's foreign commerce during the first 10 months of 1922, as compared with the same period in 1921.

[Quantities in kilos unless otherwise indicated.]

Commodity.	First 10 months—			
	1921		1922	
	Quantity.	Value (gold pesos of 18d.).	Quantity.	Value (gold pesos of 18d.).
IMPORTS.				
Edible oil.....	1,772,570	2,251,109	2,107,531	2,528,986
Rice.....	7,092,441	2,996,109	10,640,048	3,457,313
Sugar.....	54,926,428	18,120,927	71,641,941	12,176,983
Coffee.....	1,430,493	1,117,068	4,012,911	2,762,610
Tea.....	1,053,602	2,313,243	480,159	730,975
Wines and liquors ¹	128,180	519,910	50,861	157,150
Print paper.....	6,455,995	4,341,333	9,183,457	2,306,636
Fuel oil ²	350,507	6,644,406	635,113	4,518,572
Coal ³	474,735	18,720,609	165,157	4,571,649
Cement.....	35,978,947	3,025,799	24,339,406	1,181,378
Pig iron.....	3,067,667	560,109	2,885,166	893,977
Tin plate.....	2,518,309	1,556,634	4,423,853	1,234,891
Bags.....	24,212,091	21,603,426	2,597,155	1,250,233
Automobiles ⁴	285	1,712,927	32	193,683
Yerba maté.....	1,794,723	942,857	4,529,150	2,242,941
EXPORTS.				
Nitrate ⁴	40,022,252	230,458,511	7,032,539	96,705,616
Iodine.....	422,377	9,779,028	202,145	4,679,656
Borax.....	18,920,390	22,797,204	39,724,872	41,313,938
Copper bars.....	42,074,912	29,919,613	85,864,309	64,004,849
Copper ore.....	43,988,892	3,183,166	91,406,341	4,749,578
Wool.....	11,011,476	7,111,555	7,388,012	3,299,892
Wheat.....	11,291,725	7,898,641	2,467,039	352,029
Wheat flour.....	8,710,438	2,587,593	8,950,141	2,274,998
Barley.....	41,298,040	4,637,174	30,322,954	3,077,776
Beans.....	13,225,154	2,323,987	9,054,598	1,597,586
Oats.....	26,857,817	2,195,484	14,377,675	1,315,163

¹ Bottles. ² Tons. ³ Number. ⁴ Metric quintals.

Imports of all commodities, with the exception of coal, cement, bags, tea, and wines, were considerably increased. The decrease in the imports of tea is compensated, however, by the striking increase in imports of yerba maté. It may be noted that articles which could be classed as luxuries, such as wines and liquors, showed a marked reduction, and others, such as automobiles, did not increase substantially, thus clearly indicating that the purchasing power of Chile still showed signs of impairment as a result of the economic crisis in the previous year. With regard to exports, particular attention must be called to the fact that the copper figures compare most favorably with

those of the previous year, and the exports of borax, the third most important article of export, also showed remarkable improvement. On the other hand, nitrate, the mainstay of Chile, showed a severe reduction, which, coupled with the considerable decrease in the exports of other important staples, such as oats, barley, and wheat, were responsible for the general depression of trade and business felt throughout Chile during 1922. At the close of the year, however, the foreign-trade outlook was somewhat more promising.

Exchange fluctuations during 1922 were relatively small. During the early part of the year an upward trend was firmly established, and in July the peso had reached the high mark of 14.31 cents, as against 10 cents in the same month during the previous year and 10.75 cents at the beginning of 1922. After July it fell again and the downward trend continued until the end of the year, Chilean pesos being quoted in December at an average of 12.40 cents. The difficult financial position of the country, due to budget deficits and the 1921 commercial crisis, easily explains the fact that the Chilean peso has during the past year been quoted at very much less than the average of most preceding years, while the depressed condition of the nitrate industry, which existed until very recently, explains much of Chile's present unsatisfactory economic position. There is, however, a very important factor which may lead to an improvement in Chile's position within a short time, namely, that this country, unlike many others, has not indulged in inflation of its currency. In point of fact, the various note issues amounted to 289,460,771 pesos in June, 1920, and had increased by the end of that year to 302,821,919 pesos and to 329,202,953 pesos by June, 1921; declining, however, to 324,631,120 pesos in December of that year and to 262,995,594 pesos on October 31, 1922. The conversion fund held against the fiscal notes at the end of 1922 amounted to 114,724,780 gold pesos of 18d., of which 21,502,780 pesos are deposited in the Bank of England and 93,218,999 pesos in the Santiago treasury, the ratio of gold to the issue of fiscal notes being 77 per cent. Another sign indicating the absence of inflation is the fact that total bank deposits during the year decreased moderately, as may be seen from the figures given on page 484. Toward the close of the year the presence on the market of a large number of gold drafts received from nitrate shipments, coupled with the treasury sale of approximately £1,000,000 needed to satisfy outstand-

ing accounts, had a beneficial influence on the exchange, enabling the peso to regain some of the ground lost during the temporary recession of November. On the 1st day of December the 90-day rate on New York was 8.17 pesos to the dollar and the rate on London 36.90 pesos per pound. These rates were gradually lowered during the month, the final quotations of the 31st being 7.74 and 35.90, respectively. Since the nitrate season was at its height during that month, the opinion was general that a more decisive improvement than that shown by the foregoing figures was to be expected. The fact that such expectations were not realized has seemed to demonstrate that the principal cause of the fall in exchange was due to the position of the Government finances. According to the opinion of prominent economists of Chile, the frequent cabinet crises in 1922, together with the increasing issue of treasury notes and the contracting of foreign loans to cover fiscal deficits, exerted a depressing influence on the currency which even heavy and regular sales of sterling and dollar drafts could not fully counteract. The following table shows the Bank of Chile's quotations on 90-day drafts on New York, London, and Madrid, and the local premium on gold pesos, used for customs charges, etc., by months during 1922:

[Monthly averages.]

Month.	Premium on gold (per cent).	Exchange on London (pesos per £).	Exchange on New York (pesos per dollar).	Exchange on Madrid (pesos per peseta).
January.....	227.32	43.33	10.3212	1.5280
February.....	226.53	42.57	9.7928	1.5282
March.....	203.96	39.10	8.9681	1.4011
April.....	212.72	39.90	9.0715	1.4042
May.....	201.65	38.16	8.5994	1.3446
June.....	189.37	35.79	8.0489	1.2657
July.....	173.87	34.43	7.7635	1.2064
August.....	157.10	32.20	7.2084	1.1230
September.....	156.15	32.05	7.2350	1.1099
October.....	157.83	32.37	7.2933	1.1132
November.....	182.29	36.15	8.0674	1.2327
December.....	183.65	36.65	7.9532	1.2448

As a supplement to the foreign exchange table contained in the July, 1922, issue of the BULLETIN (p. 824), the following table is presented, showing the high and low monthly average quotations of the Chilean peso in cents during 1922:

	High.	Low.		High.	Low.
January.....	10.750	9.500	July.....	13.610	12.700
February.....	11.125	9.750	August.....	14.310	13.420
March.....	11.875	11.000	September.....	14.040	13.380
April.....	11.375	11.000	October.....	13.800	13.250
May.....	12.500	11.250	November.....	13.420	11.810
June.....	12.875	11.125	December.....	13.050	11.850

BANKING AND PUBLIC FINANCE.

The outstanding feature during 1922 in the banking activity of the Republic of Chile was that bank deposits showed only a limited movement. It is important, however, to note the striking decrease in gold deposits which was registered throughout the year. The following table shows the condition of the Chilean banks at the end of the first three-quarters of 1922, and on October 31, 1922:

Date.	Cash on hand (in pesos).			C items.	
	Notes.	Silver.	Gold.	Paper currency.	Gold.
1921.					
Oct. 31.....	67,495,724	805,092	3,831,050	79,134,482	5,075,384
Dec. 31.....	164,172,789	1,359,116	8,383,447	76,952,199	1,069,181
1922.					
Mar. 31.....	124,586,244	1,387,281	7,002,213	64,265,630	2,945,479
June 30.....	149,199,115	1,629,422	7,842,984	75,903,531	1,645,311
Sept. 30.....	103,787,060	1,903,399	13,138,397	128,683,227	3,068,541
Oct. 31.....	115,922,080	2,139,701	15,079,082	108,942,106	2,418,452

Date.	Deposits.		Loans and discounts.	
	Paper currency.	Gold.	Paper currency.	Gold.
1921.				
Oct. 31.....	557,179,930	97,584,465	756,043,254	89,477,161
Dec. 31.....	824,115,592	102,666,482	1,032,593,613	83,949,156
1922.				
Mar. 31.....	855,405,322	101,248,057	1,084,975,509	83,955,977
June 30.....	448,120,377	60,400,354	1,115,937,394	87,466,290
Sept. 30.....	888,192,303	92,845,605	1,131,285,779	108,803,322
Oct. 31.....	899,299,366	81,079,923	1,159,821,335	109,777,350

Customs receipts improved considerably during the latter part of 1922, those for December reaching 11,955,931 gold pesos, as compared with 12,881,811 pesos in the preceding month and 5,089,629 pesos during December, 1921. Total collections for the calendar year 1922 reached 86,882,246 pesos, an increase of 704,323 pesos over the total for 1921. Encouraging evidence of the improvement in the country's foreign trade during the last months of 1922 is found in the fact that collections for the last quarter amounted to 35,560,080 pesos, or over 41 per cent of the year's total, whereas collections effected during the last quarter of 1921 reached only 15,505,644 pesos, or 18 per cent of the year's total. Furthermore, the local stocks of merchandise were unusually low at the close of the year and are being replenished at present. This fact, coupled with the news that the Nitrate Association had already closed at that time contracts for future de-

livery aggregating shipments close to a half million tons, indicates that the heavy movements of imports and exports which were passing through Chilean customhouses at the end of the year are not likely to decrease in 1923. The only loan floated by Chile in the United States during 1922 was that for \$18,000,000, placed by the National City Co. on November 1, 1922, details of which were given in the February issue of the BULLETIN (p.203).

PRESENT CONDITIONS.

The slow recovery in the general economic situation of Chile noted at the close of the year 1922, following the moderate reduction in trade during last October and November, has partially continued during the first three months of 1923. The demand for funds is increasing, and this demand appears to be for business needs rather than for speculative operations. No important commercial failures have been reported during the first three months of 1923, and collections on new imports are proceeding satisfactorily. On the other hand, sales of nitrate have fallen off

somewhat since the first of February, due undoubtedly to the uncertain European situation. During the first three weeks of that month 120,000 metric tons were booked, while in January 200,000 tons were sold. January exports of nitrate amounted to 223,000 metric tons and production was placed at 134,000 tons, thus materially reducing the stocks on hand. During February, 54 plants were producing nitrate, one more than in December, 1922. Exchange has registered a slight drop during the first three months of the year, the respective average monthly quotations being 12.81, 11.99, and 12.67 cents. For the purpose of meeting payments due for the construction of new lines and bridges and with the object of expediting the completion of public works already authorized, it is reported that the Government expects soon to sell at auction State lands in the Territorio de Magallanes, valued at 13,500,000 pesos. It is stated that since the sale may be delayed some time, the Government intends to apply to some banking institutions for a short-term loan of approximately 13,000,000 pesos with which to meet outstanding obligations.

PRICE MOVEMENT AND VOLUME OF TRADE.

INTERNATIONAL WHOLESALE PRICE INDEX.

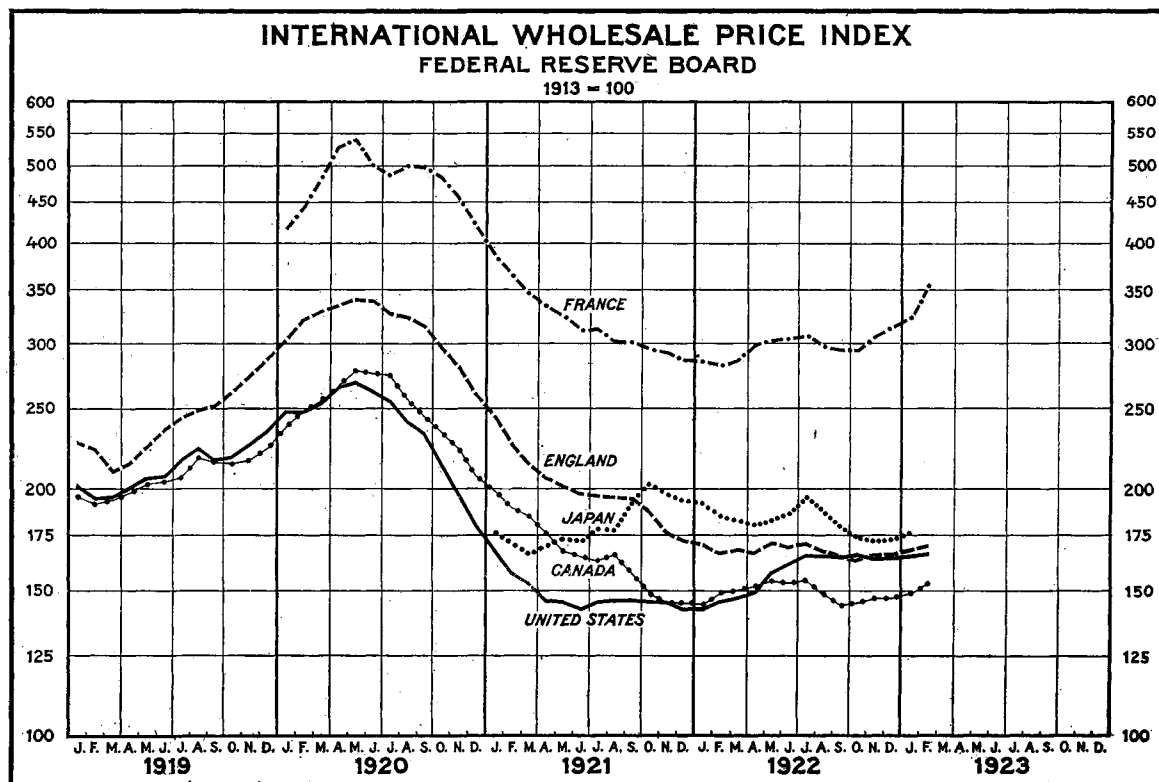
The February movement of wholesale prices in the United States and those foreign countries covered by the Federal Reserve Board's index numbers was a continuation of the January advances. The indexes moved up 1 point in the United States, 3 points in England, 30 points in France, 4 points in Canada, and 7 points in Japan. These represent increases of less than 1 per cent in the United States, and of 1.7, 9.3, 2.3, and 4.3 per cent in the other countries, respectively.

There was likewise a slight rise in the price levels of all countries, computed on a gold basis, due to declines in foreign exchange rates in the case of France, Canada, and Japan. The index figures show that the gold price levels of the United States and England are more nearly equal than they have been at any time since May, 1922. The gold price level in Japan continues to rise above that of this country.

In the foreign countries marked advances occurred in the prices of goods in all stages of manufacture, but the rise of consumers' goods lagged slightly behind that of raw materials and producers' goods. In the United States the prices of raw materials and consumers' goods were fairly steady, producers' goods alone showing any decided upward movement.

Conditions in foreign countries and the United States also differed with respect to commodities entering into foreign trade. In this country imported goods were mainly responsible for the higher price level, whereas in other countries domestic and imported goods shared alike in the price increases.

A more detailed account of recent price movements in England and France appears on pages 464-475 of this issue.



The table below gives the all-commodities index numbers of the five countries included in the Federal Reserve Board's international wholesale price index. Relative price levels are shown both in terms of the respective currencies and "converted to a gold basis." The latter figures take into account the depreciation of the foreign currencies in terms of the American dollar by the use of foreign exchange rates, and indicate therefore relative price levels in the several countries when all prices are expressed as dollars. There follows a table showing the index numbers of the various groups of commodities in each country.

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	.....	211	218	.....	199	.....
1920, average.....	239	314	478	250	.....	239	237	174	223	.....
1921, average.....	148	201	321	167	181	148	159	124	150	175
1922, average.....	157	167	298	149	182	157	152	126	147	175
1922.										
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	152	143	148	171
May.....	158	171	302	154	183	158	157	143	152	174
June.....	161	169	304	153	187	161	155	138	151	179
July.....	165	171	307	154	195	165	156	131	152	187
August.....	165	168	298	149	187	165	154	123	149	179
September.....	164	165	294	144	179	164	150	117	144	171
October.....	165	163	294	145	174	165	148	112	145	168
November.....	164	165	307	147	172	164	151	109	147	167
December.....	164	166	315	147	173	164	157	118	146	170
1923.										
January.....	165	167	324	149	176	165	160	112	148	172
February.....	166	170	354	153	183	166	164	113	151	178

GROUP INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES, ENGLAND, FRANCE, CANADA, AND JAPAN.¹

Countries and commodity groups.	1923		1922			Countries and commodity groups.	1923		1922		
	February.	January.	December.	November.	February.		February.	January.	December.	November.	February.
UNITED STATES.						CANADA.					
All commodities.....	166	165	164	164	146	All commodities.....	153	149	147	147	149
Goods produced.....	162	162	160	160	143	Goods produced.....	150	146	143	143	148
Goods imported.....	146	139	138	137	110	Goods imported.....	170	171	167	165	150
Goods exported.....	187	180	174	173	142	Goods exported.....	143	140	138	138	152
Raw materials.....	182	182	177	177	145	Raw materials.....	140	137	135	135	138
Producers' goods.....	156	150	149	150	127	Producers' goods.....	164	160	159	157	147
Consumers' goods.....	154	156	157	156	155	Consumers' goods.....	167	163	161	160	164
ENGLAND.						JAPAN.					
All commodities.....	170	167	166	165	167	All commodities.....	183	176	173	172	185
Goods produced.....	168	165	164	161	171	Goods produced.....	183	176	175	173	192
Goods imported.....	166	164	163	165	143	Goods imported.....	184	175	165	166	151
Goods exported.....	172	165	157	154	151	Goods exported.....	214	199	192	194	186
Raw materials.....	172	167	166	166	168	Raw materials.....	192	178	171	173	163
Producers' goods.....	153	151	146	146	144	Producers' goods.....	186	176	167	168	183
Consumers' goods.....	177	175	177	172	181	Consumers' goods.....	177	174	177	173	198
FRANCE.											
All commodities.....	354	324	315	307	283						
Goods produced.....	341	312	306	296	282						
Goods imported.....	422	384	361	362	286						
Goods exported.....	389	346	333	336	275						
Raw materials.....	396	366	352	348	300						
Producers' goods.....	295	262	253	248	227						
Consumers' goods.....	340	312	310	296	300						

¹ Complete descriptions of these index numbers may be found in the following issues of the BULLETIN: United States—May and June, 1920, June, 1921, and May, 1922; England—February, 1922; France—August, 1922; Canada—July, 1922; Japan—September, 1922.

WHOLESALE PRICES OF INDIVIDUAL COMMODITIES IN THE UNITED STATES.

In order to give a more concrete illustration of actual price movements in the United States, there are presented in the following table monthly actual and relative figures for certain commodities of a basic character. The prices have in most cases been obtained from the records of the United States Bureau of Labor Statistics. This table is published in the BULLETIN at quarterly intervals.

[Average price for 1913=100.]

Year and month.	Corn, No 3, Chicago.		Cotton, middling, New Orleans.		Wheat, No. 1, northern spring, Minneapolis.		Wheat, No. 2, red winter, Chicago.		Cattle, steers, good to choice, Chicago.		Hides, packers, heavy native steers, Chicago.		Hogs, light, Chicago.	
	Average price per bushel.	Relative price.	Average price per pound.	Relative price.	Average price per bushel.	Relative price.	Average price per bushel.	Relative price.	Average price per 100 pounds.	Relative price.	Average price per pound.	Relative price.	Average price per 100 pounds.	Relative price.
1913.....	\$0.616	100	\$0.127	100	\$0.874	100	\$0.936	100	\$8.507	100	\$0.184	100	\$8.454	100
1914.....	.683	111	.113	89	1.003	115	1.005	102	9.039	106	.196	107	8.832	99
1915.....	.722	117	.096	76	1.306	150	1.307	132	8.702	102	.242	132	7.187	85
1916.....	.812	132	.141	111	1.411	162	1.351	137	9.573	113	.262	142	9.400	111
1917.....	1.620	263	.226	178	2.325	266	2.278	231	12.809	151	.327	178	15.459	183
1918.....	1.522	247	.312	246	2.191	251	2.210	224	16.368	192	.300	163	17.663	209
1919.....	1.580	257	.319	251	2.566	294	2.537	239	17.496	206	.393	214	18.326	217
1920.....	1.397	227	.330	260	2.558	293	2.523	256	14.486	170	.312	170	14.711	174
1921.....	.565	92	.141	111	1.466	168	1.435	146	8.780	103	.139	76	8.891	105
1922.....	.614	100	.204	161	1.345	154	1.238	126	9.438	111	.130	98	9.727	115
1922.....														
January.....	.474	77	.165	130	1.300	149	1.196	121	8.150	96	.165	90	8.160	97
February.....	.557	91	.166	130	1.522	174	1.332	140	8.638	102	.160	87	10.263	121
March.....	.561	91	.167	131	1.500	172	1.357	138	8.731	103	.139	75	10.588	125
April.....	.576	94	.168	132	1.563	179	1.391	141	8.406	99	.134	73	10.500	124
May.....	.609	99	.194	153	1.589	182	1.356	137	8.615	101	.146	79	10.660	126
June.....	.601	98	.217	171	1.419	143	1.160	118	8.363	104	.168	91	10.600	125
July.....	.637	103	.221	174	1.423	148	1.152	117	9.700	114	.132	99	10.695	127
August.....	.617	100	.216	170	1.186	135	1.057	107	10.375	122	.201	109	9.656	114
September.....	.627	102	.209	164	1.085	124	1.071	109	10.713	126	.213	116	9.694	115
October.....	.686	112	.221	174	1.132	130	1.177	119	10.245	120	.227	123	9.430	117
November.....	.717	117	.255	201	1.218	139	1.273	129	10.500	123	.228	124	8.206	92
December.....	.722	117	.254	200	1.251	143	1.325	134	10.581	124	.204	111	8.269	98
1923.....														
January.....	.698	113	.273	215	1.221	140	1.258	128	9.780	115	.200	109	8.395	99
February.....	.724	118	.290	228	1.241	142	1.360	138	9.356	110	.199	108	8.069	95
March.....	.727	118	.305	240	1.232	141	1.321	134	9.263	109	.193	105	8.344	99

Year and month.	Wool, Ohio, 1-3 grades, scoured, eastern markets.		Yellow pine, flooring, New York.		Coal, bituminous, run of mine, f. o. b. spot at mines, Pittsburgh.		Coal, bituminous, Pocahontas, f. o. b. spot at mines, Columbus.		Coke, Connells-ville, at furnace.		Copper, ingot, electrolytic, New York.		Lead, pig, desilverized, New York.	
	Average price per pound.	Relative price.	Average price per M feet manufactured.	Relative price.	Average price per short ton.	Relative price.	Average price per short ton.	Relative price.	Average price per short ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
1913.....	\$0.471	100	\$44.591	100	\$1.320	100	\$1.571	100	\$2.440	100	\$0.157	100	\$0.044	100
1914.....	.440	93	42.750	96	.....	.....	.....	.....	1.808	74	.134	85	.039	88
1915.....	.571	121	39.591	89	.....	.....	.....	.....	1.785	73	.173	110	.046	104
1916.....	.680	144	39.375	88	.....	.....	.....	.....	3.246	133	.275	175	.068	155
1917.....	1.145	243	50.909	114	.....	.....	.....	.....	8.250	338	.294	187	.091	207
1918.....	1.439	306	60.750	136	.....	.....	.....	.....	6.000	246	.247	157	.074	169
1919.....	1.189	248	78.833	177	.....	.....	.....	.....	4.738	194	.191	122	.058	131
1920.....	.971	203	145.417	326	6.043	458	5.889	375	10.816	443	.180	114	.081	184
1921.....	.508	108	93.708	210	2.203	167	3.180	202	3.636	149	.126	80	.046	104
1922.....	.782	166	94.583	212	2.813	213	4.048	258	7.136	293	.134	85	.058	132
1922.....														
January.....	.582	124	95.500	214	2.150	163	2.150	137	2.750	113	.136	86	.047	107
February.....	.673	143	95.500	214	2.150	163	2.075	132	3.038	125	.129	82	.047	107
March.....	.727	154	95.500	214	2.038	154	1.825	116	3.250	133	.127	81	.047	107
April.....	.727	154	95.500	214	2.000	152	1.975	126	4.475	183	.126	80	.051	116
May.....	.727	154	90.000	202	.....	.....	2.750	175	6.000	246	.132	84	.055	125
June.....	.746	158	90.000	202	.....	.....	3.036	210	6.750	277	.136	86	.058	132
July.....	.818	174	92.500	207	.....	.....	4.955	315	10.750	441	.137	87	.058	132
August.....	.818	174	92.500	207	.....	.....	5.688	362	12.800	525	.138	87	.059	133
September.....	.836	178	92.500	207	4.600	349	5.750	366	11.125	456	.138	87	.062	140
October.....	.836	178	92.500	207	3.675	278	5.938	378	9.800	402	.137	87	.067	151
November.....	.946	201	100.500	225	3.163	240	6.125	390	7.188	295	.136	87	.072	165
December.....	.946	201	102.500	230	2.725	206	6.038	384	7.000	287	.141	90	.073	166
1923.....														
January.....	.982	205	102.500	230	3.319	251	6.619	421	8.250	338	.146	92	.078	178
February.....	1.000	209	102.250	229	2.838	215	4.775	304	7.125	292	.155	98	.082	185
March.....	1.000	209	105.250	236	2.450	186	4.500	286	7.313	300	.169	108	.085	193

¹ Toledo market average for last 6 months of 1913.

WHOLESALE PRICES OF INDIVIDUAL COMMODITIES IN THE UNITED STATES—Continued.

Year and month	Petroleum, crude, Pennsylvania, at wells.		Pig iron, basic, Mahoning and Shenango Valley, at furnace.		Cotton yarns, northern cones, 10/1 Boston.		Leather, sole, hemlock, No. 1, Chicago.		Steel billets, Bessemer, Pittsburgh.		Steel plates, tank, Pittsburgh.		Steel rails, open-hearth, Pittsburgh.	
	Average price per barrel.	Relative price.	Average price per long ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per long ton.	Relative price.	Average price per pound.	Relative price.	Average price per long ton.	Relative price.
1913.....	\$2.450	100	\$14.706	100	\$0.221	100	\$0.282	100	\$25.789	100	\$0.015	100	\$30.000	100
1914.....	1.917	78	12.873	88	.197	89	.302	107	20.078	78	.012	78	30.000	100
1915.....	1.529	62	13.741	93	.173	78	.309	110	22.441	87	.013	86	30.000	100
1916.....	2.483	101	19.768	134	.265	120	.388	138	43.946	170	.032	219	33.333	111
1917.....	3.200	131	38.904	265	.397	179	.535	190	69.856	271	.056	376	40.000	133
1918.....	3.974	162	32.509	221	.600	271	.484	172	47.300	183	.032	219	56.150	187
1919.....	4.135	169	27.697	188	.534	241	.528	187	40.539	157	.027	183	49.264	164
1920.....	5.975	244	42.289	287	.625	282	.534	189	56.260	218	.033	222	53.827	179
1921.....	3.314	135	21.668	147	.290	131	.358	127	34.385	133	.019	130	45.654	152
1922.....	3.173	130	24.264	165	.361	163	.350	124	33.990	132	.017	117	40.692	136
1922.....														
January.....	3.300	135	18.150	123	.326	147	.340	121	28.000	109	.015	101	40.000	133
February.....	3.250	133	17.750	121	.313	141	.350	124	28.000	109	.014	94	40.000	133
March.....	3.250	133	17.938	122	.314	142	.350	124	28.000	109	.014	94	40.000	133
April.....	3.250	133	20.000	136	.314	142	.350	124	29.500	114	.015	100	40.000	133
May.....	3.250	133	24.600	167	.331	150	.350	124	34.000	132	.016	105	40.000	133
June.....	3.500	143	25.000	170	.360	163	.360	128	35.000	136	.016	108	40.000	133
July.....	3.313	135	24.250	165	.378	171	.350	124	35.000	136	.017	115	40.000	133
August.....	3.000	122	26.600	181	.387	175	.350	124	36.100	140	.019	127	40.000	133
September.....	3.000	122	32.625	222	.373	168	.350	124	39.500	153	.021	142	40.000	133
October.....	3.000	122	30.900	210	.391	177	.350	124	40.000	155	.021	142	42.250	141
November.....	3.000	122	27.750	189	.420	190	.350	124	37.750	146	.020	135	43.000	143
December.....	3.000	122	24.813	169	.430	192	.350	124	36.500	142	.020	132	43.000	143
1923.....														
January.....	3.370	138	25.800	175	.435	197			37.300	145	.021	139	43.000	143
February.....	3.944	161	26.250	179	.448	203			39.625	154	.022	151	43.000	143
March.....	4.000	163	30.125	205	.462	209			44.375	172	.024	162	43.000	143
Year and month.	Worsted, yarns, 2-32's crossbred, Philadelphia.		Beef, carcass, good native steers, Chicago.		Coffee, Rio, No. 7, New York.		Flour, wheat, standard patents (1918, standard war), Minneapolis.		Hams, smoked, Chicago.		Illuminating oil, 150° fire test, New York.		Sugar, granulated, New York.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per gallon.	Relative price.	Average price per pound.	Relative price.
1913.....	\$0.777	100	\$0.130	100	\$0.111	100	\$4.584	100	\$0.166	100	\$0.123	100	\$0.043	100
1914.....	.640	82	.136	105	.082	73	5.096	111	.167	100	.120	97	.047	110
1915.....	.788	101	.129	100	.075	67	6.663	145	.153	92	.121	98	.056	130
1916.....	1.050	135	.138	107	.092	83	7.264	158	.185	111	.122	99	.069	161
1917.....	1.556	200	.167	129	.093	83	11.391	249	.252	152	.124	101	.077	181
1918.....	2.109	272	.221	171	.097	88	10.131	221	.318	191	.170	137	.078	183
1919.....	1.627	210	.233	180	.179	160	11.998	262	.343	207	.200	163	.089	209
1920.....	1.825	235	.230	178	.120	108	12.675	277	.334	201	.263	213	.127	297
1921.....	1.179	152	.163	126	.072	65	8.326	182	.268	161	.243	197	.062	144
1922.....	1.413	182	.150	116	.103	92	7.282	159	.264	159	.208	169	.059	139
1922.....														
January.....	1.277	164	.154	119	.096	87	7.000	153	.221	133	.218	176	.048	112
February.....	1.300	167	.145	112	.090	81	7.975	174	.267	161	.210	170	.049	115
March.....	1.250	161	.145	112	.096	86	7.813	170	.306	184	.210	170	.052	121
April.....	1.300	167	.145	112	.108	97	8.144	178	.309	186	.202	164	.052	122
May.....	1.350	174	.145	112	.110	99	8.060	176	.313	188	.199	161	.053	123
June.....	1.427	184	.145	112	.110	99	7.500	164	.313	188	.200	162	.059	138
July.....	1.400	180	.148	114	.104	93	7.788	170	.301	181	.200	162	.066	155
August.....	1.400	180	.155	120	.100	90	6.995	153	.264	159	.200	162	.067	157
September.....	1.450	187	.155	120	.102	92	6.344	138	.235	141	.202	164	.063	146
October.....	1.500	193	.155	120	.102	92	6.435	140	.232	140	.215	174	.066	154
November.....	1.650	212	.155	120	.108	97	6.713	146	.213	128	.220	178	.068	160
December.....	1.650	212	.155	120	.111	100	6.775	148	.206	124	.220	178	.069	162
1923.....														
January.....	1.700	219	.154	119	.119	107	6.630	145	.202	122	.220	178	.067	158
February.....	1.750	225	.148	114	.130	117	6.713	146	.203	122	.220	178	.073	171
March.....	1.750	225	.145	112	.130	117	6.625	145	.206	124	.220	178	.086	201

COMPARATIVE WHOLESALE PRICE LEVELS IN PRINCIPAL COUNTRIES.

ALL-COMMODITIES INDEX NUMBERS.¹

Year and month.	EUROPE.												
	Belgium; Ministry of Labor. ²	Bulgaria; General Statistical Bureau.	Czechoslovakia; Central Bureau of Statistics.	Denmark; Finans-tidende. ³	France; General Statistical Bureau. ⁴	Germany; Frankfurter Zeitung. ⁵	Germany; Federal Statistical Bureau. ⁶	Italy; Riccardo Bachi. ⁷	Netherlands; Central Bureau of Statistics. ⁸	Norway (Christiania); Oekonomisk Revue. ⁹	Poland; Central Statistical Office.	Spain; Institute of Geography and Statistics. ¹⁰	Sweden; Göteborgs Handels och Sjöfartstidning. ¹¹
	(128)	(38)	(126)	(33)	(45)	(98)	(38)	(100)	(53)	(93)	(58)	(74)	(47)
1913.....		100			100		¹⁰ 1.0	100	100			100	¹¹ 100
1914.....	¹² 100	103	¹³ 100	¹⁴ 100	101	¹⁵ 1.0	1.1	95	105	¹⁶ 115	¹⁷ 1	101	116
1919.....		¹⁸ 1,166		294	358		4.2	364	297	322		204	330
1920.....		1,940		382	510	¹⁹ 19.7	14.9	624	281	377		221	347
1921.....		2,006		250	345	²⁰ 21.3	19.1	578	181	269		190	211
1922.....	367	2,473	1,355	179	327	327.2	341.8	562	160	220	1,376	176	162
1922.													
March.....	350	2,287	1,552	182	307	54	54	533	161	240	737	177	164
April.....	344	2,514	1,491	178	314	67	64	527	161	236	751	180	165
May.....	348	2,695	1,471	177	317	74	65	524	165	231	786	178	164
June.....	356	2,436	1,471	179	325	79	70	537	167	230	877	178	164
July.....	360	2,489	1,464	180	325	91	101	558	162	232	1,016	175	165
August.....	360	2,526	1,386	180	331	140	192	571	155	227	1,358	175	163
September.....	364	2,531	1,155	178	329	291	287	582	163	225	1,524	174	158
October.....	385	2,558	1,059	176	337	432	566	601	156	221	2,013	172	155
November.....	408	2,564	1,017	180	352	945	1,151	596	158	221	2,756	174	154
December.....	407	2,630	999	182	362	1,665	1,475	580	158	220	3,464	172	155
1923.													
January.....	434	2,657	1,003	181	387	2,054	2,785	575	159	220	5,487	170	156
February.....	474		1,028	192	422	7,159	5,585	582	158	224	8,591		158
March.....				199	424	6,770	4,888			229			

Year and month.	EUROPE—continued.			NORTH AMERICA.		ASIA AND OCEANIA.					AFRICA.		
	Switzerland; Dr. J. Lorenz. ¹²	United Kingdom; Board of Trade.	United Kingdom; Statist. ¹³	United States; Bureau of Labor Statistics.	Canada; Department of Labor. ¹⁴	Australia; Bureau of Census and Statistics. ¹⁵	China (Shanghai); Ministry of Finance. ¹⁶	Dutch East Indies; Statistical Bureau.	India (Calcutta); Department of Statistics. ¹⁷	Japan (Tokyo); Bank of Japan. ¹⁸	New Zealand; Department of Statistics.	Egypt (Cairo); Department of Statistics.	South Africa; Office of Census and Statistics.
	(71)	(150)	(45)	(404)	(271)	(92)	(147)	(17)	(75)	(56)	(106)	(23)	(187)
1913.....		100	100	100	100		¹⁹ 100		²⁰ 100	100	100		100
1914.....	100		101	98	101	²¹ 100		²² 100	²³ 100	95	104	²⁴ 100	100
1919.....			242	206	217	180	133	²⁵ 281	²⁶ 198	236	178	225	170
1920.....		307	295	226	246	218	140	²⁷ 226	204	259	212	299	231
1921.....	195	197	188	147	182	167	145	186	181	200	201	171	
1922.....	166	159	155	149	166	154	146	164	180	196	177	145	133
1922.													
March.....	171	160	157	142	166	146	152	164	182	201	180	153	
April.....	163	160	158	143	166	148	148	164	182	197	180	148	132
May.....	161	160	159	148	167	155	146	166	187	194	177	141	
June.....	160	160	159	150	165	156	144	167	183	197	175	139	
July.....	161	160	157	155	166	157	145	168	181	201	177	138	131
August.....	163	156	152	155	164	155	142	163	178	195	177	139	
September.....	163	154	150	153	163	158	139	159	176	193	174	138	
October.....	163	155	153	154	162	159	143	163	177	190	174	140	132
November.....	169	157	153	156	164	162	143	164	178	188	175	144	
December.....	170	155	152	156	165	161	149	163	176	183	172	147	
1923.													
January.....	175	157	153	156	165	163	153		179	184		141	135
February.....	181	158	155	157	166	161	162			192		137	

¹ The number of commodities or quotations used in the computation of each index is indicated by figures in parenthesis at head of each column.

² Average of last half of month.

³ First of month.

⁴ End of month.

⁵ Beginning of month—not always the 1st.

⁶ Average for the month.

⁷ 38 commodities prior to 1920; 76 commodities during 1921. End of month.

⁸ Based upon price of 52 commodities during 1920; 53 during 1921.

⁹ End of year and end of month.

¹⁰ 15th of the month.

¹¹ Middle of month.

¹² July 1, 1913, to June 30, 1914—100.

¹³ April, 1914—100.

¹⁴ July 1, 1912, to June 30, 1914—100.

¹⁵ July, 1914—100.

¹⁶ Dec. 31, 1913, to June 30, 1914—100.

¹⁷ January, 1914—1

¹⁸ December figure.

¹⁹ January figure.

²⁰ As of last Wednesday in month.

²¹ February, 1913—100.

²² As of Jan. 1.

²³ End of July, 1914—100.

²⁴ Jan. 1, 1913, to July 31, 1914—100.

²⁵ July, 1914—1.

²⁶ 1913 average—1.

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

Index numbers showing the price levels of separate groups of commodities in the United States and certain foreign countries are presented below and on the following page. Group

index numbers for 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 487. 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.	Consumers' goods.	All commodities.
	Agricultural products. (21)	Animal products. (21)	Forest products. (11)	Mineral products. (35)	Total raw materials. (88)			
1913.....	100	100	100	100	100	100	100	100
1919.....	251	221	211	179	217	179	211	206
1920.....	255	186	211	236	228	214	231	226
1921.....	134	110	165	184	142	135	159	147
1922.....	145	125	185	207	153	123	151	149
1922.								
February.....	140	121	166	177	146	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	153
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	210	208	167	135	157	156
1923.								
January.....	164	126	215	213	168	136	155	156
February.....	170	123	220	207	167	141	155	157

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)
	(56)	(110)	(65)	(20)	(37)	(41)	(43)	(31)	(25)	(404)
1913.....	100	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	168	124	176	117	149
1922.										
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	156	124	175	116	143
May.....	132	138	175	216	119	160	122	176	116	145
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	153
September.....	133	138	183	244	134	180	124	173	116	153
October.....	138	140	188	226	135	183	124	176	120	154
November.....	143	143	192	218	133	186	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
February.....	142	141	199	212	139	192	132	184	126	157

GROUP INDEX NUMBERS OF WHOLESALE PRICES IN FOREIGN COUNTRIES.

FRANCE.¹

Groups.	March, 1923.	February, 1923.	January, 1923.	March, 1922.	March, 1921.
All commodities.....	424	422	387	307	360
All foods.....	397	402	367	317	366
Animal foods.....	413	420	388	341	406
Vegetable foods.....	333	332	322	285	322
Sugar, coffee, cocoa.....	491	508	412	326	367
All industrial materials.....	447	439	404	300	355
Minerals.....	426	399	346	242	289
Textiles.....	541	553	533	326	375
Sundries.....	417	410	377	328	392

GERMANY—FEDERAL STATISTICAL BUREAU.²

All commodities.....	4,388	5,585	2,785	54	13
Goods produced.....	4,503	4,942	2,390	50	13
Goods imported.....	6,816	8,796	4,758	75	16

GERMANY—FRANKFURTER ZEITUNG.³

Groups.	April, 1923.	March, 1923.	February, 1923.	April, 1922.	January, 1921.
All commodities.....	6,393	6,770	7,159	67	21
Food stuffs and luxuries.....	5,350	5,361	5,550	63	20
Textiles and leather.....	8,349	9,450	14,137	86	23
Minerals.....	7,822	8,298	9,312	86	28
Miscellaneous.....	6,434	6,949	5,347	53	18
Industrial finished products.....	5,315	5,514	4,766	50	17

ITALY.⁴

Groups.	February, 1923.	January, 1923.	December, 1922.	February, 1922.	February, 1921.
All commodities.....	93	92	93	90	98
Vegetable foods.....	109	109	110	109	103
Other vegetable products.....	130	125	129	111	127
Animal foods.....	108	108	110	112	120
Chemicals.....	70	69	69	73	89
Textiles.....	83	81	78	68	65
Minerals and metals.....	64	63	65	62	80
Building materials.....	86	88	88	91	117
Sundries.....	92	91	94	92	107

SWEDEN.⁵

All commodities.....	158	156	155	166	250
Vegetable foods.....	141	137	136	170	231
Animal foods.....	156	161	165	159	241
Raw materials for agriculture.....	159	163	162	170	243
Coal.....	214	184	178	186	362
Metals.....	118	117	117	130	204
Building materials.....	206	211	209	226	319
Wood pulp.....	190	185	181	178	511
Hides and leather.....	89	89	89	97	108
Textiles.....	213	205	198	138	147
Oils.....	150	150	150	179	318

NORWAY.⁶

Groups.	March, 1923.	February, 1923.	January, 1923.	March, 1922.	March, 1921.
All commodities.....	229	224	220	240	312
Animal foods.....	208	215	210	222	307
Vegetable foods.....	202	200	198	245	315
Coal and coke.....	354	238	252	279	289
Iron.....	275	270	225	232	328
Metals.....	179	170	157	161	169
Building materials.....	177	179	179	262	339
Textiles.....	179	179	177	289	350
Hides and leather.....	264	252	251	190	203

SWITZERLAND.⁷

Groups.	February, 1923.	January, 1923.	December, 1922.	February, 1922.	February, 1921.
All commodities.....	181	175	170	171	230
Consumers' goods.....	163	176	174	181	262
Agricultural products.....	181	162	155	151	181
Industrial products.....	193	180	176	169	217

UNITED KINGDOM—BOARD OF TRADE.¹

Groups.	February, 1923.	January, 1923.	December, 1922.	February, 1922.	February, 1921.
All commodities.....	158	157	155	162	225
Total food.....	153	157	156	174	234
Cereals.....	138	141	141	156	212
Meats and fish.....	165	175	174	178	265
Other foods.....	157	156	156	188	228
Total not food.....	160	157	155	156	221
Iron and steel.....	140	134	131	143	284
Other minerals and metals.....	142	138	138	145	201
Cotton.....	197	195	189	168	195
Other textiles.....	177	176	172	162	200
Other articles.....	165	167	166	168	215

UNITED KINGDOM—STATIST.¹

All commodities.....	155	153	152	155	215
Foodstuffs.....	163	161	163	166	234
Animal foods.....	178	177	181	173	270
Sugar, coffee, tea.....	188	167	164	138	187
Vegetable foods.....	134	138	140	167	206
Materials.....	150	148	145	149	203
Minerals.....	141	132	127	117	200
Textiles.....	164	172	171	172	179
Sundries.....	147	144	140	158	224

CANADA.¹

Groups.	February, 1923.	January, 1923.	December, 1922.	February, 1922.	February, 1921.
All commodities.....	166	165	165	169	199
Grains and fodder.....	129	125	127	145	171
Animals and meats.....	128	126	127	135	171
Dairy products.....	150	151	160	141	185
Fruits and vegetables.....	162	155	159	204	163
Other foods.....	163	159	154	155	205
Textiles.....	185	184	182	174	204
Hides and leather.....	102	102	102	97	126
Metals.....	150	150	148	141	167
Implements.....	218	218	218	216	257
Building materials—lumber.....	184	184	184	179	239
Fuel and lighting.....	221	226	225	204	234
Drugs and chemicals.....	159	159	160	164	188

AUSTRALIA.⁸

All commodities.....	161	163	161	147	192
Metals and coal.....	168	169	169	184	•214
Textiles.....	198	190	181	136	132
Agricultural products.....	157	164	169	142	192
Dairy products.....	140	134	126	119	206
Groceries and tobacco.....	170	170	170	187	197
Meat.....	116	122	113	93	184
Building materials.....	190	198	204	195	303
Chemicals.....	194	188	184	194	242

¹ 1913=100.
² 1913=1.³ July, 1914=1.
⁴ 1920=100.⁵ July 1, 1913–June 30, 1914=100.
⁶ Dec. 31, 1913–June 30, 1914=100.⁷ 1914=100.
⁸ July, 1914=100.

GROUP INDEX NUMBERS—CZECHOSLOVAKIA—CENTRAL BUREAU OF STATISTICS.

[July, 1914=100.]

Year and month.	Animal foods.	Vegetable foods.	Sugar, coffee, sweets.	All foodstuffs.	Textiles.	Iron and minerals.	Other industrial materials and finished products.	Total not food.	All commodities.
	(17)	(16)	(25)	(58)	(23)	(12)	(31)	(68)	(126)
1922.....	1,189	1,213	1,266	1,229	1,560	1,651	1,401	1,501	1,355
1922.									
January.....	1,223	1,727	1,519	1,514	2,092	1,967	1,707	1,861	1,675
February.....	1,249	1,451	1,385	1,373	1,756	1,875	1,570	1,691	1,520
March.....	1,284	1,572	1,410	1,433	1,852	1,843	1,542	1,690	1,552
April.....	1,257	1,456	1,382	1,375	1,692	1,823	1,496	1,625	1,491
May.....	1,323	1,405	1,353	1,363	1,678	1,804	1,459	1,597	1,471
June.....	1,350	1,318	1,383	1,353	1,766	1,817	1,432	1,607	1,471
July.....	1,331	1,327	1,402	1,359	1,807	1,714	1,424	1,585	1,464
August.....	1,236	1,252	1,313	1,273	1,597	1,689	1,396	1,517	1,386
September.....	1,065	745	1,142	990	1,155	1,586	1,310	1,346	1,155
October.....	986	776	977	912	1,121	1,392	1,194	1,229	1,059
November.....	1,032	780	949	913	1,079	1,160	1,153	1,138	1,017
December.....	926	748	977	888	1,125	1,136	1,126	1,128	999
1923.									
January.....	965	743	973	894	1,145	1,150	1,111	1,129	1,003
February.....	904	806	1,039	927	1,227	1,188	1,088	1,145	1,028

COMPARATIVE RETAIL PRICES IN PRINCIPAL COUNTRIES.

In the following tables are presented statistics showing the trend of retail food prices and the cost of living in the United States and certain other countries. Figures for some of the countries are shown for the first time in this issue of the BULLETIN, and in such cases a brief description of the series will be found below. Descriptions of the other index numbers were given on page 86 of the January, 1923, BULLETIN. More detailed explanations of most of these series may be found in recent issues of the International Labor Review. Wherever possible the index numbers have been shifted to a July, 1914, base, instead of being shown on the different bases used in the original computations.

RETAIL PRICES.

The Austrian index, computed by the Paritätische Kommission, includes 13 articles of food. The price level of December 15, 1921, is taken as 100 in the original computation. An average is calculated for each article and weighted according to the theoretical weekly expenditure of a normal person on the principal articles of necessity. Prices are those ruling on Vienna markets.

The Belgian index number includes 22 items of food and is weighted according to a standard budget based on the inquiry of the Solvay Institute of Sociology into the expenditure of 602 families with an income of less than 5 francs a day in 1910. The original base is April, 1914.

For Bulgaria the retail price index is based on the prices of about 40 foodstuffs, in addition to the items of tobacco, soap, and heating and lighting. The weighting is based on the annual expenditure of an average family during the years 1908 to 1912. Prices are collected in 4 towns each month on the basis of 1910=100.

The German retail food price index number is based on reports from 71 towns, and includes 13 items of foods. Prior to March, 1922, it was based on prices in 46 towns only. An average price for each commodity for the whole country is calculated by taking the mean of the average prices in different towns, weighted according to the population of the towns. Original base: Average of October, 1913, January, April, June, 1914=100.

The Berlin index is calculated by Doctor Kuczynski and is weighted according to a theoretical budget, fixed each month and based on market prices and available supplies. In the original computation August, 1913, to July, 1914=100.

For the Netherlands the retail food index number is weighted according to a pre-war standard budget, computed by the Bureau van Statistiek der Gemeente Amsterdam.

The Norwegian retail food index, computed by the Central Statistical Office, includes 55 foods. The weighting is that of a standard budget for a working-class family of 4 persons with an income of about 1,500 kroner in 1914.

The retail food index for Spain, computed by Direccion General de Estadistica, includes 19 food products, fuel, and 9 sundries. The prices are those usual on the Madrid markets, and no weighting is used. The original base (1914 average = 100) is used in the accompanying table.

The Swiss retail food index number is composed of 37 items of foods, in addition to soap and heating and lighting. The system of weighting is that of the standard budget, based on an inquiry made in 1912 by the Secretariat ouvrier suisse, covering 785 households. Base: June, 1914 = 100.

The Australian index number, constructed by the Commonwealth Bureau of Census and Statistics, is based upon the retail prices of 46 articles of food and groceries, weighted according to a system of pre-war aggregate expenditure in 30 towns. The original base is 1911, and has been shifted to July, 1914.

For New Zealand the retail index number, computed by the Census and Statistics Office, includes 59 items of food. The weighting is based on the aggregate expenditure of the whole country from 1909 to 1913. The original base is 1909 to 1913 = 1,000.

The South African retail food index, computed by the Office of Census and Statistics, includes 17 articles of food. Since 1920 the aggregate expenditure method has been adopted, based on the period 1917 to 1919. The original base of 1910 = 1,000 has been shifted so that July, 1914 = 100.

COST OF LIVING.

The cost of living index number for Finland, calculated by the Central Social Board for 21 towns, includes food (14 items), clothing (2 items), rent, fuel, tobacco, a daily newspaper, and taxes. The system of weighting is that of a standard budget for a working-class family of five persons with a yearly income of 1,600-2,000 Finnish marks, based on an official inquiry made in 1908-9. Original base: First half of 1914 = 100.

The index number for Paris, calculated by the Commission Régionale d'Études relatives au coût de la vie à Paris, includes food, clothing, heating, lighting, and miscellaneous items. The system of weighting is that of a theoretical budget. Original base: First half of 1914 = 100.

The index number for Milan, published in the Municipal Bulletin of the city of Milan, consists of food, clothing, heating and lighting, rent, and miscellaneous items. The system of

weighting is that of the pre-war budget, with the first half of 1914 taken as 100.

The index number for the Netherlands is computed by the Bureau van Statistiek der Gemeente Amsterdam. It covers food, clothing, heating and lighting, rent, taxes and subscriptions, laundry, upkeep of furniture, traveling expenses, amusements, etc., and takes changes in consumption into account. The figures given in the accompanying table refer to the base 1910-11.

For Norway the cost of living index number is computed by the Central Statistical Office. It includes 55 items of food, clothing, heating and lighting, rent, taxes, and miscellaneous items. The original base (July, 1914 = 100) is used in the accompanying table.

The American index, computed by the Bureau of Labor Statistics, includes 43 items of food, clothing (77 items for winter and 91 for summer), heating and lighting (6 items), rent, furniture and household articles (25 items), and 19 miscellaneous items, including taxes and subscriptions, medical and traveling expenses, and amusements. The system of weighting is that of the standard budget, based on inquiries made in 1917 and 1918 into more than 12,000 working-class families in various parts of the United States. The data are collected for 32 towns, and July, 1913, is taken as 100.

The index number for Massachusetts is calculated by the Special Commission on the Necessaries of Life. It includes 37 items of food, clothing (17 items), shelter, fuel, heat, and light (4 items), and sundries, weighted according to an estimated budget for a hypothetical wage-earner's family of five persons, based upon an investigation made by the National Industrial Conference Board in October, 1919.

The Canadian index is computed by the Department of Labor and includes food (29 items), fuel and light (5 items), rent, clothing, and sundries. The system of weighting is the theoretical pre-war budget of a skilled workman's family of five persons, with an income of \$21 per week, in 1913. Original base: 1913 = 100.

The Indian index, including food, clothing, heating, lighting, and rent, is computed by the Labor Office Secretariat. The price of each of the food articles is collected twice a week from about 10 retailers in that commodity in Bombay. The index is weighted according to the aggregate expenditure of the whole of India in July, 1914, based on production, imports, and exports during five years before the war.

INDEX NUMBERS OF RETAIL FOOD PRICES.

Year and month.	EUROPEAN COUNTRIES.													UNITED STATES AND OTHER COUNTRIES.				
	Austria (Vienna).	Belgium.	Bulgaria.	Czechoslovakia.	France (Paris). ²	Germany (71 towns).	Germany (Berlin).	Italy.	Netherlands (Amsterdam).	Norway.	Spain (Madrid). ²	Sweden.	Switzerland. ²	United States.	Canada.	Australia.	New Zealand.	South Africa.
1914, July.	* 1	100	100	100	100	* 1	* 1	100	100	100	100	100	100	100	100	100	100	100
1920, July.	459	1,694	.....	.....	373	13	14	452	210	319	190	297	239	215	227	194	167	197
1921, July.	410	1,612	.....	.....	306	15	15	501	180	295	184	232	207	145	148	161	164	139
1921, Dec.	579	438	2,187	.....	323	24	25	585	150	268	181	202	187	147	148	143	150	125
1922, Jan.	748	417	2,259	1,467	319	25	26	576	148	257	179	190	176	139	149	142	147	121
Feb.	871	399	2,365	1,461	307	30	31	559	149	245	179	189	173	139	143	140	145	119
Mar.	904	382	2,379	1,414	294	36	36	546	143	238	181	185	162	136	142	141	141	119
Apr.	1,043	378	2,455	1,415	304	44	43	524	137	234	190	182	153	136	138	143	144	121
May.	1,374	379	2,632	1,444	317	47	45	530	136	230	188	178	152	136	138	147	145	120
June.	2,421	384	2,379	1,475	307	51	48	.....	137	227	183	179	153	138	137	146	143	118
July.	3,282	381	2,431	1,430	297	68	71	522	140	233	179	179	153	139	138	148	144	116
Aug.	7,224	377	2,475	1,290	289	97	111	531	139	232	178	181	152	136	141	149	141	116
Sept.	13,531	386	2,478	1,105	291	154	176	537	141	228	179	180	153	137	139	149	139	117
Oct.	11,907	406	2,506	1,016	290	266	288	555	143	220	178	178	155	140	138	146	139	119
Nov.	11,193	432	2,520	984	297	550	.....	561	136	216	178	170	156	142	139	145	139	120
Dec.	10,521	429	.....	962	305	807	.....	.....	.....	215	177	168	156	144	140	146	138	118
1923, Jan.	.....	426	.....	940	309	1,366	.....	.....	.....	214	180	166	155	141	142	.....	138	117
Feb.	.....	436	.....	.....	316	3,183	.....	.....	.....	214	.....	165	154	139	142	.....	139	.....

¹ Average for 1913.² Includes, in addition to foodstuffs, certain items of fuel and light.³ July, 1914=1.

COST OF LIVING INDEX NUMBERS.

Year and month.	EUROPEAN COUNTRIES.												UNITED STATES AND OTHER COUNTRIES.					
	Austria (Vienna).	Belgium.	Finland.	France (Paris).	Germany (71 cities).	Germany (Berlin).	Italy (Milan).	Netherlands (Amsterdam).	Norway.	Poland.	Switzerland.	United Kingdom.	United States (32 towns).	United States (Mass.).	Canada.	India (Bombay).	New Zealand.	South Africa.
1914, July.	* 1	* 100	100	100	* 1	* 1	100	* 100	100	* 1	* 100	100	* 100	100	100	100	* 100	* 100
1920, July.	.....	.....	931	341	9	11	441	217	302	.....	469	186	252	217	198	190	.....	.....
1921, July.	.....	404	1,214	307	11	11	449	208	302	257	205	219	180	158	155	177	.....	133
1921, Dec.	533	447	1,172	297	17	19	539	190	283	467	189	199	174	156	152	179	158	124
1922, Jan.	669	418	1,124	.....	18	19	523	.....	.....	469	186	192	.....	154	149	173	157	122
Feb.	770	395	1,120	.....	22	22	522	.....	.....	481	175	188	.....	154	148	165	156	120
Mar.	792	372	1,107	291	26	27	503	192	266	524	170	186	167	152	146	165	153	120
Apr.	875	368	1,109	.....	32	32	490	.....	.....	586	162	182	.....	152	145	162	152	122
May.	1,092	365	1,111	.....	35	35	492	.....	.....	639	156	181	.....	152	145	163	152	122
June.	1,871	373	1,137	802	38	41	488	187	255	684	155	180	167	152	146	163	151	121
July.	2,645	372	1,142	.....	50	61	488	.....	.....	788	159	184	.....	153	146	165	150	120
Aug.	5,932	369	1,159	.....	70	103	491	.....	.....	908	154	181	.....	152	147	164	150	120
Sept.	11,306	384	1,160	289	114	164	498	175	249	1,077	154	179	166	152	147	165	150	120
Oct.	10,363	406	1,178	.....	195	261	501	.....	.....	1,284	155	178	.....	153	147	162	149	121
Nov.	9,701	432	1,169	.....	400	565	505	.....	.....	1,710	153	180	.....	154	147	160	149	122
Dec.	9,375	429	1,158	300	612	868	504	.....	.....	2,310	153	180	170	154	148	161	148	121
1923, Jan.	9,454	425	.....	.....	1,034	1,291	.....	.....	.....	3,527	158	178	.....	154	149	156	.....	120
Feb.	.....	.....	.....	.....	2,408	2,814	.....	.....	.....	5,713	157	177	.....	.....	150	.....	.....	.....

¹ July, 1914=1.² Apr. 15, 1914=100.³ 1913-14=1.⁴ August, 1913-July, 1914=1.⁵ 1910-11=100.⁶ June.⁷ July, 1913=100.⁸ 1909-1913=100.⁹ 1910=100.

INDEXES OF INDUSTRIAL ACTIVITY IN FOREIGN COUNTRIES.

UNITED KINGDOM.

Year and month.	PRODUCTION.				Raw cotton, visible supply. ³	EXPORTS.			IMPORTS.				TRANSPORTATION.				Unemployed among approximately 12,000,000 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 clearing.	British railways.			
															Net ton-miles.	Total freight receipts.		
Monthly av:	Long tons. ¹	Long tons. ¹	Long tons. ¹	Long tons. ¹	Bales. ¹	Long tons. ¹	Square yards. ²	Long tons. ¹	Lbs. ²	Lbs. ²	Lbs. ¹	Lbs. ¹	Gross tons. ¹	Tons. ¹	Ton-miles. ¹	£ sterling. ¹	Per cent.	Per cent.
1913.....	23,953	855	639	.....	.....	414	4,596	6,117	181	67	6,926	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	1,546	.....	.....	15.2
1921.....	18,388	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
1922.....	20,996	408	486	349	1,277	283	352	5,350	119	92	5,661	4,991	1,810	4,974	.....	.....	13.3	7.1
1922.																		
January.....	17,693	288	328	271	1,298	253	342	4,021	134	90	4,557	4,186	.....	3,921	1,320	9,370	16.2	6.1
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	14.6	.....
April.....	22,875	394	404	294	1,181	258	305	4,097	101	117	3,164	3,390	.....	4,187	1,236	9,198	14.4	7.2
May.....	19,146	408	462	334	1,143	272	345	5,057	120	138	2,994	2,471	.....	5,104	1,379	10,442	13.5	.....
June.....	15,827	369	400	316	1,111	236	315	4,794	127	97	2,772	3,393	1,920	4,975	1,160	8,903	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	12.3	5.9
August.....	19,151	412	528	338	864	270	381	6,146	81	107	7,281	4,422	.....	5,855	1,455	9,398	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	9,204	12.0	.....
October.....	21,207	482	565	393	882	347	357	6,196	128	60	5,090	6,371	.....	5,590	1,545	9,922	12.0	9.1
November.....	21,712	494	601	410	1,056	372	402	6,571	183	60	5,500	5,469	.....	5,653	1,568	9,954	12.4	.....
December.....	25,841	534	546	407	1,138	341	364	5,955	205	70	5,099	6,204	1,469	5,145	.....	.....	12.2	.....
1923.																		
January.....	21,219	568	634	.....	1,123	353	404	5,612	135	98	4,501	7,171	.....	5,281	.....	.....	12.7	.....
February.....	22,247	543	707	.....	1,104	318	346	5,903	130	84	3,532	6,395	.....	4,985	.....	.....	11.8	.....

¹ In thousands; 000 omitted.
² In millions; 000,000 omitted.

³ Figures for end of the month.
⁴ Expressed in yards.

⁵ Figures for 5 weeks.

FRANCE.

Year and month.	PRODUCTION.		Cotton stocks at Havre. ²	EXPORTS.		IMPORTS.			TRANSPORTATION.		Unem- ployed receiving municipal aid in Paris.
	Pig iron.	Crude steel.		Total.	Total.	Raw cotton for consumption.	Raw silk for consumption.	Coal for consumption.	Vessels cleared.	Receipts of principal railways. ³	
Monthly average:	Metric tons. ¹	Metric tons. ¹	Bales. ^{1, 4}	Metric tons. ¹	Metric tons. ¹	Metric tons.	Metric tons.	Metric tons. ¹	Tons. ¹	Francs. ¹	Number.
1913.....	434	391	274	1,840	3,685	27,428	629	1,558	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
1922.....	427	373	148							557,194	1,679
1922.											
January.....	312	315	188	1,554	3,396	14,870	502	1,676	1,735	451,870	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	4,434	20,978	408	2,081	1,934	472,779	3,546
April.....	383	324	138	1,794	3,787	17,391	207	1,538	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.....	416	358	145	1,799	4,307	32,380	391	1,829	2,473	504,431	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	16,291	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	153	2,034	4,577	20,387	526	1,965	2,455	532,152	285
December.....	513	414	197	2,429	4,930	36,468	436	2,177	2,366	691,539	414
1923.											
January.....	486	408	203	1,896	4,111	33,275	238	1,888	2,146	484,566	684
February.....			169	2,490	3,884					496,581	666

¹ In thousands; 000 omitted.

² End of the month figure.

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

⁴ Bale of 50 kilograms.

⁵ Figures do not include Lorraine.

⁶ Excludes the Alsace-Lorraine and Guillaume-Luxembourg Railways.

GERMANY.

Year and month.	PRODUCTION.		EXPORTS. ¹				IMPORTS. ²				SHIPPING.		UNEMPLOYMENT.		
	Coal and coke.	Lignite.	Iron and iron manufactures.	Machinery and electrical supplies.	Dyes and dye-stuffs.	Coal. ³	Raw wool.	Half manufactured silk.	Cotton. ⁴	Iron ore. ⁵	Arrivals of vessels in Hamburg.		Applicants for every 100 available positions.	Unemployed persons receiving State aid.	Business failures during month.
	<i>Metric tons.¹</i>	<i>Metric tons.¹</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.</i>	<i>Metric tons.¹</i>	<i>Number.</i>	<i>Tons.¹</i>	<i>Number.</i>	<i>Number.¹</i>	<i>Number.</i>
Monthly av.: 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	.....	.....	.....
1920.....	13,043	9,303	145,883	46,772	8,462	608,749	4,025	232	12,490	538	401	374	169	366	331
1921.....	13,664	10,241	203,681	39,037	8,530	518,937	11,860	393	30,894	619	700	794	165	310	744
1922.....	.....	.....	220,803	49,147	12,731	421,835	15,910	407	21,483	1,003	907	1,084	.....	.....	.....
1922.															
January.....	14,640	10,978	221,743	39,470	9,552	752,340	10,400	347	23,426	942	745	875	150	165	140
February.....	13,655	10,091	172,709	45,689	9,332	669,433	26,202	363	17,915	493	461	716	145	203	123
March.....	15,931	12,260	211,979	48,813	12,299	795,200	26,988	440	26,130	810	894	969	113	213	151
April.....	13,800	10,634	200,677	46,112	11,095	795,940	24,091	462	24,070	866	972	1,112	113	116	107
May.....	14,670	11,437	209,452	47,354	12,629	701,941	25,619	486	26,112	1,519	1,143	1,244	107	65	95
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	91
July.....	11,972	11,411	212,365	44,162	12,671	199,961	14,119	435	26,085	962	793	1,065	106	20	81
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	59
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	45
October.....	13,329	12,089	246,074	50,699	13,187	125,670	10,023	371	10,584	1,316	1,016	1,272	129	16	43
November.....	12,986	11,896	233,553	41,644	11,110	137,341	9,198	425	20,622	1,842	877	1,046	155	24	34
December.....	12,212	11,897	285,464	85,350	16,472	123,826	8,828	297	25,942	1,038	936	1,041	.....	43	39
1923.															
January.....	12,212	9,104	236,709	42,209	13,651	90,626	11,448	254	26,382	867	993	1,142	.....	.....	42

¹ In thousands; 000 omitted.² Export and import figures for first 4 months of 1921 not available; 1921 averages based on 8 months.³ Not including coal for reparations account.⁴ Includes linters.⁵ Includes manganese ore.⁶ Average based on 6 months.⁷ Coal only.

SWEDEN.

Year and month.	PRODUCTION.		EXPORTS.		IMPORTS.	TRANSPORTATION.			Unemployed workmen per 100 vacancies.	Business failures during month.
	Pig iron.	Iron and steel ingots.	Unplaned boards.	Paper pulp.	Coal.	Vessels entered.	Vessels cleared.	Freight carried on State railways.		
	<i>Metric tons.¹</i>	<i>Metric tons.¹</i>	<i>Cubic meters.¹</i>	<i>Metric tons.¹</i>	<i>Metric tons.¹</i>	<i>Net tons.¹</i>	<i>Net tons.¹</i>	<i>Metric tons.¹</i>	<i>Number.</i>	<i>Number.</i>
Monthly average:										
1913.....	61	49	328	71	408	1,147	1,147	830	112	317
1920.....	39	37	306	73	234	677	692	991	107	196
1921.....	26	17	162	40	122	519	482	589	276	432
1922.....	22	26	320	87	220	.....	.....	681	290	388
1922.										
February.....	17	17	25	11	62	285	255	630	479	398
March.....	22	22	63	36	197	617	509	730	381	513
April.....	19	21	66	21	206	524	485	622	368	400
May.....	24	31	99	76	230	600	633	578	257	430
June.....	21	24	500	80	172	596	738	645	215	362
July.....	20	27	608	89	214	625	787	715	203	374
August.....	22	27	539	104	294	694	836	765	172	300
September.....	22	31	508	113	229	684	808	776	155	371
October.....	23	31	494	144	270	699	822	799	177	335
November.....	27	34	465	189	302	705	751	796	269	353
December.....	28	29	384	156	346	655	671	635	321	309
1923.										
January.....	22	15	97	41	227	.....	.....	.....	346	387
February.....	.....	.....	45	12	201	.....	.....	.....	308	338

¹ In thousands; 000 omitted.

CANADA.

Year and month.	PRODUCTION.			EXPORTS.				IMPORTS.			Railroad receipts.	Unemployment among trade union members.	Business failures.
	Pig iron.	Coal.	Crude Steel.	Planks and boards.	Pre-served fish.	Wood pulp.	Wheat.	Coal.	Raw cotton.	Machinery.			
	Tons. ¹	Tons. ¹	Tons. ¹	Feet. ²	Lbs. ¹	Lbs. ¹	Bushels. ¹	Tons. ¹	Lbs. ¹	Dollars. ¹	Dollars. ¹	Per cent.	Number.
1921 average.....	50	1,255	56	85	11,007	87,871	12,238	1,525	7,269	2,288	33,568	12.5	47
1922 average.....	32	.....	40	166	9,488	136,375	17,462	1,085	9,229	1,895	34,021	7.1	72
1922.													
January.....	32	1,208	33	82	10,180	124,012	6,103	1,069	11,007	1,640	26,706	13.9	90
February.....	34	1,313	42	88	7,140	87,039	5,602	1,148	8,758	1,573	26,053	10.6	80
March.....	35	1,400	30	119	8,929	117,543	6,042	1,857	12,538	2,410	31,966	9.6	90
April.....	33	666	22	84	5,075	62,153	1,940	896	7,320	1,637	26,809	10.4	59
May.....	23	721	17	156	5,711	105,197	14,207	548	9,788	1,999	30,799	8.8	67
June.....	28	811	33	214	6,749	168,169	11,760	412	8,438	2,008	30,536	5.3	64
July.....	32	858	63	215	9,936	155,502	9,487	427	7,518	1,559	32,624	4.1	60
August.....	29	789	59	213	7,607	169,611	11,587	440	8,459	1,963	34,937	3.6	64
September.....	25	.....	36	191	20,675	180,068	9,233	663	4,276	1,918	39,158	2.8	65
October.....	37	.....	53	239	13,239	154,019	37,593	1,465	4,383	1,931	47,641	3.9	72
November.....	34	.....	51	205	9,995	173,180	55,316	2,127	11,284	2,114	44,259	6.2	76
December.....	36	.....	47	187	8,614	140,001	40,669	1,964	16,980	1,986	36,758	6.4	82

¹ In thousands; 000 omitted.² In millions; 000,000 omitted.

JAPAN.

Year and month.	PRODUCTION. ¹			Raw silk stocks, Yokohama market.	EXPORTS.				IMPORTS.			TRANSPORTATION. ¹		
	Cotton yarns.	Silk fabrics (habutaye).	Paper.		Silk, raw.	Silk fabrics (habutaye).	Cotton yarns.	Sheetings and shirtings, gray.	Raw cotton, ginned.	Wool.	Iron plates and sheets.	Vessels cleared in foreign trade.	Freight carried on State railways.	Receipts of State railways.
	Bales.	Hiki. ²	Pounds.	Bales.	Piculs. ³	Piculs.	Piculs.	Yards. ¹	Piculs. ¹	Piculs.	Piculs. ¹	Tons.	Tons.	Yen.
Monthly average:														
1913.....	126	.....	.....	.....	16,857	2,302	113,374	7,921	537	13,162	132	2,075	2,923	11,723
1920.....	151	.....	.....	53,111	14,557	2,264	74,839	28,465	648	46,918	528	2,216	4,548	27,589
1921.....	151	143	44,538	58,477	21,836	1,702	73,064	23,210	718	22,277	312	2,324	4,342	31,182
1921.														
November.....	168	170	45,658	48,832	29,169	1,855	53,484	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	20,382	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	24,990	1,168	93,411	594	2,817	4,261	28,656
March.....	184	153	49,644	44,701	16,647	2,003	123,605	24,194	1,084	64,865	637	3,094	5,066	36,337
April.....	191	110	52,687	40,777	27,380	1,689	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	3,287	5,225	33,486
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	25,234	433	37,431	872	2,987	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	118,451	25,259	330	16,994	332	2,784	4,920	45,374
November.....	199	123	54,340	75,419	26,804	1,253	101,406	22,537	339	47,469	240	2,895	4,884	32,582
December.....	190	117	56,306	68,304	31,133	1,608	129,466	29,463	805	46,182	131	3,049	5,189	33,041

¹ In thousands; 000 omitted.² One hiki equals two pieces.³ 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.					Reexports.	Total exports and reexports.
	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	16,134	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
1922.....	39,429	24,853	19,160	261	83,660	30,27	8,501	47,451	1,062	60,041	8,648	68,689
1922.												
February.....	32,257	20,220	16,576	322	69,375	2,754	6,869	48,000	712	58,335	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	24,237	18,579	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
1923.												
January.....	47,398	30,288	21,707	307	99,700	3,364	9,372	53,135	1,068	66,939	9,798	76,737
February.....	37,141	26,739	19,462	513	83,855	2,864	9,470	44,324	852	57,510	9,823	67,333

FOREIGN TRADE OF FRANCE.¹

Year and month.	IMPORTS.					EXPORTS.						
	In thousands of francs.				In thou- sands of metric tons.	In thousands of francs.					In thou- sands of metric tons.	
	Food.	Raw mate- rials.	Manufact- ured articles.	Total.		Food.	Raw mate- rials.	Manufact- ured 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	1,540	
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	
1922.....					4,281						1,577	
1922.*												
February.....	385,021	1,137,855	324,150	1,847,026	4,126	153,892	448,455	1,106,507	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	1,962,997	1,794	
May.....	504,000	996,000	310,000	1,810,125	4,396	132,000	498,000	1,127,000	111,000	1,886,964	1,538	
June.....	483,356	1,082,371	285,448	1,851,184	4,307						1,709	
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	1,783	
September.....	473,000	1,087,000	333,000	1,893,000	4,138	141,000	477,000	1,055,000	68,000	1,741,000	2,616	
October.....	570,395	1,189,564	348,913	2,108,872	4,543	195,467	493,804	1,098,983	149,213	1,937,467	2,034	
November.....	516,586	1,478,424	353,235	2,348,245	4,577	196,112	537,370	856,421	116,596	1,706,499	2,024	
December.....	628,705	1,903,975	390,616	2,923,296	4,930	249,079	1,185,596	1,119,980	224,292	2,778,947	2,429	
1923.												
January.....	457,976	1,374,222	312,096	2,144,294	4,111	187,004	434,786	944,740	129,368	1,695,898	1,896	
February.....	551,000	1,445,000	347,000	2,343,000	3,884	242,000	730,000	1,236,000	121,000	2,329,000	2,490	

¹ Not including reexport trade.

² Calculated on 1919 value units.

³ Imports calculated on basis of actual declared value.

⁴ Value of exports not available. Beginning with June, exports calculated on 1921 value units.

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

Year and month.	Denmark. (In millions of kroner.)		Italy. ¹ (In millions of lire.)		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.	Im-ports.	Ex-ports.
Monthly average:																
1913.....	71	60	304	210	(*)	(*)	71	68	56	31	84	82	134	205	61	53
1920.....	262	151	1,322	650	278	142	281	191	89	107	174	146	173	272	195	162
1921.....	136	121	1,041	657	187	114	106	91	103	101	141	142	280	214	135	104
1922.....	125	101			169	102	97	97	63	74					156	136
1922.																
January.....	102	80	1,316	620	152	86	77	61	51	47	92	199	276	230	179	87
February.....	71	76	1,056	720	152	84	49	38	54	47	101	161	189	222	198	101
March.....	103	100	1,311	716	180	113	109	71	79	61	131	172	215	277	208	115
April.....	126	76	1,157	689	167	93	102	60	48	33	127	187	178	239	185	129
May.....	159	113	1,245	592	194	108	97	90	66	70	127	141	191	273	169	154
June.....	142	126	1,662	861	151	101	93	104	62	73	129	149	164	192	157	146
July.....	117	107	1,101	672	164	105	83	113	61	72	109	154	182	244	142	144
August.....	135	90	1,080	732	179	99	105	132	67	74	147	182	212	252	137	146
September.....	134	122	1,236	747	165	116	109	123	60	73	132	202	182	216	135	150
October.....	148	112	1,395	889	187	112	118	122	67	104	226	299	229	216	105	161
November.....	130	120	1,254	1,046	172	104	111	128	76	132	170	237	206	288	116	139
December.....	142	109			163	100	110	120	70	112	208	250	192	278	143	158
1923.																
January.....	141	108			173	92	88	65							148	95
February.....					162	95									154	122

¹ Italian yearly figures for 1921 based on average for six months only.² 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.					Gold.	Silver.	Merchandise.							
			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.			Total merchandise. ¹	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.	Total merchandise. ¹	
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	64,998	207,002	
1920.....	34,756	7,338	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	685,668	
1921.....	57,606	5,270	71,090	25,331	30,737	28,669	51,577	209,085	1,991	4,298	82,002	57,681	55,809	33,323	135,450	373,760	
1922.....	22,919	5,899							3,073	5,236	81,817	38,189	48,988	36,488	107,845	319,316	
1922.																	
February.....	28,739	4,786	80,971	22,370	27,762	34,041	49,375	215,743	1,732	7,092	55,895	27,799	45,164	32,193	84,684	250,620	
March.....	33,488	6,953	86,910	28,756	36,014	42,820	59,880	256,178	963	4,302	73,001	34,507	58,899	43,632	112,765	329,980	
April.....	12,244	4,800	69,804	25,711	32,482	37,252	50,820	217,023	1,579	5,109	79,511	31,174	47,372	37,969	113,876	318,470	
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	307,569	
June.....	12,977	6,346	91,146	26,170	37,346	46,471	58,439	260,460	1,601	6,004	70,219	41,000	55,485	39,086	121,284	335,117	
July.....	42,987	6,957	87,298	27,596	33,511	48,398	49,464	251,772	644	6,289	60,024	41,958	49,226	35,676	109,544	301,157	
August.....	19,092	4,944	110,285	22,489	42,404	48,430	55,858	281,376	956	3,861	47,872	61,339	46,071	35,708	104,871	301,775	
September.....	24,464	6,370	86,818	18,769	24,023	41,026	54,038	228,795	1,399	3,735	66,619	55,142	43,231	35,566	106,542	313,197	
October.....	20,866	3,940	137,378	37,465	30,324	65,685	71,952	345,083	17,592	3,269	133,703	40,798	47,919	32,943	110,177	370,719	
November.....	18,308	5,856	110,703	32,650	32,319	56,195	58,896	291,906	3,431	6,599	144,329	33,615	51,471	33,593	110,532	380,000	
December.....	26,440	7,848	124,091	31,228	26,539	57,194	52,655	293,464	2,710	6,913	113,350	25,764	48,620	35,879	113,937	344,324	
1923.																	
January.....	32,820	5,825						319,000	8,472	6,921	102,074	24,201	50,741	43,264	109,722	335,894	
February.....	8,383	3,792							1,399	2,191						310,000	

¹ Including miscellaneous merchandise imported.² Including miscellaneous and foreign merchandise exported.³ Imports under old tariff law September 1-21, 1922, only.⁴ Import figures delayed owing to change in tariff.⁵ 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.¹

Year and month.	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	158.7	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..	89.7	108.9	135.1	101.1	157.6	253.1	143.0	189.1
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.....	90.5	120.9	150.5	106.0	125.5	236.1	152.0	169.1
May.....	78.3	128.8	155.4	99.4	144.6	227.9	168.0	177.9
June.....	86.3	124.3	169.2	107.4	148.7	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	183.5	244.0	133.4	196.7
October....	122.9	96.8	121.0	119.8	155.0	241.6	138.8	172.4
November..	112.6	101.6	117.2	112.4	195.1	244.0	144.4	204.1
December..	86.7	109.9	122.8	96.5	219.1	263.0	153.9	224.0
1923,								
January....	78.8	126.5	137.3	95.8	.....	.....	.....	.....
February....	62.2	130.9	129.6	83.2	.....	.....	.....	.....

The total volume of exports dropped off about 13 per cent in February, according to the figures above. The level was 83.5 in comparison with 100 in 1913. The greatest decrease took place in the group of raw materials, which fell 21 per cent. Consumers' goods decreased 6 per cent, but producers' goods rose 5.6 per cent. The commodities mainly responsible for these changes were the following: Among raw materials, raw cotton, copper, and wheat declined in volume, the latter commodity showing its usual seasonal decline. Among producers' goods, sole leather and gasoline rose quite

¹ 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.

strikingly. Declines were slight. Among consumers' goods, exports of hams, lard, and illuminating oil fell from the January figure. There was an enormous increase in sugar exports, from 10,568,000 pounds in January to 65,942,000 pounds in February.

Import figures for 1922 are now complete. December figures showed increased imports in all groups of commodities. Comparing yearly figures it is to be observed that during 1922 the average volume of imports increased 40 per cent over 1921. This compares with a decrease of 7 per cent among exports. The most important rise in 1922 imports occurred in producers' goods which increased 56 per cent. Raw materials were 39 per cent higher and consumers' goods 1 per cent higher.

SAVINGS DEPOSITS.

Savings deposits, as reported by 880 banks distributed throughout all sections of the United States, continued to increase during February in all Federal reserve districts. On March 1 the total deposits were \$6,394,117,000, or an increase of 0.8 per cent over February 1, 1923, and 9.2 per cent over March 1, 1922. The increases reflected the improvement in employment conditions due to continued industrial development. A comparison of savings deposits on March 1, 1923, with deposits on February 1, 1923, and March 1, 1922, are shown in the following table. 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.

SAVINGS DEPOSITS.

[000 omitted.]

District.	Number of banks.	Mar. 1, 1923.	Feb. 1, 1923.	Mar. 1, 1922.
Boston.....	64	1,158,610	1,150,793	1,081,935
New York.....	30	1,809,394	1,805,923	1,698,535
Philadelphia.....	80	446,773	442,063	426,470
Cleveland.....	18	412,811	411,325	374,773
Richmond.....	93	285,829	284,707	255,034
Atlanta.....	82	176,536	174,151	153,927
Chicago.....	210	827,691	818,513	758,258
St. Louis.....	35	125,774	125,229	110,704
Minneapolis.....	15	88,992	86,220	78,196
Kansas City.....	66	101,624	101,357	88,619
Dallas.....	112	83,030	81,654	70,529
San Francisco.....	75	877,113	864,077	758,249
Total.....	880	6,394,177	6,342,845	5,855,516

COMMERCIAL FAILURES DURING FEBRUARY.

District.	Number.		Liabilities.	
	1923	1922	1923	1922
No. 1—Boston.....	150	206	\$4,637,721	\$6,235,271
No. 2—New York.....	202	300	8,883,288	24,202,858
No. 3—Philadelphia.....	53	93	1,024,670	2,436,402
No. 4—Cleveland.....	121	235	6,293,852	4,627,038
No. 5—Richmond.....	109	213	2,452,891	4,761,744
No. 6—Atlanta.....	135	270	4,029,704	5,331,050
No. 7—Chicago.....	195	288	3,081,365	7,876,931
No. 8—St. Louis.....	81	167	1,003,734	4,653,231
No. 9—Minneapolis.....	72	97	2,217,789	2,300,814
No. 10—Kansas City.....	89	99	1,154,884	2,006,480
No. 11—Dallas.....	91	207	2,104,596	5,889,143
No. 12—San Francisco.....	145	156	3,738,945	2,287,431
Total.....	1,508	2,331	40,627,939	72,608,393

REPORT OF ASSOCIATED KNIT UNDERWEAR MANUFACTURERS OF AMERICA.

Production of winter and summer underwear by months since February, 1922, is given in the following table:

Month.	Number of mills reporting.			Production (in dozens).		
	Total.	Winter.	Summer.	Total.	Winter.	Summer.
1922.						
February.....	53	36	32	663,346	332,224	331,122
March.....	54	36	34	756,247	392,595	363,652
April.....	53	38	31	522,035	275,911	246,124
May.....	47	34	28	518,150	298,080	220,070
June.....	47	38	25	564,893	345,605	219,288
July.....	50	41	23	422,872	269,223	153,649
August.....	49	41	24	519,511	341,713	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	321,044	277,947
December.....	52	36	27	461,695	233,459	228,236
1923.						
January.....	49	37	28	558,845	269,026	289,819
February.....	50	38	32	564,708	269,950	294,758

Forty-two representative mills which reported for January and February furnished the data for the following table:

	January, 1923.	February, 1923.	Loss.
Unfilled orders (end of month).....	2,031,187	1,794,311	236,876
New orders.....	827,389	353,977	473,412
Shipments.....	603,412	584,074	19,338
Cancellations.....	15,795	6,779	9,016
Production.....	501,531	472,998	28,533

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.
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	25.9	25.2	23.3	31.8	29.1
March.....	33.1	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	23.9	18.9	22.9	21.6	22.7
November.....	28.0	23.4	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	19.8	22.3	21.2	22.9
February.....	21.8	22.6	18.6	22.3	20.6	21.1
March.....	21.7	23.6	20.0	22.3	19.5	21.4

PRODUCTION AND SHIPMENTS OF FINISHED COTTON FABRICS.

	January, 1923.				February, 1923.			
	White goods.	Dyed goods.	Printed goods.	Total.	White goods.	Dyed goods.	Printed goods.	Total.
Total finished yards billed during month:								
District 1.....	13, 104, 851	27, 851, 640	11, 130, 702	55, 208, 039	12, 781, 525	27, 458, 764	10, 397, 550	53, 886, 334
2.....	7, 054, 901	2, 099, 906	5, 038, 826	23, 261, 422	5, 076, 248	3, 800, 797	4, 791, 188	21, 055, 176
3.....	8, 927, 484	7, 082, 378	.....	16, 009, 862	8, 332, 926	6, 515, 980	.....	14, 848, 906
5.....	8, 729, 582	107, 752	.....	8, 837, 334	7, 069, 422	89, 897	.....	7, 159, 319
6.....	916, 470	.....	.....	916, 470	991, 168	.....	.....	991, 168
8.....	.....	.....	.....	1, 752, 853	.....	.....	.....	1, 501, 075
Total.....	38, 733, 288	37, 141, 676	16, 169, 528	105, 985, 990	34, 251, 289	37, 865, 438	15, 188, 738	99, 441, 978
Total average percentage of capacity operated:								
District 1.....	59	92	68	73	58	95	62	73
2.....	65	60	37	73	57	66	46	74
3.....	120	93	.....	106	107	80	.....	93
5.....	72	.....	.....	72	62	.....	.....	62
6.....	69	.....	.....	69	75	.....	.....	75
8.....	.....	.....	.....	68	.....	.....	.....	63
Average for all districts.....	72	88	63	77	67	88	59	74
Total gray yardage of finishing orders received:								
District 1.....	14, 475, 319	30, 391, 999	10, 127, 543	58, 415, 939	13, 980, 547	29, 618, 028	9, 481, 922	56, 770, 679
2.....	7, 800, 512	6, 420, 251	5, 924, 454	25, 750, 871	6, 298, 129	5, 480, 804	4, 698, 309	20, 779, 723
3.....	9, 785, 371	8, 024, 031	.....	17, 809, 402	8, 305, 886	6, 809, 102	.....	15, 114, 988
5.....	6, 425, 961	156, 025	.....	6, 581, 986	7, 079, 637	355, 186	.....	7, 434, 823
6.....	916, 470	.....	.....	916, 470	991, 168	.....	.....	991, 168
8.....	.....	.....	.....	1, 655, 464	.....	.....	.....	1, 735, 325
Total.....	39, 403, 633	44, 992, 306	16, 051, 997	111, 130, 132	36, 655, 367	42, 263, 120	14, 180, 231	102, 826, 706
Number of cases of finished goods shipped to customers:								
District 1.....	6, 028	8, 367	2, 140	29, 615	5, 834	8, 537	2, 729	29, 687
2.....	3, 107	592	.....	12, 247	3, 198	375	.....	11, 577
3.....	6, 703	3, 617	.....	10, 320	6, 166	3, 223	.....	9, 389
5.....	1, 766	.....	.....	4, 813	1, 654	.....	.....	3, 985
6.....	.....	.....	.....	476	.....	.....	.....	454
8.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	17, 604	12, 576	2, 140	57, 471	16, 852	12, 135	2, 729	55, 092
Number of cases of finished goods held in storage at end of month:								
District 1.....	4, 701	4, 630	2, 497	21, 987	4, 153	4, 377	2, 304	20, 817
2.....	4, 008	589	.....	12, 736	3, 803	447	.....	11, 446
3.....	332	385	.....	7, 452	327	374	.....	7, 211
5.....	.....	.....	.....	1, 279	.....	.....	.....	1, 243
6.....	.....	.....	.....	204	.....	.....	.....	218
8.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	9, 041	5, 604	2, 497	43, 658	8, 283	5, 198	2, 304	40, 935
Total average work ahead at end of month (expressed in days):								
District 1.....	4.8	17.5	19.1	13.5	5.4	17.2	17.4	13.3
2.....	5.1	7.1	3.0	12.0	10.0	9.8	11.9	11.3
3.....	13.3	15.6	.....	14.5	14.1	13.1	.....	13.6
5.....	3.8	.....	.....	3.8	5.3	.....	.....	5.3
6.....	.....	.....	.....	4.5	.....	.....	.....	7.0
8.....	.....	.....	.....	.....	.....	.....	.....	.....
Average for all districts.....	5.8	16.0	16.4	12.1	7.2	15.4	16.5	12.1

¹ The National Association of Finishers of Cotton Fabrics at the request of the Federal Reserve Board prepares a monthly survey for 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 of 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.

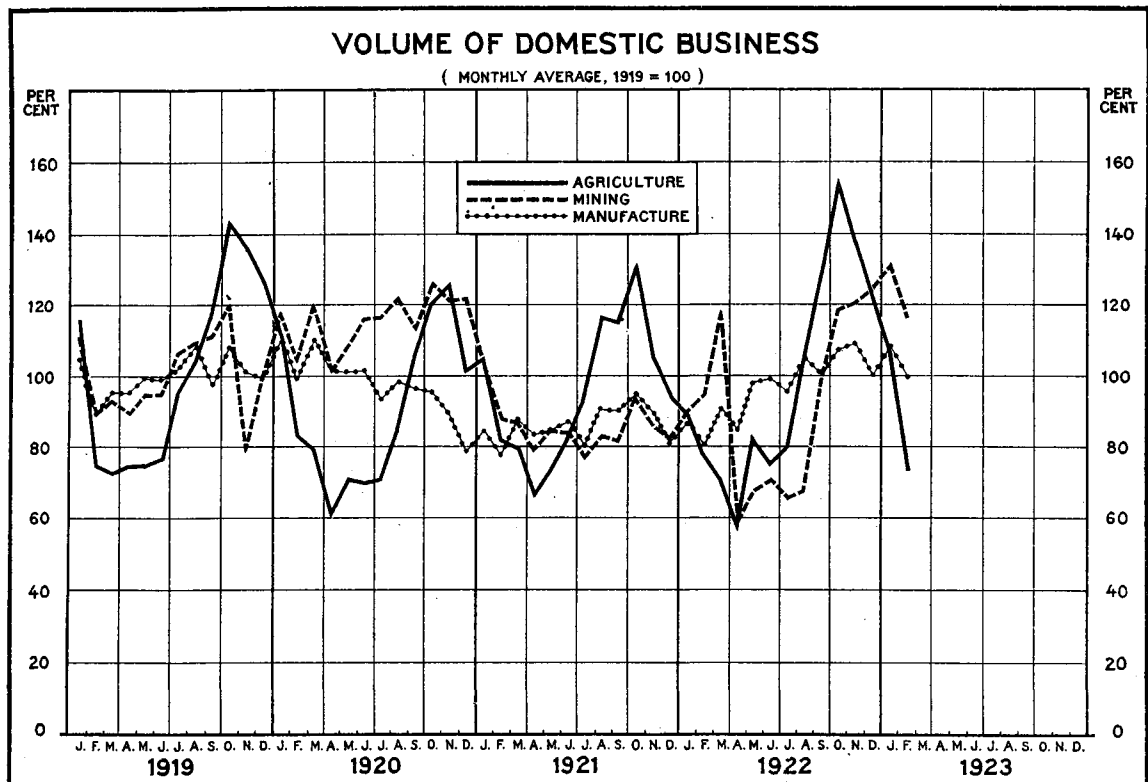
PHYSICAL VOLUME OF TRADE.

February business activity, except in the case of crop marketing, continued at approximately the same high rate as during the preceding month, but the total volume of trade, as reflected by available statistics, was smaller, owing to the shortness of the month. Agricultural movements declined considerably and to a point slightly below that of last February. This may be attributed largely to the prompt marketing of crops early in the season, as shown by the large volume moved during the fall months. Mineral production fell off for the first time since last July, but this was largely, if not entirely, seasonal. The decline in manufacturing output may also be attributed to the short month, for the rate of activity continued practically unabated in almost all industries.

Movements of many agricultural products reached extremely low levels during February. Cotton sight receipts, for example, were smaller than during any February within the last five years. Receipts of grain, particularly of wheat

were considerably smaller than during January and somewhat below those of February, 1922, but were fairly well maintained when compared with other years. Stocks of grains on farms, except of corn, were larger than they were a year ago, and the visible supply of wheat was also greater than at the same time last year. Receipts of most grains at seaboard points were curtailed during February, and stocks at ports fell to a level slightly below that of a year ago. Live-stock receipts and shipments at principal markets, as is customary, were smaller than during January, but compared favorably with February of previous years. Tobacco sales also fell off during February. Citrus-fruit shipments from California were extremely large, indicating an early marketing of the crop.

Output of all mineral products during February was greater than during the same month last year, and less than during January, 1923, but, as compared with the latter month, the rate of production was either greater or practically unchanged. The daily average output



of crude petroleum again reached a new high record, and that of pig iron exceeded all months since March, 1920. Although zinc production was at a high rate, shipments were still larger, and as a result stocks were reduced to less than a week's supply. Deliveries of tin to factories were double those of February, 1922.

Total manufacturing output during February declined to slightly below the December level. Steel-ingot production was less than in January, but exceeded that of any other February within the past six years. Despite this high rate of output, unfilled orders of the United States Steel Corporation increased further during the month, and fabricated steel bookings likewise were augmented. February production of passenger cars exceeded the output for any other month except June, 1922, since statistics have been compiled, i. e., since July, 1921, and automobile shipments and driveaways were also the largest ever recorded. The output of locomotives was only slightly less than during January, and unfilled orders increased 24 per cent. The amount of lumber cut was curtailed more than usual during February by bad weather, but shipments continued at the same rate as in January. Both the demand for and the production of other building materials continued practically unchecked during February. Activity among textile mills either increased or was maintained at practically the same rate as in January. The number of cotton spindles active exceeded all previous records. The production of leather and of shoes was without significant change. The output of food products, as a whole, showed the usual seasonal declines.

INDEX OF PRODUCTION IN BASIC INDUSTRIES, WITH ALLOWANCE FOR SEASONAL VARIATION.

[Monthly average, 1919=100.]

	1919	1920	1921	1922	1923
January.....	107.3	115.8	83.9	86.5	120.7
February.....	100.3	114.8	84.3	90.5	120.1
March.....	96.2	114.5	81.0	94.9	.....
April.....	98.8	107.6	78.6	85.3	.....
May.....	92.9	105.4	76.7	92.1	.....
June.....	92.9	106.8	76.7	94.2	.....
July.....	101.6	104.9	74.1	94.8	.....
August.....	103.4	102.1	78.5	93.9	.....
September.....	104.6	101.7	79.1	99.9	.....
October.....	101.1	99.0	82.7	106.9	.....
November.....	97.9	95.3	85.6	115.5	.....
December.....	103.3	89.6	83.3	115.6	.....

INDEXES OF DOMESTIC BUSINESS UNCORRECTED FOR SEASONAL CHANGES.

[Monthly average of 1919=100.]

AGRICULTURAL MOVEMENTS.

Date.	Total agriculture. ¹	Total animals.	Total grains.	Cotton.	Fruit.	Leaf tobacco.
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.....	57.4	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.....	154.2	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	100.1	97.3
1923.						
January.....	106.6	107.7	116.4	80.2	99.7	75.1
February.....	73.3	84.4	73.7	37.4	117.7	45.1

¹ Combination of 14 independent series.

MINERAL PRODUCTS.

Date.	Total mineral products. ¹	Bituminous coal.	Anthracite coal.	Crude petroleum.	Iron.	Copper.	Zinc.	Lead.
1922.								
January.....	91.3	93.5	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	149.1	79.9	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	81.2	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	96.2	101.6	108.3
November.....	120.1	118.6	114.1	152.1	111.8	94.6	102.3	113.2
December.....	124.5	121.7	114.7	159.3	121.1	97.5	109.0	108.9
1923.								
January.....	131.5	131.4	118.5	163.5	126.7	104.6	117.8	112.7
February.....	116.6	110.5	105.8	153.8	117.5	95.5	108.0	101.4

¹ Combination of 7 independent series.

PRODUCTION OF MANUFACTURED GOODS.

Date.	Total manufacture. ¹	Steel.	Lumber.	Paper.	Petroleum.	Textiles.	Leather.	Food.	Tobacco.
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	96.8	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	84.9	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.....	100.0	110.5	103.6	106.8	152.7	113.3	78.5	107.1	89.4
1923.									
January.....	108.7	129.3	105.8	117.3	156.8	128.0	88.9	104.1	115.3
February.....	² 99.9	116.1	95.8	109.0	.....	122.0	78.4	95.3	101.3

¹ Combination of 34 independent series.

² Partly estimated.

COMMODITY MOVEMENTS.				COMMODITY MOVEMENTS—Continued.			
	February, 1923.	January, 1923.	February, 1922.		February, 1923.	January, 1923.	February, 1922.
Grain and Flour.				Live Stock—Continued.			
Receipts at 17 interior centers (000 omitted):				Shipments of stockers and feeders from 33 markets (head, 000 omitted):			
Wheat (bushels).....	22,099	38,122	24,109	Cattle and calves.....	206	274	241
Corn (bushels).....	31,577	37,496	57,893	Hogs.....	165	62	57
Oats (bushels).....	16,041	24,511	19,328	Sheep.....	50	170	169
Rye (bushels).....	4,749	7,176	1,589	Total.....	411	506	467
Barley (bushels).....	2,556	3,776	2,358				
Total grain (bushels).....	77,002	111,081	105,278	Slaughter at principal centers under Federal inspection (head, 000 omitted):			
Flour (barrels).....	1,738	1,993	1,852	Cattle.....	634	745	569
Total grain and flour (bushels).....	84,823	120,051	113,611	Calves.....	297	352	279
Shipments at 14 interior centers (000 omitted):				Hogs.....	4,231	5,134	3,480
Wheat (bushels).....	10,936	18,278	12,463	Sheep.....	836	1,021	776
Corn (bushels).....	14,377	21,083	31,100	Total.....	5,998	7,252	5,104
Oats (bushels).....	13,438	21,155	12,106				
Rye (bushels).....	2,476	4,592	721	Meats, cold storage holdings first of following month (pounds, 000 omitted):			
Barley (bushels).....	1,747	2,315	1,373	Beef.....	102,811	113,415	73,782
Total grain (bushels).....	42,974	67,423	57,763	Pork products.....	837,636	686,825	608,747
Flour (barrels).....	3,055	3,331	3,247	Lamb and mutton.....	5,758	5,283	2,863
Total grain and flour (bushels).....	56,723	82,411	72,374	Exports of certain meat products (pounds, 000 omitted):			
Stocks at 11 interior centers at close of month (000 omitted):				Beef—			
Wheat (bushels).....	36,096	33,787	27,832	Canned.....	253	168	193
Corn (bushels).....	18,492	15,533	26,178	Fresh.....	320	320	309
Oats (bushels).....	24,155	26,027	56,564	Pickled and other cured.....	1,929	1,205	2,069
Rye (bushels).....	10,711	8,241	4,337	Hog products—			
Barley (bushels).....	1,825	1,880	1,475	Bacon.....	36,296	43,352	30,794
Total grain (bushels).....	91,279	85,468	116,386	Hams and shoulder.....	28,192	31,080	25,209
Total visible supply of grain east of the Rocky Mountains (000 omitted):				Lard.....	89,055	107,786	75,520
Wheat (bushels).....	51,500	50,361	44,388	Pork, pickled.....	3,863	3,806	2,816
Corn (bushels).....	29,585	22,908	43,801				
Oats (bushels).....	29,937	33,165	74,384	Dairy Products.			
Receipts at 9 seaboard centers (000 omitted):				Receipts at 5 principal markets (000 omitted):			
Wheat (bushels).....	10,767	24,693	13,792	Butter (pounds).....	40,662	48,123	38,894
Corn (bushels).....	8,395	8,211	22,246	Cheese (pounds).....	12,575	12,887	11,319
Oats (bushels).....	1,235	2,407	2,342	Eggs (cases).....	1,025	853	1,026
Rye (bushels).....	3,794	6,031	912	Cold storage holdings first of following month (000 omitted):			
Barley (bushels).....	1,632	1,455	640	Creamery butter (pounds).....	8,913	16,121	22,582
Total grain (bushels).....	25,823	42,796	39,932	American cheese (pounds).....	20,709	26,594	15,006
Flour (barrels).....	1,621	1,849	1,660	Eggs (cases).....	14	213	13
Total grain and flour (bushels).....	33,116	51,115	47,401				
Stocks at 8 seaboard centers at close of month (000 omitted):				Fishery Products.			
Wheat (bushels).....	9,601	10,163	10,367	Fish landed by American fishing vessels, total catch (pounds, 000 omitted):	12,499	7,897	11,901
Corn (bushels).....	4,795	4,228	8,251	Cold storage holdings frozen and cured fish, on 15th of month (pounds, 000 omitted):	50,645	67,514	55,092
Oats (bushels).....	2,791	3,252	1,692				
Rye (bushels).....	2,559	2,130	2,343	Other Agricultural Products.			
Barley (bushels).....	2,077	2,597	2,058	Cottonseed (tons):			
Total grain (bushels).....	21,823	22,370	24,711	Received at mills.....	92,200	213,235	130,988
Wheat flour production (barrels, 000 omitted).....	9,425	10,137	9,232	Crushed.....	317,182	469,783	291,095
				Stocks at mills at close of month.....	302,381	527,839	254,015
Live Stock.				Cottonseed oil (pounds, 000 omitted):			
Receipts at 57 principal markets (head, 000 omitted):				Production.....	110,403	145,292	90,935
Cattle and calves.....	1,401	1,843	1,378	Stocks.....	83,667	92,129	68,996
Hogs.....	4,393	5,191	3,572	Oleomargarine consumption (pounds, 000 omitted):	19,722	20,633	12,195
Sheep.....	1,343	1,620	1,323	Tobacco sales at loose-leaf warehouses (pounds, 000 omitted):			
Horses and mules (42 markets).....	52	83	35	Dark belt—Virginia.....	5,541	6,294	6,381
Total.....	7,189	8,737	6,308	Bright belt—			
Shipments at 52 principal markets (head, 000 omitted):				Virginia.....	3,633	5,029	10,644
Cattle and calves.....	550	743	576	North Carolina.....	4,728	9,264	11,333
Hogs.....	1,648	1,854	1,287	Burley.....	12,832	25,622	34,520
Sheep.....	634	723	627	Western dark.....	8,263	11,615	12,109
Horses and mules (42 markets).....	51	82	35	Sale of revenue stamps for manufacture of tobacco, excluding Porto Rico and Philippine Islands (000,000 omitted):			
Total.....	2,883	3,402	2,525	Cigars (large).....	507	559	447
				Cigars (small).....	44	52	46
				Cigarettes (small).....	4,623	5,350	3,126
				Manufactured tobacco (pounds).....	29	34	29
				Fruit shipments (carloads):			
				Grapefruit.....	1,877	2,451	1,818
				Oranges.....	8,009	7,009	4,443
				Lemons.....	626	686	677
				Apples.....	6,257	8,171	4,683

COMMODITY MOVEMENTS—Continued.

	February, 1923.	January, 1923.	February, 1922.
Other Agricultural Products—Continued.			
Vegetable shipments:			
White potatoes (carloads).....	13,758	16,477	13,561
Onions (carloads).....	1,398	1,909	1,022
Rice (pounds, 000 omitted).....	56,178	101,552	102,038
Sugar, all ports (long tons) (American Sugar Bulletin):			
Receipts.....	421,370	274,507	499,432
Meltings.....	383,100	270,600	400,832
Raw stock at close of month.....	434,556	485,772	699,353
Forest Products.			
Lumber:			
Number of mills—			
National Lumber Manufacturing Association.....	569	553	452
Southern Pine Association.....	179	172	173
Western Pine Association.....	51	51	55
West Coast Lumbermen's Associa- tion.....	124	122	124
Production (feet, 000,000 omitted)—			
National Lumber Manufacturing Association.....	978	1,066	776
Southern Pine Association.....	359	409	353
Western Pine Association.....	59	64	42
West Coast Lumbermen's Associa- tion.....	303	314	311
Shipments (feet, 000,000 omitted)—			
National Lumber Manufacturing Association.....	1,132	1,282	739
Southern Pine Association.....	386	477	326
Western Pine Association.....	117	129	89
West Coast Lumbermen's Associa- tion.....	360	373	267
Naval stores at 3 southeastern ports:			
Spirits of turpentine (casks)—			
Receipts.....	5,814	10,326	3,240
Stocks at close of month.....	29,238	38,758	33,204
Rosin (barrels)—			
Receipts.....	46,644	67,967	38,533
Stocks at close of month.....	282,610	338,957	299,305
Fuel and Power.			
Coal and coke (short tons, 000 omitted):			
Bituminous coal production.....	42,130	50,178	40,980
Anthracite coal production.....	7,773	8,713	6,762
Anthracite coal shipments.....	5,952	6,672	5,239
Coke—			
Beehive production.....	1,482	1,478	549
By-product production.....	2,810	3,100	1,795
Petroleum, crude (barrels, 000,000 omitted):			
Production.....	48,413	51,467	40,814
Stocks at close of month.....	252,275	249,794	208,851
Producing oil wells completed (number). Oil refineries: ¹	1,094	1,208	1,143
Production (000,000 omitted)—			
Crude-oil run (barrels).....	47	47	39
Gasoline (gallons).....	624	585	445
Kerosene (gallons).....	212	226	173
Gas and fuel oils (gallons).....	989	972	858
Lubricating oils (gallons).....	87	90	74
Stocks (000,000 omitted)—			
Crude-oil run (barrels).....	30	34	31
Gasoline (gallons).....	1,003	884	706
Kerosene (gallons).....	275	281	327
Gas and fuel oils (gallons).....	1,265	1,305	1,319
Lubricating oils (gallons).....	241	236	245
Electric power produced by public utility plants (000,000 kilowatt-hours):			
Produced by water power.....	1,487	1,615	1,223
Produced by fuels.....	2,863	3,134	2,247
Total.....	4,350	4,749	3,470
Metals.			
Iron and steel (long tons, 000 omitted):			
Pig-iron production (long tons, 000 omitted) ²	3,521	2,994	2,036
Steel-ingot production (long tons, 000 omitted) ²	3,402	2,919	2,371

¹ Figures for January, 1923; December, 1922; January, 1922.² Figures for March, 1923; February, 1923; March, 1922.

COMMODITY MOVEMENTS—Continued.

	February, 1923.	January, 1923.	February, 1922.
Metals—Continued.			
Iron and steel—Continued.			
Unfilled orders, United States Steel (long tons, 000 omitted) ²		7,284	4,494
Fabricated structural steel orders (ton- nage).....	176	168	79
Steel barrels (number)—			
Shipments.....	193,992	206,021	101,830
Unfilled orders.....	603,774	518,463	248,315
Steelcastings—bookings (net tons).....	90,152	103,581	37,080
Silver production (troy ounces, 000 omitted). Copper production (pounds, 000 omitted).....	4,729	5,190	3,878
Zinc production (pounds, 000 omitted):	102,515	112,341	37,416
Production.....	84,886	92,634	45,026
Stocks, close of month.....	21,728	33,148	128,248
Shipments.....	96,306	95,990	48,134
Tin (pounds, 000 omitted):			
Deliveries to factories.....	13,854	14,840	7,202
Stocks at close of month.....	4,601	7,513	3,149
Textiles.			
Cotton (bales, 000 omitted):			
Sight receipts.....	410	872	775
American spinners' takings.....	399	687	576
Stocks at mills.....	2,022	1,987	1,595
Stocks at warehouses.....	2,504	3,482	4,215
Visible supply.....	2,734	3,359	3,891
Consumption by mills.....	567	610	472
Spindles active during month (number, 000 omitted).....	35,308	35,241	33,755
Wool:			
Consumption (pounds, 000 omitted).....	57,916	63,348	53,774
Percentage of active machinery to total reported—			
Looms wider than 50-inch reed space.....	83.4	81.0	68.5
Looms 50-inch reed space or less.....	85.7	85.7	72.9
Sets of cards.....	88.4	85.8	81.9
Combs.....	87.4	83.8	86.4
Spinning spindles, woolen.....	87.0	84.8	79.9
Spinning spindles, worsted.....	91.3	89.5	85.6
Percentage of active hours to total re- ported—			
Looms wider than 50-inch reed space.....	79.7	86.7	65.9
Looms 50-inch reed space or less.....	74.3	83.7	68.1
Sets of cards.....	95.0	95.1	84.4
Combs.....	93.3	103.0	97.2
Spinning spindles, woolen.....	94.6	91.6	81.6
Spinning spindles, worsted.....	95.8	95.4	82.7
Raw silk:			
Consumption (bales).....	36,231	34,680	22,107
Stocks at close of month (bales).....	44,615	47,087	28,982
Hides and Leather.			
Sales of raw hides and skins during month (number, 000 omitted):			
Cattle hides.....	1,697	1,937	1,356
Calf skins.....	725	770	643
Kip skins.....	198	205	209
Goat and kid.....	1,089	1,086	813
Cabretta.....	113	99	70
Sheep and lamb.....	2,902	3,408	1,482
Stocks of raw hides and skins at close of month (number, 000 omitted):			
Cattle hides.....	6,772	6,384	5,761
Calf skins.....	2,648	2,937	2,820
Kip skins.....	1,068	1,149	951
Goat and kid.....	7,950	8,938	7,627
Cabretta.....	968	1,079	456
Sheep and lamb.....	9,058	9,188	13,045
Production of leather (000 omitted):			
Sole leather (sides).....	1,470	1,667	1,478
Skivers (dozens).....	37	36	17
Oak and union harness (sides stuffed).....	140	144	65
Boots and shoes output (pairs, 000 omitted):			
Men's.....	8,599	8,999	6,697
Women's.....	9,393	9,617	8,665
Other.....	11,599	11,942	9,189
Total.....	29,591	30,558	24,551

² Figures for March, 1923; February, 1923; March, 1922.

COMMODITY MOVEMENTS—Continued.

	Febru- ary, 1923.	Janu- ary, 1923.	Febru- ary, 1922.
Building Materials.			
Brick (000 omitted):			
Clay fire brick—			
Production.....	56,075	64,804	34,683
Shipments.....	53,222	57,569	30,043
Stocks, close of month.....	163,426	163,977	146,911
New orders.....	67,164	64,883	35,941
Unfilled orders.....	88,713	75,421	30,357
Face brick—			
Production.....	32,473	43,240	22,926
Shipments.....	26,679	28,853	18,392
Stocks in sheds and kilns.....	134,175	129,428	151,769
Unfilled orders, close of month.....	91,819	74,718	44,513
Silica brick—			
Production.....	14,544	14,308	6,663
Shipments.....	14,418	14,281	7,263
Stocks, close of month.....	45,492	46,174	35,743
Cement (barrels, 000 omitted):			
Production.....	8,085	7,704	4,278
Shipments.....	5,963	5,419	3,285
Stocks, close of month.....	13,592	11,470	14,142
Oak flooring:			
Production.....	24,421	27,473	17,282
Shipments.....	25,031	24,162	16,455
Orders booked.....	33,458	30,137	16,063
Stocks.....	25,301	25,447	28,856
Unfilled orders.....	56,936	50,398	20,907
Maple flooring:			
Production.....	11,333	13,929	9,274
Shipments.....	11,354	13,269	7,947
Orders booked.....	16,033	24,481	8,105
Stocks.....	25,539	25,023	34,248
Unfilled orders.....	40,200	36,084	11,818
Enameled ware:			
Baths—			
Shipments.....	82,912	85,703	52,575
Stocks at close of month.....	40,124	40,530	56,759
New orders.....	129,847	133,198	49,134
Lavatories—			
Shipments.....	83,469	91,116	70,654
Stocks at close of month.....	56,543	60,535	101,566
New orders.....	156,033	170,693	68,414
Sinks—			
Shipments.....	99,085	116,539	73,660
Stocks at close of month.....	59,806	59,580	129,505
New orders.....	167,607	195,984	71,434
Miscellaneous ware—			
Shipments.....	44,766	53,255	35,446
Stocks at close of month.....	49,367	57,616	80,742
New orders.....	75,431	93,427	35,240
Miscellaneous Manufactures.			
Wood pulp (short tons):			
Production.....	279,457	314,834	243,310
Consumption.....	235,934	257,859	202,449
Shipments.....	51,389	53,518	38,265
Stocks, end of month.....	108,872	116,738	178,709
Paper (short tons):			
Newsprint—			
Production.....	114,611	127,452	97,786
Shipments.....	114,415	123,656	96,521
Stocks, end of month.....	23,200	23,004	27,815
Book paper—			
Production.....	89,265	97,318	69,408
Stocks, end of month.....	38,043	38,882	39,334
Paper board—			
Production.....	198,031	209,473	153,704
Stocks, end of month.....	62,901	57,434	63,908
Wrapping paper—			
Production.....	77,813	82,703	62,035
Stocks, end of month.....	48,421	48,123	59,251
Fine paper—			
Production.....	32,377	34,906	26,663
Stocks, end of month.....	39,772	38,822	35,804
Rubber (pounds, 000 omitted):			
Consumption by tire manufacturers.....	34,235	34,186	18,447
Pneumatic tires (000 omitted):			
Production.....	3,218	3,127	2,084
Shipments, domestic.....	2,589	2,994	1,562
Stocks.....	5,244	4,696	4,691
Inner tubes (000 omitted):			
Production.....	4,039	3,952	2,597
Shipments, domestic.....	3,002	3,749	1,703
Stocks.....	6,772	5,838	6,142

COMMODITY MOVEMENTS—Continued.

	Febru- ary, 1923.	Janu- ary, 1923.	Febru- ary, 1922.
Miscellaneous Manufactures—Contd.			
Solid tires (000 omitted):			
Production.....	75	83	39
Shipments, domestic.....	63	61	37
Stocks.....	270	262	183
Automobiles:			
Production (number)—			
Passenger cars.....	259,383	223,653	98,487
Trucks.....	21,288	18,913	12,861
Shipments—			
Railroads (carloads).....	35,700	35,228	19,636
Driveways (machines).....	42,700	30,027	10,173
Boat (machines).....	900	728	180
Locomotives (number):			
Domestic shipped.....	196	217	40
Foreign completed.....	11	12	4
Total.....	207	229	44
Unfilled orders—			
Domestic.....	2,141	1,699	173
Foreign.....	79	89	66
Total.....	2,220	1,788	239
Vessels built in United States and officially numbered by the Bureau of Navigation:			
Number.....	37	36	39
Gross tonnage.....	21,392	14,292	38,359
Transportation.			
Freight carried by Class I railways: ¹			
Net ton-miles, revenue and nonrevenue (000,000 omitted).....	37,668	36,222	27,105
Net tons per train.....	692	681	632
Net tons per loaded car.....	29.0	28.6	27.6
Revenue freight loaded and received from connections, classified according to nature of products (cars, loaded, 000 omitted):			
Grain and grain products.....	165	212	204
Live stock.....	128	155	115
Coal.....	742	869	757
Coke.....	60	62	32
Forest products.....	267	301	198
Ore.....	41	49	17
Merchandise l. c. l.....	848	925	859
Miscellaneous.....	1,142	1,239	861
Total.....	3,393	3,813	3,043
Revenue freight loaded, classified according to geographical divisions:			
Eastern.....	812	910	754
Allegheny.....	731	820	634
Pocahontas.....	134	143	141
Southern.....	546	591	470
Northwestern.....	429	500	367
Central western.....	531	573	475
Southwestern.....	210	278	202
Total.....	3,393	3,813	3,043
Freight-car surplus (number):			
Total.....	23,101	26,588	271,263
Box.....	5,692	6,976	108,845
Coal.....	6,263	7,208	109,593
Freight-car shortage (number):			
Total.....	75,228	73,163	562
Box.....	29,138	26,815	414
Coal.....	38,432	38,477	53
Bad-order cars, total.....	215,552	209,471	331,050
Vessels cleared in foreign trade (tons, 000 omitted):			
American.....	1,587	1,873	1,856
Foreign.....	2,526	2,678	2,169
Total.....	4,113	4,551	4,025
Percentage of American to total.....	38.6	41.2	46.1
Panama Canal traffic (tons, 000 omitted): ¹			
Total cargo traffic.....	1,592	1,535	807
American vessels.....	775	881	360
British vessels.....	407	443	277

¹ Figures for January, 1923, December, 1922, January, 1922.

BUILDING STATISTICS.

BUILDING PERMITS ISSUED IN 168 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 (15 cities).	District No. 6 (15 cities).	District No. 7 (10 cities).	District No. 8 (5 cities).	District No. 9 (9 cities).	District No. 10 (14 cities).	District No. 11 (9 cities).	District No. 12 (20 cities).	Total (168 cities).
1922.													
February.....	1,120	4,633	2,081	2,699	2,305	2,566	4,656	1,434	517	1,755	2,114	7,600	33,480
July.....	2,597	7,761	3,029	4,680	3,756	2,978	10,385	2,291	2,125	2,467	2,238	9,415	53,722
August.....	2,873	7,828	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	2,225	11,291	57,919
October.....	2,911	9,672	3,169	5,064	3,930	3,335	11,988	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	1,457	2,669	2,184	10,490	52,685
December.....	1,285	7,456	1,639	2,666	2,458	2,070	6,620	1,653	698	1,601	1,510	7,767	37,453
1923.													
January.....	905	6,243	1,486	2,946	2,787	2,975	6,310	1,985	722	2,276	2,554	10,313	41,502
February.....	838	6,880	1,573	2,901	2,585	2,516	5,729	1,742	612	1,913	2,199	9,666	39,154

VALUE OF PERMITS ISSUED (000 OMITTED).

	District No. 1	District No. 2	District No. 3	District No. 4	District No. 5	District No. 6	District No. 7	District No. 8	District No. 9	District No. 10	District No. 11	District No. 12	Total
1922.													
February.....	\$9,247	\$53,100	\$8,275	\$8,450	\$7,564	\$4,976	\$20,431	\$4,150	\$1,570	\$4,346	\$4,420	\$18,918	\$145,447
July.....	9,175	47,144	15,899	26,559	15,515	7,516	38,151	5,699	7,663	8,041	5,861	22,391	209,613
August.....	16,634	49,211	15,353	22,037	11,605	7,985	40,453	5,816	8,285	9,793	5,010	29,424	221,606
September.....	8,656	56,670	15,869	25,077	12,970	6,326	31,550	5,384	4,761	8,352	4,980	23,968	204,564
October.....	9,159	66,063	13,806	14,907	11,292	8,049	34,088	6,353	4,717	8,989	4,765	29,338	211,527
November.....	8,388	66,684	15,357	14,713	9,519	5,125	41,425	5,812	5,273	8,278	3,860	26,200	210,634
December.....	7,252	80,400	10,640	13,050	14,456	5,156	53,134	10,115	3,686	6,923	9,570	22,035	236,446
1923.													
January.....	5,661	73,574	9,767	16,458	11,083	7,265	31,022	7,936	3,739	6,903	6,248	26,164	205,820
February.....	4,003	88,207	9,877	14,165	13,085	7,811	40,490	6,528	2,455	7,028	6,121	28,830	228,601

VALUE OF BUILDING CONTRACTS AWARDED BY FEDERAL RESERVE DISTRICTS.

(F. W. Dodge Co.)

VALUE OF CONTRACTS FOR ALL CLASSES OF BUILDINGS (000 OMITTED).

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	District No. 5.	District No. 6.	District No. 7.	District No. 8.	District No. 9. ¹	District No. 10. ²	Total.
1922.											
March.....	\$26,212	\$90,089	\$24,558	\$29,661	\$24,116	.....	\$58,082	.....	\$11,933	.....	\$264,651
August.....	26,750	80,811	43,819	50,812	20,984	.....	56,954	.....	8,250	.....	288,410
September.....	29,245	64,299	24,948	34,035	22,997	.....	62,220	.....	5,868	.....	244,262
October.....	25,305	65,061	20,440	35,165	19,685	.....	52,048	.....	4,523	.....	222,226
November.....	25,298	77,700	16,929	29,337	19,848	.....	45,429	.....	4,810	.....	219,351
December.....	19,740	58,685	18,706	28,042	15,677	.....	45,128	.....	5,285	.....	191,263
1923.											
January.....	21,806	65,233	16,770	25,691	17,633	\$22,051	43,137	\$17,864	4,524	\$7,845	\$242,554
February.....	13,759	58,614	18,780	38,546	20,219	34,775	46,764	21,193	12,199	12,531	\$277,380
March.....	25,079	98,412	31,265	52,793	30,147	25,538	59,868	17,961	15,259	11,277	\$367,599

VALUE OF CONTRACTS FOR RESIDENTIAL BUILDINGS (000 OMITTED).

	District No. 1	District No. 2	District No. 3	District No. 4	District No. 5	District No. 6	District No. 7	District No. 8	District No. 9	District No. 10	Total
1922.											
March.....	\$11,897	\$51,117	\$9,553	\$10,641	\$9,796	.....	\$17,225	.....	\$2,348	.....	\$112,577
August.....	11,945	29,092	8,829	13,409	6,320	.....	18,833	.....	2,536	.....	90,964
September.....	11,510	34,537	8,142	12,737	8,596	.....	15,012	.....	2,454	.....	92,986
October.....	13,553	33,238	10,072	13,730	7,416	.....	20,291	.....	2,228	.....	100,528
November.....	13,667	51,892	7,397	11,405	7,998	.....	22,308	.....	2,847	.....	117,515
December.....	13,963	42,981	11,526	17,809	5,003	.....	17,949	.....	2,046	.....	111,278
1923.											
January.....	14,469	47,702	5,722	11,803	7,815	\$10,223	14,567	\$5,884	2,072	\$2,120	\$122,376
February.....	4,587	10,849	9,128	13,751	7,930	10,065	18,315	6,476	6,703	3,288	\$90,462
March.....	11,044	65,912	13,336	23,338	9,146	8,993	27,065	8,676	4,493	3,295	\$175,298

¹ Montana not included.² Colorado, Wyoming, and Arizona not included.³ Figures for Districts 6, 8, and 10, not available for previous months, included in total.

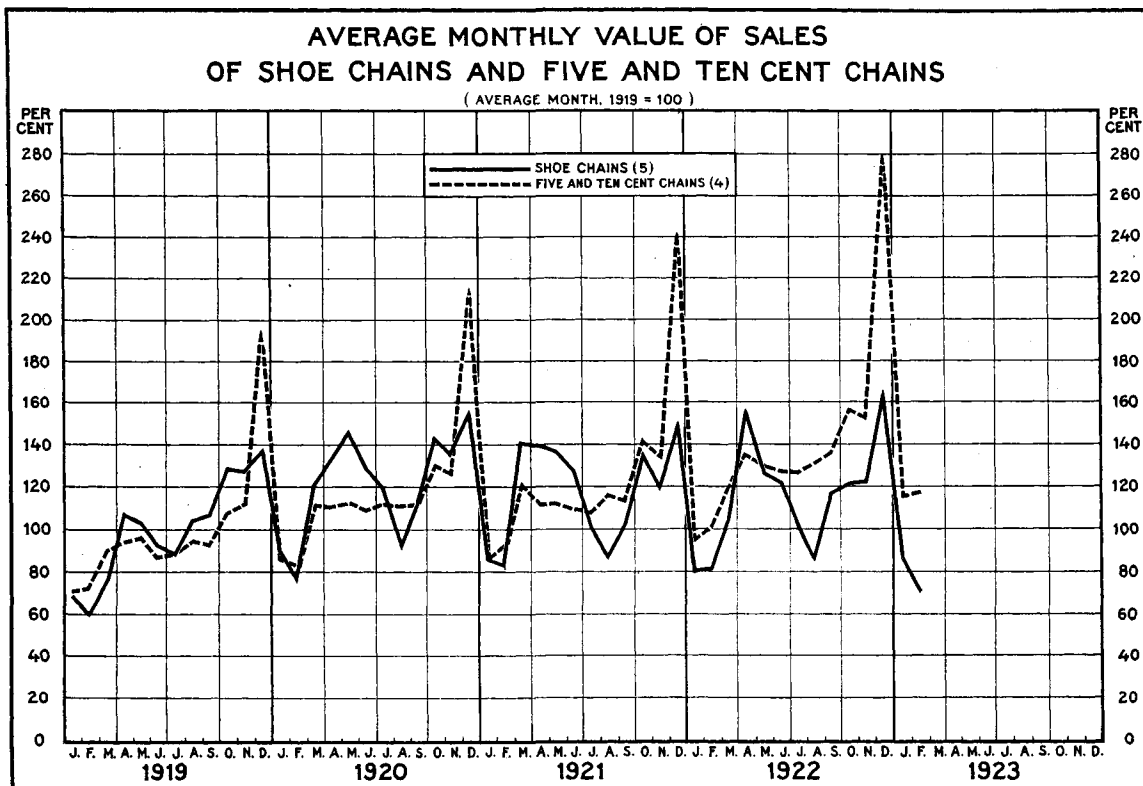
WHOLESALE AND RETAIL TRADE.

Wholesale and retail trade during February were maintained at about the same level as in January, if allowance is made for the fewer number of business days. An index of wholesale trade, which has been constructed in order to show the trend of wholesale business during the last four years, is described in detail on page 439. According to the index, sales in February were 2.6 per cent less than in January, but were 20 per cent larger than in February, 1922. The tables which follow show that sales were slightly smaller than in January for all lines except shoes, whereas in all lines and all districts they were substantially larger than a year ago.

The department store figures of sales and stocks have been revised this month in order to add a group of stores from the Chicago district and to increase the number of stores in many other districts. Continuous indexes of department store sales and stocks are now available for representative groups of stores in 9 of the 12 Federal reserve districts by months since January, 1919. The sales figures which are published for the entire period

in this issue indicate that the dollar value of department store sales are relatively higher at present in the eastern industrial districts than in the agricultural districts of the South and West. The San Francisco district, however, had the highest level of sales in February. Department store stocks increased on the average 9.5 per cent during February, and at the end of the month were larger in all reporting districts than their average size in 1919. The reasons for the increase in stocks in February were the customary purchases of goods after the annual taking of inventories in January and preparations for an early spring trade on account of the early date of Easter.

Mail-order houses and chain stores did an unusually large business in February, considering the shortness of the month. Mail-order sales were 5.4 per cent less than in the longer month of January, but were larger than in any of the first nine months of 1922. The trend of sales of shoe chains and 5 and 10 cent chains are shown in the accompanying chart from 1919 to 1923. The difference in seasonal movement between these two lines of business is very striking. Shoe chains have



two seasons of heavy sales each year—one in the spring and one in the fall—whereas the 5 and 10 cent stores have only one heavy buying peak in the month of December, which is, however, relatively much larger than either of the two peaks in the shoe business. December sales of 5 and 10 cent stores are about twice as large as sales in an average month, whereas the peak sales of shoe stores are only

about one-half again as large as the average monthly sales. In the month of February, 1923, 5 and 10 cent stores were the only group of reporting retail stores to show an actual increase in sales over January. Shoe stores, on the other hand, showed the sharpest decrease of any retail line and were smaller in dollar amounts than in any month in the last four years.

CONDITION OF WHOLESALE TRADE.

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN FEBRUARY, 1923, AS COMPARED WITH THE PRECEDING MONTH, JANUARY, 1923.

District.	Groceries.		Dry goods.		Hardware.		Shoes.		Furniture.		Drugs.		Auto supplies.		Stationery.		Farm implements.	
	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.....	-12.0	42	13.0	8	-6.7	11	-9.9	10	.....	.....	-2.2	6	.....	.....	-6.8	6	.....	.....
No. 3.....	-1.8	64	-3.4	21	-5.0	35	3.9	13	.....	.....	-7.9	15	.....	.....	.....	.....	.....	.....
No. 4.....	-4.9	36	2.0	14	11.1	12	.....	.....	.....	.....	-7.4	11	.....	.....	.....	.....	.....	.....
No. 5.....	-4.3	42	-9.0	15	15.6	16	20.2	21	-12.9	8	-17.7	14	.....	.....	.....	.....	.....	.....
No. 6.....	-9.9	43	-4.9	27	-16.1	26	17.3	13	-3.2	21	-19.5	7	.....	.....	-17.8	4	24.7	7
No. 7.....	5.5	37	-10.9	14	-6.5	20	2.0	12	.....	.....	-5.1	12	-21.2	8	.....	.....	.....	.....
No. 8.....	-2.3	20	-12.8	6	-20.5	7	-22.1	10	.....	.....	-9.4	4	.....	.....	.....	.....	.....	.....
No. 9.....	2.4	55	-5.1	5	-14.1	14	-7.3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 10.....	26.6	5	-1.8	3	-5.8	10	.....	.....	2.7	4	-6	3	.....	.....	.....	.....	.....	.....
No. 11.....	.4	13	-12.5	10	-3.4	11	.....	.....	-4.6	2	-14.7	8	.....	.....	.....	.....	-35.5	4
No. 12.....	1.8	29	-11.1	15	-2.2	20	3.2	13	6.8	16	.5	10	-5.4	21	-10.9	27	5.6	21

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN FEBRUARY, 1923, AS COMPARED WITH FEBRUARY, 1922.

No. 2.....	16.8	42	18.2	8	33.5	11	14.0	10	.....	.....	13.9	6	.....	.....	8.1	6	.....	.....
No. 3.....	17.1	64	24.6	21	28.1	35	36.7	13	.....	.....	9.9	15	.....	.....	.....	.....	.....	.....
No. 4.....	12.4	36	32.1	14	51.1	12	.....	.....	.....	.....	17.2	11	.....	.....	.....	.....	.....	.....
No. 5.....	11.8	42	53.1	15	46.5	16	20.4	21	63.5	8	13.9	14	.....	.....	.....	.....	.....	.....
No. 6.....	15.0	43	46.0	27	34.0	26	22.2	13	52.4	21	22.2	7	.....	.....	5.8	4	38.4	7
No. 7.....	19.4	37	21.4	14	51.3	20	2.2	12	.....	.....	18.0	12	52.7	8	.....	.....	.....	.....
No. 8.....	8.7	20	35.8	6	42.2	7	10.5	10	.....	.....	8.1	4	.....	.....	.....	.....	.....	.....
No. 9.....	22.8	55	.....	.....	18.0	14	-5.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
No. 10.....	38.6	5	16.5	3	22.0	10	.....	.....	16.4	4	17.9	3	.....	.....	.....	.....	.....	.....
No. 11.....	15.7	13	18.8	10	30.7	11	.....	.....	29.3	2	6.7	8	.....	.....	.....	.....	70.0	4
No. 12.....	28.5	29	25.7	15	40.1	20	25.7	13	49.3	16	7.4	10	29.0	21	22.2	27	40.8	21

RETAIL TRADE BY REPORTING LINES.

[Average monthly sales, 1919=100.]

	Department stores (289 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).
1922.								
January.....	89.9	65.3	137.5	94.6	117.4	111.0	79.9	71.8
February.....	79.9	59.4	130.3	100.8	114.8	109.3	80.6	75.0
March.....	101.2	83.5	149.2	118.4	123.4	124.3	103.8	80.6
April.....	112.5	77.1	139.2	134.9	120.5	124.5	156.1	78.9
May.....	115.6	69.9	137.9	129.6	123.2	128.8	126.9	80.9
June.....	107.8	68.8	136.7	127.0	123.8	123.4	121.7	81.3
July.....	80.4	58.4	135.1	126.3	126.2	127.3	101.2	83.0
August.....	87.4	57.2	139.1	130.4	128.2	126.9	86.7	99.1
September.....	107.8	75.1	141.0	136.1	128.7	135.4	117.7	118.2
October.....	129.9	108.7	148.6	156.6	133.1	127.1	121.1	118.8
November.....	130.0	110.4	162.4	152.3	122.4	126.9	121.9	120.7
December.....	185.7	107.8	165.5	279.2	161.0	178.7	164.7	203.7
1923.								
January.....	99.6	88.7	165.1	115.9	128.7	115.6	85.5	95.0
February.....	89.7	83.9	158.8	117.4	125.3	109.7	70.8	87.8

DEPARTMENT STORE SALES BY FEDERAL RESERVE DISTRICTS.

[Average month, 1919=100.]

	District No. 1— Boston (24 stores).	District No. 2— New York (64 stores).	District No. 3— Philadel- phia (18 stores).	District No. 5— Richmond (19 stores).	District No. 6— Atlanta (35 stores).	District No. 7— Chicago (70 stores).	District No. 9— Minne- apolis (25 stores).	District No. 11— Dallas (16 stores).	District No. 12— San Francisco (18 stores).	Index for United States (289 stores).
1919.										
January	78.2	77.0	89.4	75.0	82.0	87.1	91.1	86.0	73.1	81.3
February	67.5	67.8	72.1	68.3	71.2	82.1	76.0	77.4	66.2	72.2
March	85.8	82.8	105.6	95.5	92.3	105.8	100.8	108.0	84.9	94.2
April	100.4	100.9	102.3	109.0	100.8	104.5	106.3	95.4	92.0	101.6
May	102.4	98.2	109.0	100.2	98.0	106.7	102.3	101.8	93.7	101.3
June	98.1	95.0	96.5	97.4	91.1	99.5	103.5	97.4	89.6	96.2
July	75.1	73.2	82.2	76.2	84.7	76.4	82.5	75.8	87.6	78.2
August	77.9	69.6	81.8	69.9	75.9	81.3	89.3	76.9	99.5	79.1
September	94.7	95.0	89.0	94.2	95.1	94.6	97.1	98.6	102.0	95.4
October	121.2	130.0	112.7	114.5	110.0	106.0	106.0	114.8	120.3	116.6
November	119.7	127.5	117.1	120.4	118.9	107.0	103.3	115.6	108.8	116.4
December	179.0	183.0	142.3	179.4	180.0	149.0	141.8	149.3	182.3	167.4
1920.										
January	107.4	110.9	106.1	88.9	100.2	106.1	104.2	103.3	110.0	105.5
February	81.0	87.0	85.7	78.0	88.8	100.0	82.2	93.0	88.5	88.5
March	119.0	122.5	125.5	117.5	117.6	128.8	111.9	128.8	116.5	122.0
April	120.5	117.1	121.3	110.0	124.4	127.2	112.5	118.1	115.7	119.4
May	123.9	128.2	129.3	111.2	128.4	129.9	114.6	122.2	121.1	124.0
June	125.5	121.7	114.5	118.2	113.3	121.2	117.0	117.0	113.8	119.0
July	88.5	88.5	97.6	88.1	94.6	93.0	98.9	91.1	104.3	93.1
August	86.4	78.6	97.2	84.5	96.8	98.9	99.3	92.4	120.5	93.5
September	108.5	102.1	105.7	101.3	107.1	115.1	114.0	118.4	115.9	109.1
October	122.8	135.3	133.8	128.7	137.6	129.1	120.4	137.9	127.5	130.8
November	134.1	142.7	139.0	136.1	136.3	130.4	121.5	138.8	120.8	134.2
December	177.7	185.0	169.0	188.2	185.3	181.7	163.7	179.4	188.0	181.3
1921.										
January	108.8	106.7	108.9	92.1	91.1	92.3	97.6	92.5	107.2	100.4
February	86.3	88.6	88.2	84.1	87.8	87.0	81.9	88.4	95.3	87.9
March	121.2	118.8	125.9	118.2	113.1	112.1	107.9	110.2	116.3	116.4
April	117.8	116.3	124.8	107.6	100.9	110.4	114.0	95.8	109.3	111.9
May	118.2	113.6	121.2	107.0	105.8	112.8	106.8	102.9	115.9	112.5
June	121.6	113.4	113.0	111.8	94.6	105.3	111.2	94.6	107.2	109.0
July	77.7	77.8	90.0	76.8	73.9	80.9	84.5	69.4	95.5	80.8
August	82.7	74.3	92.8	75.9	74.9	85.8	93.8	69.4	118.4	84.7
September	97.6	91.9	90.5	84.0	83.2	99.9	100.4	90.5	109.4	96.1
October	128.1	138.7	138.9	119.8	120.3	112.3	110.8	113.0	124.6	124.7
November	124.4	131.0	136.4	117.3	109.5	113.2	107.7	103.2	115.6	119.7
December	188.3	189.1	171.0	177.5	155.0	158.0	145.7	159.8	184.1	172.8
1922.										
January	100.3	98.4	96.6	75.6	74.1	85.6	85.0	73.9	100.3	89.9
February	83.9	84.8	87.8	72.0	73.3	77.3	71.5	71.9	84.5	79.9
March	109.5	109.3	111.8	93.9	85.2	94.3	91.1	90.7	110.4	101.2
April	125.1	119.0	132.1	105.8	98.3	111.9	104.5	83.7	108.8	112.5
May	122.8	117.7	126.4	103.3	97.6	116.5	103.7	96.4	135.4	115.6
June	121.9	114.5	108.7	103.0	86.3	110.3	101.9	85.7	111.8	107.8
July	81.7	77.8	86.8	71.0	69.8	83.0	83.9	64.0	98.1	80.4
August	87.5	78.2	94.9	72.9	73.9	92.1	93.6	66.2	122.6	87.4
September	114.2	106.7	107.2	90.8	86.4	114.4	105.0	98.8	113.0	106.0
October	134.8	144.8	143.8	119.1	113.8	122.1	119.9	103.9	137.9	129.9
November	134.9	141.6	146.8	122.3	113.1	130.9	107.2	103.7	132.0	130.0
December	197.3	198.5	185.8	184.7	161.8	184.3	160.6	148.8	204.0	185.7
1923.										
January	106.3	107.7	106.1	83.9	83.0	98.5	92.1	79.2	114.2	99.6
February	93.4	91.3	98.0	79.6	78.2	92.5	77.1	74.8	101.9	89.7

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. 3— Philadel- phia (13 stores).	District No. 5— Richmond (19 stores).	District No. 6— Atlanta (22 stores).	District No. 7— Chicago (59 stores).	District No. 9— Minne- apolis (16 stores).	District No. 11— Dallas (19 stores).	District No. 12— San Francisco (29 stores).	Index for United States (265 stores).
1922.										
January	99.1	105.1	95.9	90.8	101.7	106.9	88.5	98.8	106.2	101.4
February	103.6	108.5	104.7	102.4	110.6	117.7	95.6	107.3	111.7	108.7
March	110.7	120.7	116.3	111.7	117.3	127.0	103.3	115.5	120.9	118.2
April	112.2	121.6	113.9	110.6	116.4	124.6	98.7	113.8	122.2	117.5
May	110.9	116.5	110.1	107.0	111.7	122.8	102.5	110.1	114.4	114.0
June	106.2	110.4	109.8	103.7	104.9	115.7	99.2	100.4	107.0	108.3
July	103.7	104.5	105.6	99.8	103.2	113.6	97.8	99.6	108.1	105.5
August	105.0	109.1	111.9	105.0	109.3	125.0	102.0	111.0	112.1	111.8
September	116.9	120.2	121.6	119.5	118.5	128.9	107.7	117.7	118.0	120.4
October	125.1	124.5	127.5	130.3	121.3	134.8	112.6	119.6	120.0	125.6
November	130.0	131.4	126.7	126.0	123.1	136.8	115.5	118.9	124.2	128.3
December	110.5	110.4	105.9	103.2	101.2	115.2	97.2	94.1	107.6	107.4
1923.										
January	104.0	106.6	102.2	99.6	105.2	111.7	100.0	96.0	107.5	105.3
February	115.7	113.0	116.5	113.0	111.8	124.6	107.2	104.8	119.7	115.6

BANKING AND FINANCIAL STATISTICS.

DISCOUNT AND OPEN-MARKET OPERATIONS OF FEDERAL RESERVE BANKS.

VOLUME OF OPERATIONS DURING FEBRUARY, 1923.

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.		February, 1923.	February, 1922.
Boston.....	\$391,594,946	\$25,061,592	\$2,915,370	\$698,330		\$421,270,238	\$325,952,234
New York.....	2,393,408,807	50,179,142	43,319,000	21,037,500		2,512,944,449	1,026,458,540
Philadelphia.....	227,102,417	16,248,251	45,100	39,000		243,434,768	254,007,729
Cleveland.....	113,961,557	22,720,273	102,900	11,226,000		148,010,730	192,205,505
Richmond.....	144,805,411					144,805,411	159,622,316
Atlanta.....	23,830,401	6,915,870	1,954,700	6,500,000		39,200,971	62,889,805
Chicago.....	162,007,187	26,354,364	10,808,200	9,284,000		208,453,751	195,691,652
St. Louis.....	64,382,181	5,520,748	628,100	2,662,000		73,193,029	65,610,430
Minneapolis.....	9,668,616	5,258,653	2,989,550	135,000		18,051,819	20,711,710
Kansas City.....	26,493,827		6,716,800	920,000		34,130,627	48,224,888
Dallas.....	12,980,449	4,579,156		5,000,000		22,559,605	23,660,883
San Francisco.....	150,310,787	22,625,729	4,200			172,940,716	149,721,389
Total: February, 1923.....	3,720,546,586	186,463,778	74,453,920	57,501,830		4,038,996,114	
February, 1922.....	2,080,373,333	139,020,498	170,252,250	135,060,000	\$51,000		2,524,757,081
2 months ending—							
Feb. 28, 1923.....	7,411,805,402	339,218,547	151,824,230	1,772,447,030		9,675,295,209	
Feb. 28, 1922.....	4,425,738,235	242,930,994	232,409,750	276,160,500	111,029		5,177,350,508

VOLUME OF BILLS DISCOUNTED DURING FEBRUARY, 1923, BY CLASSES OF PAPER; ALSO NUMBER OF MEMBER BANKS ACCOMMODATED.

Federal reserve bank.	Customers' paper secured by Government obligations.	Member banks' 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.....	\$990,975	\$169,587,600		\$220,524,397	\$318,648	\$60,000			
New York.....	58,835	2,277,456,600		115,050,368	229,637		\$265,864	\$23,940	
Philadelphia.....	197,560	160,793,400		65,916,577	158,654				
Cleveland.....	134,961	89,651,850	\$38,000	22,359,743	106,567	44,560			
Richmond.....	264,044	124,710,754	4,251,600	13,356,309	1,854,395	900			
Atlanta.....	158,032	7,767,600	563,850	12,994,428	2,167,551	99,480			
Chicago.....	60,050	119,120,150	154,645	38,987,424	3,620,995				
St. Louis.....	32,141	46,778,700	80,000	15,167,106	1,367,693	62,772	336,408	174,527	\$50,000
Minneapolis.....	510	2,339,440	698,943	5,499,557	734,190	395,976			
Kansas City.....	148,130	20,917,100		2,852,346	974,749	1,563,759			
Dallas.....	2,450	6,711,000	481,060	2,654,416	1,499,246	1,622,277			
San Francisco.....	164,890	104,037,488	12,152,457	31,487,715	768,415	583,197	244,130	621,507	40,000
Total: February, 1923.....	2,212,578	3,129,871,682	18,420,555	546,850,386	13,800,770	4,432,921	846,402	819,974	90,000
January, 1923.....	2,231,345	3,152,212,623	18,940,041	488,894,081	17,609,789	6,372,161	333,761	284,256	50,000
February, 1922.....	17,081,217	1,267,616,523	26,411,796	730,839,912	27,567,790	6,909,724		92,410	
January, 1922.....	20,310,308	1,658,227,251	34,675,118	574,166,167	38,959,741	12,390,584		872,497	

Federal reserve bank.	Trade acceptances.		Total, all classes.	Total reduced to a common maturity basis. ¹		Member banks.		
	Foreign.	Domestic.		Amount	Per cent of total.	Number in district Feb. 28.	Accommodated.	
							Number.	Per cent.
Boston.....		\$113,326	\$391,594,946	\$405,453,888	10.9	427	194	45.4
New York.....	\$173,012	150,551	2,393,408,807	1,295,749,395	34.8	812	341	42.0
Philadelphia.....		36,226	227,102,417	279,592,485	7.5	715	270	37.8
Cleveland.....		1,625,846	113,961,557	133,718,259	3.6	882	220	24.9
Richmond.....		367,409	144,805,411	187,797,614	5.1	635	244	38.4
Atlanta.....		79,460	23,830,401	130,243,224	3.5	542	226	41.7
Chicago.....		63,923	162,007,187	612,791,948	16.5	1,441	444	30.8
St. Louis.....		332,834	64,382,181	176,338,080	4.7	616	169	27.4
Minneapolis.....			9,668,616	73,661,433	2.0	1,012	174	17.2
Kansas City.....		37,743	26,493,827	97,994,007	2.6	1,152	240	20.8
Dallas.....		10,000	12,980,449	86,105,699	2.3	861	222	25.8
San Francisco.....		210,988	150,310,787	241,100,554	6.5	822	232	28.2
Total: February, 1923.....	173,012	3,028,306	3,720,546,586	3,720,546,586	100.0	9,917	2,976	30.0
January, 1923.....	110,000	4,218,759	3,691,258,816			9,911	3,294	33.2
February, 1922.....		3,853,961	2,080,373,333			9,858	4,847	49.1
January, 1922.....		5,773,237	2,345,364,903			9,850	5,350	54.3

¹ Total discounts multiplied by ratio of average maturity of bills discounted by each bank to average maturity (6.70) for system.

VOLUME OF BILLS DISCOUNTED DURING FEBRUARY, 1923, 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.....	\$329,306,292	\$62,288,654	\$391,594,946	4.10	6.93
New York.....	1,955,192,164	438,216,643	2,393,408,807	4.09	3.63
Philadelphia.....		227,102,417	227,102,417	4.50	8.24
Cleveland.....		113,961,557	113,961,557	4.50	7.86
Richmond.....		144,805,411	144,805,411	4.50	8.68
Atlanta.....		23,830,401	23,830,401	4.50	36.60
Chicago.....		162,007,187	162,007,187	4.50	25.33
St. Louis.....		64,382,181	64,382,181	4.50	18.34
Minneapolis.....		9,668,616	9,668,616	4.50	51.02
Kansas City.....		26,493,827	26,493,827	4.50	24.77
Dallas.....		12,980,449	12,980,449	4.50	44.42
San Francisco.....	150,310,787		150,310,787	4.00	10.74
Total: February, 1923.....	2,434,809,243	1,285,737,343	3,720,546,586	4.28	6.70
January, 1923.....	2,990,063,833	701,194,983	3,691,258,816	4.25	6.08

VOLUME OF BANKERS' AND TRADE ACCEPTANCES PURCHASED DURING FEBRUARY, 1923, BY CLASSES.

Federal reserve bank.	Bankers' acceptances.				Trade acceptances.			Total bills purchased.	Total reduced to a common maturity basis. ¹	
	Foreign.	Domestic.	Dollar exchange.	Total.	Foreign.	Domestic.	Total.		Amount.	Per cent of total.
Boston.....	\$17,431,170	\$7,845,422	\$785,000	\$26,061,592				\$26,061,592	\$16,378,059	8.8
New York.....	30,826,449	14,821,452	3,001,874	48,649,775	\$1,529,367		\$1,529,367	50,179,142	27,018,393	14.8
Philadelphia.....	12,924,245	2,884,006	440,000	16,248,251				16,248,251	32,052,700	17.2
Cleveland.....	16,998,963	5,619,156	102,154	22,720,273				22,720,273	30,209,585	16.2
Richmond.....										
Atlanta.....	4,806,637	2,039,233	10,000	6,915,870				6,915,870	7,917,763	4.3
Chicago.....	18,211,161	7,319,518	823,685	26,354,364				26,354,364	33,797,252	18.1
St. Louis.....	4,782,636	613,112	125,000	5,520,748				5,520,748	6,979,466	3.8
Minneapolis.....	3,934,547	1,289,106	35,000	5,258,653				5,258,653	6,423,317	3.4
Kansas City.....										
Dallas.....	3,212,035	1,114,062	253,059	4,579,156				4,579,156	5,073,253	2.7
San Francisco.....	16,087,657	6,033,203	504,869	22,625,729				22,625,729	20,013,990	10.7
Total: February, 1923.....	129,275,500	49,578,270	6,080,641	184,934,411	1,529,367		1,529,367	186,463,778	186,463,778	100.0
January, 1923.....	104,402,240	43,905,920	3,557,303	151,865,463	889,306		889,306	152,754,769		
February, 1922.....	96,606,585	36,846,851	5,243,963	138,697,399	323,099		323,099	139,020,498		
January, 1922.....	68,832,538	29,535,526	5,426,498	103,794,562	71,787	\$44,147	115,934	103,910,496		

¹ Total purchases multiplied by ratio of average maturity of bills purchased by each bank to average maturity (43.14) for system.

VOLUME OF ACCEPTANCES PURCHASED DURING FEBRUARY, 1923, BY RATES OF DISCOUNT CHARGED; ALSO AVERAGE RATES AND MATURITIES.

Federal reserve bank.	3½ per cent.	4 per cent.	4½ per cent.	4¾ per cent.	4¾ per cent.	4¾ per cent.	4¾ per cent.	Total.	Average rate (365-day basis).	Average maturity.
									<i>Per cent.</i>	<i>Days.</i>
Boston.....	\$7,126,536	\$16,703,792	\$1,983,963	\$162,301	\$85,000			\$26,061,592	4.05	27.11
New York.....	4,123,674	42,801,535	1,499,240	222,422		\$1,439,703	\$92,568	50,179,142	4.09	23.75
Philadelphia.....	320,790	15,037,616	889,845					16,248,251	4.07	85.11
Cleveland.....	4,158,490	14,348,291	3,772,784	380,740	35,620	24,348		22,720,273	4.09	57.36
Richmond.....										
Atlanta.....	542,203	3,845,332	16,904			2,511,431		6,915,870	4.17	49.39
Chicago.....	5,004,453	16,207,915	5,032,980	84,016	25,000			26,354,364	4.08	55.33
St. Louis.....	1,173,053	4,347,695						5,520,748	4.04	54.54
Minneapolis.....	1,317,639	3,609,144	331,870					5,258,653	4.06	52.70
Kansas City.....										
Dallas.....	1,502,068	2,984,747	66,125	26,216				4,579,156	4.04	47.80
San Francisco.....	4,938,133	8,803,641	8,728,432	155,523				22,625,729	4.08	38.16
Total: February, 1923.....	30,207,039	128,689,708	22,322,143	1,031,218	145,620	3,975,482	92,568	186,463,778	4.08	43.14
January, 1923.....	28,483,593	97,118,521	22,610,160	2,054,100	94,513	2,184,022		152,754,769	4.09	37.74

¹ Includes \$209,860 of acceptances purchased at 4¾ per cent.

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 RATE OF EARNINGS DURING FEBRUARY, 1923.

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.....	\$99,785,357	\$57,621,860	\$13,740,821	\$28,422,676	\$301,021	\$175,888	\$42,598	\$82,535	Per ct.	Per ct.	Per ct.	Per ct.
New York.....	323,911,940	242,469,240	28,507,946	52,934,754	1,000,140	753,418	89,153	157,574	3.93	3.98	4.04	3.79
Philadelphia.....	112,523,159	56,710,730	26,708,140	29,104,289	374,364	195,772	83,642	95,050	4.02	4.05	4.08	3.88
Cleveland.....	95,442,255	26,965,669	32,013,533	36,463,053	308,347	92,972	100,502	109,873	4.33	4.50	4.07	4.25
Richmond.....	42,542,141	40,762,170	439,071	1,340,900	144,544	140,718	1,404	2,422	4.14	4.50	4.09	3.93
Atlanta.....	32,279,194	18,593,931	7,325,958	6,359,305	145,718	64,187	23,711	17,423	4.43	4.50	4.17	2.36
Chicago.....	148,132,498	57,952,607	15,503,095	74,676,790	465,922	200,097	47,937	217,888	4.25	4.50	4.22	3.57
St. Louis.....	56,627,972	15,793,571	11,964,980	28,869,421	183,299	54,557	37,149	91,593	4.10	4.50	4.03	3.80
Minneapolis.....	32,618,887	18,141,675	3,390,823	11,086,389	110,149	62,629	11,018	36,502	4.22	4.50	4.05	4.14
Kansas City.....	57,712,286	17,650,475	83,214	39,878,607	183,898	60,940	291	124,667	4.40	4.50	4.24	4.29
Dallas.....	49,476,056	16,302,839	22,120,931	11,052,286	156,479	56,326	68,793	31,360	4.20	4.50	4.56	4.07
San Francisco.....	101,809,999	41,789,903	24,849,804	35,170,292	321,676	129,182	79,360	113,134	4.12	4.50	4.05	3.70
Total: Feb., 1923.....	1,152,861,754	610,754,670	186,648,316	355,458,768	3,652,160	1,986,681	585,458	1,080,021	4.12	4.00	4.16	4.19
Jan., 1923.....	1,191,218,079	548,996,091	220,733,187	421,469,246	4,077,842	1,986,515	754,081	1,337,171	4.13	4.24	4.09	3.96
Feb., 1922.....	1,215,221,369	772,415,829	87,400,347	355,209,372	4,165,669	2,903,831	284,686	976,285	4.03	4.27	4.01	3.74
Jan., 1922.....	1,304,164,715	968,971,172	98,740,965	236,149,385	5,114,751	4,106,475	372,758	634,122	4.47	4.90	4.25	3.58
									4.62	4.99	4.44	3.16

HOLDINGS OF DISCOUNTED BILLS, BY CLASSES.

(End of February figures. In thousands of dollars.)

Federal reserve bank.	Total.	Cus- tomers' paper secured by Govern- ment obliga- tions.	Member banks' collateral notes.		Com- mercial paper n. e. s.	Agricul- tural paper.	Live- stock paper.	Bankers' acceptances.				Trade acceptances.		
			Secured by Govern- ment obliga- tions.	Other- wise se- cured.				Foreign trade.		Domes- tic trade.	Dollar ex- change.	Foreign trade.		Domes- tic trade.
								Im- ports.	Ex- ports.			Im- ports.	Ex- ports.	
Boston.....	48,565	1,378	18,708	.....	27,539	755	49	.....	.....	.....	.....	.....	.....	136
New York.....	210,222	73	179,143	.....	30,341	253	.....	100	117	26	.....	4	.....	165
Philadelphia.....	53,556	342	38,486	.....	14,286	330	.....	.....	.....	.....	.....	.....	.....	112
Cleveland.....	23,252	381	16,173	38	5,111	344	346	.....	.....	.....	.....	.....	.....	859
Richmond.....	43,793	344	18,593	1,350	18,680	4,104	92	.....	.....	.....	.....	.....	.....	630
Atlanta.....	18,505	129	1,958	109	10,107	5,705	343	.....	.....	.....	.....	.....	.....	154
Chicago.....	75,682	136	41,484	85	19,543	14,107	.....	.....	.....	.....	.....	.....	.....	327
St. Louis.....	21,199	44	13,013	40	5,570	2,225	171	.....	.....	.....	.....	.....	.....	136
Minneapolis.....	16,022	8	481	391	2,056	6,146	6,748	.....	.....	.....	.....	.....	.....	192
Kansas City.....	17,851	124	4,559	.....	2,479	4,220	6,445	.....	.....	.....	.....	.....	.....	24
Dallas.....	16,913	14	1,299	198	4,385	5,006	5,971	.....	.....	.....	.....	.....	.....	40
San Francisco.....	50,200	269	18,900	6,579	17,147	3,191	2,547	353	204	677	90	.....	.....	243
Total: Feb. 28, 1923.....	595,760	3,242	352,797	8,790	157,244	46,386	22,712	453	321	703	90	4	.....	3,018
Jan. 31, 1923.....	597,251	2,944	374,538	8,409	131,367	53,552	22,445	417		190	70	10	.....	3,309
Feb. 28, 1922.....	712,577	18,459	266,155	14,074	256,335	111,822	39,147	.....		234	.....	.....	.....	6,351
Jan. 31, 1922.....	838,885	22,495	341,091	16,837	281,387	121,702	45,919	249		931	.....	.....	.....	8,274

HOLDINGS OF BANKERS' AND TRADE ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTANCES.

[End of February 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 trade.		Domestic trade.	Dollar exchange.	Total.	Foreign trade.		Domestic trade.
					Imports.	Exports.				Imports.	Exports.	
Boston.....	12,681	12,545	136	12,545	6,079	2,541	3,695	230	136			136
New York.....	30,882	30,470	412	29,383	13,618	6,701	7,405	1,659	1,499	1,334		165
Philadelphia.....	28,195	28,083	112	28,083	14,734	6,780	5,842	727	112			112
Cleveland.....	36,299	35,440	859	35,440	20,742	7,776	6,735	187	859			859
Richmond.....	795	165	630	165			165		630			630
Atlanta.....	8,437	8,283	154	8,283	1,703	3,958	2,612	10	154			154
Chicago.....	28,168	27,841	327	27,841	9,611	10,773	6,548	909	327			327
St. Louis.....	10,175	10,039	136	10,039	3,480	4,145	1,864	550	136			136
Minneapolis.....	5,151	4,959	192	4,959	2,200	1,435	1,289	35	192			192
Kansas City.....	99	75	24	75			75		24			24
Dallas.....	21,443	21,403	40	21,403	9,912	7,981	1,650	1,860	40			40
San Francisco.....	29,942	28,375	1,567	29,657	15,787	8,085	4,945	840	285	42		243
Total: Feb. 28, 1923.....	212,267			207,873	97,866	60,175	42,825	7,007	4,394	1,376		3,018
Jan. 31, 1923.....	192,562			188,105	145,612	36,371	6,122	4,457		1,148		3,309
Feb. 28, 1922.....	100,043			93,590	67,136		22,612	3,842	6,453	90		6,354
Purchased in open market:												
Feb. 28, 1923.....		207,678		206,306	97,413	59,854	42,122	6,917	1,372	1,372		
Jan. 31, 1923.....		188,566		187,428	145,195		36,181	6,052	1,138	1,138		
Feb. 28, 1922.....		93,458		93,356	67,136		22,378	3,842	102	99		3
Discounted for member banks:												
Feb. 28, 1923.....			4,589	1,567	453	321	703	90	3,022	4		3,018
Jan. 31, 1923.....			3,996	677	417		190	70	3,319	10		3,309
Feb. 28, 1922.....			6,585	234			234		6,351			6,351

HOLDINGS OF BANKERS' ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTING INSTITUTIONS.

[End of February 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.....	12,545	7,989	2,394	207	1,123	332
New York.....	29,383	12,260	8,827	3,127	3,817	1,352
Philadelphia.....	28,083	10,264	8,860	3,467	3,789	1,703
Cleveland.....	35,440	11,790	11,086	4,502	5,831	2,231
Richmond.....	165			90	75	
Atlanta.....	8,283	3,065	3,020	1,598	248	352
Chicago.....	27,841	12,881	12,640	2,021	202	97
St. Louis.....	10,039	4,009	3,379	1,679	225	747
Minneapolis.....	4,959	2,182	1,226	830	231	490
Kansas City.....	75	75				
Dallas.....	21,403	9,358	5,662	3,666	1,975	742
San Francisco.....	29,657	9,484	7,022	4,306	5,892	2,953
Total: Feb. 28, 1923.....	207,873	83,357	64,616	25,493	23,408	10,999
Jan. 31, 1923.....	188,105	70,180	57,767	23,392	24,254	12,512
Feb. 28, 1922.....	93,590	41,932	28,217	8,470	7,371	7,600
Purchased in open market:						
Feb. 28, 1923.....	206,306	82,586	64,107	25,438	23,307	10,868
Jan. 31, 1923.....	187,428	69,826	57,605	23,392	24,189	12,416
Feb. 28, 1922.....	93,356	41,826	28,089	8,470	7,371	7,600
Discounted for member banks:						
Feb. 28, 1923.....	1,567	771	509	55	101	131
Jan. 31, 1923.....	677	354	162		65	96
Feb. 28, 1922.....	234	106	128			

CONDITION OF FEDERAL RESERVE BANKS.

CASH RESERVES, TOTAL DEPOSITS, FEDERAL RESERVE NOTE CIRCULATION, AND RESERVE PERCENTAGES FOR MARCH AND FEBRUARY, 1923.

[Daily averages. Amounts in thousands of dollars.]

Federal reserve bank.	Total cash reserves.		Total deposits.		Federal reserve notes in circulation.		Reserve percentages.	
	March.	February.	March.	February.	March.	February.	March.	February.
Boston.....	250,914	236,864	128,373	130,587	202,812	198,974	75.8	71.9
New York.....	1,078,621	1,022,159	723,709	738,236	572,488	562,725	83.2	78.6
Philadelphia.....	226,353	225,380	116,774	114,731	202,805	202,729	70.8	71.0
Cleveland.....	306,187	314,660	162,432	159,328	231,382	232,318	77.7	80.3
Richmond.....	107,058	115,126	65,742	63,559	85,761	89,534	70.7	75.2
Atlanta.....	142,876	149,340	60,745	59,620	124,283	120,912	77.2	82.7
Chicago.....	514,481	536,204	285,055	282,294	394,196	387,691	75.7	80.0
St. Louis.....	109,981	117,298	75,863	77,130	86,367	87,213	67.8	71.4
Minneapolis.....	79,886	82,571	52,210	52,907	56,220	56,056	73.7	75.8
Kansas City.....	94,985	104,970	88,063	88,917	64,206	66,159	62.4	67.7
Dallas.....	40,950	44,018	55,599	56,052	30,291	31,921	47.7	50.0
San Francisco.....	238,333	260,092	145,975	146,396	202,384	208,501	68.4	73.3
Total: 1923.....	3,190,625	3,208,682	1,960,540	1,969,757	2,253,195	2,244,733	75.7	76.1
1922.....	3,095,762	3,070,045	1,794,895	1,814,446	2,195,131	2,176,529	77.6	76.9
1921.....	2,403,470	2,343,537	1,808,529	1,804,476	2,979,486	3,068,578	50.2	49.6
1920.....	2,058,293	2,053,422	2,032,787	2,002,503	3,040,440	2,946,863	42.7	43.3
1919.....	2,202,368	2,183,641	1,951,732	1,855,124	2,503,350	2,462,941	51.6	52.5

¹ Calculated on basis of net deposits and Federal reserve notes in circulation.

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, FEBRUARY 28 TO MARCH 21, 1923.

RESOURCES.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.
Gold and gold cer- tificates:													
Feb. 28.....	302,611	17,357	139,573	21,378	12,229	6,697	5,663	52,646	5,376	7,785	2,966	11,147	19,794
Mar. 7.....	311,550	19,900	144,503	22,103	12,570	6,910	5,678	52,679	5,440	7,799	2,981	11,091	19,896
Mar. 14.....	313,211	17,438	147,668	22,330	12,860	7,105	5,717	52,950	5,560	7,795	3,007	11,104	19,677
Mar. 21.....	323,572	17,516	159,320	22,570	13,159	7,291	5,829	53,228	5,097	7,803	3,032	11,076	19,651
Gold settlement fund—F. R. Board:													
Feb. 28.....	604,008	40,985	257,603	30,733	91,180	27,105	17,686	36,156	9,709	23,217	29,461	10,531	29,642
Mar. 7.....	645,285	38,119	261,805	35,969	70,580	26,655	14,961	70,014	6,427	28,629	32,676	11,976	41,474
Mar. 14.....	638,208	31,001	286,334	29,668	71,883	25,646	19,909	57,505	8,108	24,588	30,961	10,618	42,287
Mar. 21.....	648,226	47,843	292,778	26,130	59,848	15,976	26,295	77,147	6,509	22,438	33,413	9,404	36,445
Gold with F. R. agents:													
Feb. 28.....	2,108,767	163,443	624,745	161,193	206,334	64,085	109,784	391,889	80,133	46,799	58,772	14,366	187,224
Mar. 7.....	2,074,043	170,942	624,569	163,759	207,239	62,361	109,497	364,071	79,734	46,606	55,061	14,207	175,997
Mar. 14.....	2,068,613	177,954	669,402	160,279	205,722	60,362	108,679	367,872	81,099	47,848	54,252	14,674	180,470
Mar. 21.....	2,052,103	175,163	639,225	153,416	206,889	58,696	107,926	361,170	68,084	47,212	53,553	12,651	168,118
Gold redemption fund:													
Feb. 28.....	57,427	11,827	8,469	9,615	2,436	4,008	1,484	10,275	2,561	1,226	1,244	1,318	2,964
Mar. 7.....	52,763	8,514	11,471	6,583	1,852	4,755	1,098	6,789	3,388	1,060	1,429	1,318	4,508
Mar. 14.....	58,262	5,618	9,486	8,590	3,731	5,517	1,239	11,754	2,450	1,451	1,641	1,577	5,228
Mar. 21.....	50,400	7,494	7,547	5,486	2,938	5,978	1,342	7,099	2,770	1,620	1,745	1,382	4,999
Total gold reserves:													
Feb. 28.....	3,072,813	233,612	1,030,390	222,919	312,179	101,895	134,617	490,966	97,779	79,027	92,443	37,362	239,624
Mar. 7.....	3,083,641	237,475	1,042,348	228,414	298,241	100,681	131,232	493,553	94,989	84,094	92,147	38,592	241,875
Mar. 14.....	3,078,294	232,011	1,052,890	220,867	293,696	98,830	135,544	490,081	97,197	81,682	89,861	37,973	247,662
Mar. 21.....	3,074,361	248,016	1,098,870	207,602	282,834	87,941	135,392	498,644	80,460	79,073	91,743	34,513	229,213
Reserves other than gold:													
Feb. 28.....	128,787	12,249	19,964	7,570	10,354	12,576	8,863	21,187	19,235	1,334	4,834	5,324	5,297
Mar. 7.....	117,633	9,579	19,199	6,015	8,567	11,812	7,952	19,937	19,243	1,076	4,189	4,806	5,258
Mar. 14.....	118,275	10,948	17,043	7,497	7,774	11,989	7,789	19,641	20,367	829	4,249	5,277	4,872
Mar. 21.....	118,323	10,224	16,132	8,168	8,086	12,487	7,308	19,113	21,846	844	4,385	4,843	4,887
Total reserves:													
Feb. 28.....	3,201,600	245,861	1,050,354	230,489	322,533	114,471	143,480	512,153	117,014	80,361	97,277	42,686	244,921
Mar. 7.....	3,201,274	247,054	1,061,547	234,429	306,808	112,493	139,184	513,490	114,232	85,170	96,336	43,398	247,133
Mar. 14.....	3,196,569	242,959	1,069,933	228,364	301,470	110,819	143,333	509,722	117,564	82,511	94,110	43,250	252,534
Mar. 21.....	3,192,624	258,240	1,115,002	215,770	290,920	100,428	142,700	517,757	102,306	79,917	96,128	39,356	234,100
Nonreserve cash:													
Feb. 28.....	45,894	3,263	9,278	1,708	3,093	3,353	5,229	6,550	2,190	890	2,675	3,527	4,128
Mar. 7.....	70,144	12,329	10,058	2,961	3,358	3,523	7,927	6,574	5,106	1,855	3,908	3,869	8,576
Mar. 14.....	67,917	10,347	8,366	3,088	4,061	3,351	8,362	6,282	4,695	2,000	3,952	4,400	9,003
Mar. 21.....	69,451	10,801	9,334	2,882	3,839	3,089	8,311	7,048	5,176	1,845	3,651	3,957	9,518

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, FEBRUARY 28 TO MARCH 21, 1923—
 Continued.

RESOURCES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Bills discounted:													
Secured by U. S. Government obligations—													
Feb. 28.....	356,039	20,086	179,216	38,828	16,554	18,937	2,087	41,621	13,057	489	4,683	1,313	19,169
Mar. 7.....	330,093	19,707	170,341	34,004	12,756	16,027	2,984	45,770	7,765	1,468	5,416	1,840	12,015
Mar. 14.....	361,286	22,072	176,173	40,890	26,195	17,754	2,001	46,804	8,524	1,488	7,883	1,254	10,247
Mar. 21.....	351,861	22,947	136,465	43,622	21,276	23,329	3,448	53,822	10,594	4,350	11,268	1,715	19,025
Other bills discounted—													
Feb. 28.....	239,721	28,479	31,006	14,728	6,698	24,856	16,418	34,062	8,142	15,533	13,168	15,600	31,031
Mar. 7.....	241,394	21,882	29,898	11,541	14,877	25,361	16,421	30,983	11,092	15,107	13,368	16,712	34,152
Mar. 14.....	251,773	27,859	33,309	13,407	13,786	25,708	13,993	33,084	10,701	15,590	14,015	17,572	32,679
Mar. 21.....	278,126	27,165	33,572	17,752	21,212	28,505	15,990	38,920	14,885	16,733	15,767	17,083	30,540
Bills bought in open market:													
Feb. 28.....	207,678	12,545	30,470	28,083	35,440	165	8,283	27,841	10,039	4,959	75	21,403	28,375
Mar. 7.....	218,886	12,854	29,490	28,657	38,774	680	9,659	29,499	10,162	4,182	1,077	21,252	32,580
Mar. 14.....	225,416	17,111	35,264	28,620	38,388	780	11,532	28,375	9,923	3,927	1,077	18,756	31,663
Mar. 21.....	237,965	17,196	29,242	28,302	44,519	775	16,074	28,400	11,997	3,197	1,077	21,478	35,708
U. S. bonds and notes:													
Feb. 28.....	173,975	6,091	27,328	24,438	12,356	1,341	459	7,863	18,175	11,669	33,645	2,989	27,621
Mar. 7.....	157,976	5,374	12,836	24,438	12,355	1,341	561	7,209	18,145	11,923	33,299	2,879	27,616
Mar. 14.....	160,679	5,374	14,427	24,438	12,355	1,341	531	7,566	18,118	12,935	33,699	2,879	27,616
Mar. 21.....	163,589	5,637	15,962	24,438	12,355	1,341	540	7,299	18,124	14,065	32,932	3,279	27,617
U. S. certificates of indebtedness:													
Feb. 28.....	189,099	22,101	21,470	4,632	25,214		9,531	66,638	10,715	630	12,413	8,629	7,126
Mar. 7.....	186,911	22,073	13,220	4,632	25,259		14,531	66,491	10,708	729	12,413	9,729	7,126
Mar. 14.....	184,034	22,069	10,000	4,632	25,269		14,531	66,719	10,718	730	12,413	9,827	7,126
Mar. 21.....	128,322	8,544	1,700	4,606	19,271		9,501	51,375	10,300	869	5,871	9,160	7,125
Municipal warrants:													
Mar. 21.....	41			41									
Total earnings assets:													
Feb. 28.....	1,166,512	89,302	289,490	110,709	96,262	45,299	36,778	178,024	60,128	33,280	63,984	49,934	113,322
Mar. 7.....	1,135,200	81,890	255,775	103,302	104,021	43,409	44,166	179,922	57,872	3,409	65,373	52,412	113,489
Mar. 14.....	1,183,188	94,485	269,173	112,047	115,993	45,583	42,588	182,558	57,984	34,671	68,487	50,288	109,331
Mar. 21.....	1,159,904	81,489	216,941	118,761	118,633	53,950	45,553	179,816	65,900	39,214	66,915	52,717	120,015
Bank premises:													
Feb. 28.....	47,863	4,434	10,855	676	7,661	2,617	2,199	8,753	923	1,052	4,790	1,937	1,963
Mar. 7.....	47,937	4,434	10,872	676	7,704	2,617	2,211	8,756	923	1,052	4,790	1,937	1,962
Mar. 14.....	48,108	4,434	10,873	676	7,807	2,617	2,216	8,747	923	1,065	4,831	1,937	1,979
Mar. 21.....	48,761	4,434	11,338	676	7,866	2,617	2,305	8,715	926	1,071	4,831	1,937	2,045
Five per cent redemption fund against F. R. bank notes:													
Feb. 28.....	311							65			200	46	
Mar. 7.....	311							65			200	46	
Mar. 14.....	291							65			200	26	
Mar. 21.....	291							65			200	26	
Uncollected items:													
Feb. 28.....	608,167	51,870	126,709	50,201	59,748	55,449	25,062	89,455	35,469	13,774	41,386	19,043	40,001
Mar. 7.....	618,956	52,262	118,592	50,619	58,866	54,893	27,575	91,791	40,509	16,227	40,536	26,573	40,513
Mar. 14.....	689,039	61,841	152,414	58,991	68,390	59,857	28,908	93,216	40,650	16,196	40,777	25,222	42,577
Mar. 21.....	645,874	54,059	132,557	58,213	65,079	59,114	28,311	88,586	38,606	14,487	38,698	24,904	43,260
All other resources:													
Feb. 28.....	16,807	431	1,742	598	855	432	453	1,391	543	1,842	1,123	2,242	5,155
Mar. 7.....	17,120	466	1,744	636	963	443	501	1,285	584	1,879	1,244	2,241	5,134
Mar. 14.....	17,348	492	1,896	667	936	439	521	1,250	608	1,882	1,219	2,278	5,160
Mar. 21.....	14,439	192	1,373	376	631	444	507	1,005	365	1,808	972	2,196	4,570
Total resources:													
Feb. 28.....	5,087,084	395,161	1,488,428	394,381	490,092	221,621	213,201	796,391	216,270	131,199	211,435	119,415	409,490
Mar. 7.....	5,091,002	398,435	1,458,588	392,623	481,720	217,378	221,554	801,913	219,229	139,692	212,587	130,476	416,807
Mar. 14.....	5,202,460	414,558	1,512,653	403,883	498,657	222,666	225,928	801,850	222,427	138,325	213,576	127,401	420,584
Mar. 21.....	5,131,344	409,215	1,486,545	396,678	486,968	219,642	227,687	802,992	213,279	138,342	211,395	125,063	413,508

LIABILITIES.

[In thousands of dollars.]

Capital paid in:													
Feb. 28.....	108,867	8,046	29,128	9,609	11,951	5,656	4,419	14,964	4,906	3,572	4,657	4,182	7,777
Mar. 7.....	108,852	8,046	29,128	9,609	11,951	5,656	4,420	14,964	4,907	3,570	4,655	4,182	7,764
Mar. 14.....	108,483	8,046	28,888	9,459	11,975	5,653	4,419	14,964	4,908	3,570	4,647	4,182	7,767
Mar. 21.....	108,563	8,046	28,888	9,459	11,974	5,657	4,420	15,031	4,914	3,585	4,639	4,183	7,767
Surplus:													
Feb. 28.....	218,369	16,312	59,800	18,749	23,495	11,288	8,942	30,398	9,665	7,473	9,488	7,496	15,263
Mar. 7.....	218,369	16,312	59,800	18,749	23,495	11,288	8,942	30,398	9,665	7,473	9,488	7,496	15,263
Mar. 14.....	218,369	16,312	59,800	18,749	23,495	11,288	8,942	30,398	9,665	7,473	9,488	7,496	15,263
Mar. 21.....	218,369	16,312	59,800	18,749	23,495	11,288	8,942	30,398	9,665	7,473	9,488	7,496	15,263

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON WEDNESDAYS, FEBRUARY 28 TO MARCH 21, 1923—
 Continued.

LIABILITIES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Deposits:													
Government—													
Feb. 28.....	43,401	5,033	12,128	1,652	1,998	2,455	2,916	2,518	4,111	2,260	2,598	1,583	4,149
Mar. 7.....	38,773	1,772	10,807	579	4,366	1,553	3,053	4,378	2,978	2,481	2,248	1,672	2,886
Mar. 14.....	42,442	5,133	479	3,905	4,167	4,317	3,995	3,199	3,609	2,168	3,717	2,152	5,601
Mar. 21.....	98,627	8,850	28,694	3,590	10,373	6,505	5,904	17,127	2,605	2,345	5,300	2,408	4,926
Member bank—													
reserve ac-													
count—													
Feb. 28.....	1,887,552	118,175	712,106	113,449	158,292	63,806	53,029	279,117	69,993	46,526	81,960	52,626	138,473
Mar. 7.....	1,879,697	123,700	683,969	115,821	152,552	62,313	55,643	280,978	73,972	51,776	82,459	54,605	141,909
Mar. 14.....	1,932,714	123,303	724,458	115,378	162,684	61,349	57,106	281,017	74,054	52,195	83,895	53,496	143,779
Mar. 21.....	1,866,475	120,424	681,053	114,124	157,589	60,595	56,503	277,022	70,546	53,440	83,233	51,283	140,663
Other deposits—													
Feb. 28.....	21,364	458	10,513	405	1,358	123	242	1,340	772	1,054	942	358	3,799
Mar. 7.....	24,392	672	9,985	1,515	2,378	246	273	1,064	760	1,568	1,701	346	3,884
Mar. 14.....	20,633	472	9,816	502	1,287	193	216	1,207	624	784	847	248	4,437
Mar. 21.....	19,931	426	9,556	1,033	984	167	260	905	580	545	939	322	4,214
Total deposits:													
Feb. 28.....	1,952,317	123,666	734,747	115,506	161,648	66,384	56,187	282,975	74,876	49,840	85,500	54,567	146,421
Mar. 7.....	1,942,862	126,144	704,761	117,915	159,296	64,112	58,969	286,420	77,710	55,825	86,408	56,623	148,679
Mar. 14.....	1,995,789	128,908	734,753	119,785	168,138	65,859	61,317	285,423	78,287	55,147	88,459	55,896	153,817
Mar. 21.....	1,985,033	129,700	719,303	118,747	168,946	67,267	62,667	295,054	73,731	56,330	89,472	54,013	149,803
Federal reserve notes in actual circulation:													
Feb. 28.....	2,246,943	198,080	568,124	203,579	235,718	87,735	119,017	392,898	87,606	55,623	65,298	30,800	202,465
Mar. 7.....	2,256,302	202,499	570,391	200,809	232,328	83,855	123,654	394,691	87,035	56,446	65,234	31,210	205,150
Mar. 14.....	2,242,902	202,290	567,169	202,025	230,514	84,976	124,317	391,487	86,936	55,885	64,539	30,381	202,383
Mar. 21.....	2,231,487	202,940	568,287	198,180	224,874	84,063	124,851	391,856	85,916	56,143	63,759	29,800	200,818
F. R. bank notes in circulation—net liability:													
Feb. 28.....	2,645	—	—	—	—	—	—	418	—	—	1,840	387	—
Mar. 7.....	2,788	—	—	—	—	—	—	431	—	—	1,895	462	—
Mar. 14.....	2,599	—	—	—	—	—	—	453	—	—	1,701	445	—
Mar. 21.....	2,368	—	—	—	—	—	—	443	—	—	1,485	440	—
Deferred availability items:													
Feb. 28.....	543,254	48,604	94,157	46,254	53,409	50,093	24,047	73,400	38,386	13,835	44,209	20,358	36,502
Mar. 7.....	549,513	44,945	91,839	44,783	53,687	48,963	24,951	73,707	39,154	13,508	44,405	28,808	38,763
Mar. 14.....	621,433	58,485	119,055	53,031	63,514	54,394	26,297	77,774	41,827	13,358	44,248	27,274	40,176
Mar. 21.....	572,000	51,618	107,380	50,675	56,573	50,818	26,121	68,753	38,203	13,907	42,008	27,419	38,575
All other liabilities:													
Feb. 28.....	11,689	453	2,472	684	871	465	589	1,338	831	856	443	1,625	1,062
Mar. 7.....	12,316	489	2,669	758	963	504	618	1,302	758	870	502	1,695	1,188
Mar. 14.....	12,885	517	2,990	784	1,021	491	636	1,351	804	892	494	1,727	1,178
Mar. 21.....	13,524	599	2,937	868	1,106	549	686	1,457	850	904	544	1,742	1,282
Total liabilities:													
Feb. 28.....	5,087,084	395,161	1,488,428	394,381	490,092	221,621	213,201	796,391	216,270	131,199	211,435	119,415	409,490
Mar. 7.....	5,091,002	398,435	1,458,588	392,623	481,720	217,378	221,554	801,913	219,229	139,692	212,587	130,476	416,807
Mar. 14.....	5,202,460	414,558	1,512,655	403,833	498,657	222,666	225,928	801,850	222,427	138,325	213,576	127,401	420,584
Mar. 21.....	5,131,344	409,215	1,486,545	396,678	486,968	219,642	227,687	802,992	213,279	138,342	211,395	125,093	413,508
MEMORANDA.													
Ratio of total reserves to deposit and F. R. note liabilities combined—per cent:													
Feb. 28.....	76.2	76.4	80.6	72.2	81.2	74.3	81.9	75.8	72.0	76.2	64.5	50.0	70.2
Mar. 7.....	76.2	75.2	83.2	73.6	78.3	74.5	76.2	75.4	69.3	75.9	63.5	49.4	69.8
Mar. 14.....	75.4	73.4	82.2	71.0	75.6	73.5	77.2	75.3	71.2	74.3	61.5	50.1	70.9
Mar. 21.....	75.7	77.6	86.6	68.1	73.9	66.4	76.1	75.4	64.1	71.1	62.7	47.0	66.8
Contingent liability on bills purchased for foreign correspondents:													
Feb. 28.....	28,397	2,392	5,169	2,743	3,445	1,659	1,308	4,434	1,404	1,058	1,372	1,148	2,265
Mar. 7.....	28,844	2,132	8,124	2,444	3,070	1,478	1,165	3,951	1,251	966	1,222	1,023	2,018
Mar. 14.....	34,577	2,132	13,857	2,444	3,070	1,478	1,165	3,951	1,251	966	1,222	1,023	2,018
Mar. 21.....	35,405	2,132	14,685	2,444	3,070	1,478	1,165	3,951	1,251	966	1,222	1,023	2,018

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.
Bills discounted:						
Feb. 28.....	595,760	455,438	32,457	54,321	32,519	21,025
Mar. 7.....	571,487	419,826	33,993	59,752	37,865	20,051
Mar. 14.....	613,059	453,609	36,384	60,086	41,971	21,009
Mar. 21.....	629,987	457,147	40,184	66,358	45,811	20,487
Bills bought in open market:						
Feb. 28.....	207,678	58,137	42,253	57,810	38,789	10,689
Mar. 7.....	218,886	61,624	39,323	64,662	44,344	8,933
Mar. 14.....	225,416	73,178	41,627	60,442	38,968	11,201
Mar. 21.....	237,965	66,559	43,874	63,421	52,110	12,001
United States certificates of indebtedness:						
Feb. 28.....	189,099	68,620	35			120,444
Mar. 7.....	186,911	61,405				125,506
Mar. 14.....	184,034	58,300				125,734
Mar. 21.....	128,322	1,700			54,124	72,498
Municipal warrants:						
Mar. 21.....	41			41		

FEDERAL RESERVE NOTES.

FEDERAL RESERVE AGENTS' ACCOUNTS ON WEDNESDAYS, FEB. 28 TO MAR. 21, 1923.

[In thousands of dollars.]

	Total.	Boston.	New York.	Phila- delphia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Min- neap- olis.	Kansas City.	Dallas.	San Francisco.
Net amount of F. R. notes received from Comptroller of the Currency:													
Feb. 28.....	3,512,304	308,530	1,094,517	270,161	287,951	126,904	201,203	554,424	130,777	69,511	93,169	56,029	319,128
Mar. 7.....	3,503,305	306,029	1,091,105	277,727	286,857	126,140	202,416	550,606	129,379	69,317	92,457	55,371	315,901
Mar. 14.....	3,487,449	303,041	1,080,613	274,247	285,740	124,141	206,098	554,607	128,744	68,559	92,648	54,837	314,174
Mar. 21.....	3,473,336	312,650	1,074,392	270,383	281,706	123,475	204,846	550,905	127,729	69,163	91,950	54,315	311,822
F. R. notes on hand:													
Feb. 28.....	864,742	90,000	352,590	42,000	34,070	30,020	74,083	105,160	23,390	10,230	20,210	21,264	61,725
Mar. 7.....	853,122	85,000	335,590	51,000	34,520	29,540	72,943	108,960	22,740	9,630	20,210	21,264	61,725
Mar. 14.....	849,967	80,000	334,340	51,000	32,820	29,340	75,268	113,360	22,740	8,325	19,810	21,239	61,725
Mar. 21.....	855,797	92,400	334,340	45,800	33,620	30,690	73,768	110,620	22,740	9,405	19,810	20,879	61,725
F. R. notes outstanding:													
Feb. 28.....	2,647,562	218,530	741,927	228,161	253,881	96,884	127,120	449,264	197,387	59,281	72,959	34,765	257,403
Mar. 7.....	2,650,183	221,029	755,515	226,727	252,337	96,600	129,473	441,646	106,639	59,687	72,247	34,107	254,176
Mar. 14.....	2,637,482	223,041	746,273	223,247	252,920	94,801	130,830	441,247	106,004	60,234	72,838	33,598	252,449
Mar. 21.....	2,617,539	220,250	740,052	224,583	248,086	92,785	131,078	440,285	104,989	59,758	72,140	33,436	250,097
Collateral security for F. R. notes outstanding:													
Gold and gold certificates—													
Feb. 28.....	317,399	15,300	250,531	7,000	13,275	2,400			9,380	13,052		6,461	
Mar. 7.....	322,399	20,300	250,531	7,000	13,275	2,400			9,380	13,052		6,461	
Mar. 14.....	312,399	25,300	235,531	7,000	13,275	2,400			9,380	13,052		6,461	
Mar. 21.....	314,899	25,300	235,531	7,000	13,275	2,400			11,880	13,052		6,461	
Gold redemption fund—													
Feb. 28.....	136,023	20,143	33,214	15,304	13,059	4,290	6,384	16,245	4,253	1,747	4,412	1,905	15,067
Mar. 7.....	124,765	17,642	33,038	10,870	13,964	2,566	5,597	16,426	4,854	1,554	3,701	1,746	12,807
Mar. 14.....	126,836	14,654	32,871	12,390	12,447	3,567	6,279	15,228	4,219	2,796	2,892	2,213	17,280
Mar. 21.....	123,544	11,863	32,694	13,527	13,614	1,901	5,026	16,525	4,204	2,160	4,193	2,190	15,647
Gold fund—													
F. R. Board—													
Feb. 28.....	1,655,345	128,000	341,000	138,889	180,000	59,795	101,000	375,644	66,500	32,000	54,360	6,000	172,157
Mar. 7.....	1,626,879	133,000	341,000	145,889	180,000	59,795	101,500	347,645	65,500	32,000	51,360	6,000	163,190
Mar. 14.....	1,629,378	138,000	341,000	140,889	180,000	56,795	100,000	352,644	67,500	32,000	51,360	6,000	163,190
Mar. 21.....	1,613,660	138,000	371,000	132,889	180,000	56,795	100,500	344,645	52,000	32,000	49,360	4,000	152,471
Eligible paper—													
Amount re- quired—													
Feb. 28.....	538,795	55,087	117,182	66,968	47,547	32,799	17,336	57,375	27,254	12,482	14,187	20,399	70,179
Mar. 7.....	576,140	50,087	130,946	62,968	45,098	34,239	19,976	77,575	26,905	13,081	17,186	19,900	78,179
Mar. 14.....	568,869	45,087	136,871	62,968	47,198	34,439	22,151	73,375	24,905	12,386	18,586	18,924	71,979
Mar. 21.....	565,436	45,087	100,827	71,167	41,197	34,089	23,152	79,115	36,905	12,546	18,587	20,785	81,979
Excess amount held—													
Feb. 28.....	210,303	6,023	93,030	1,402	1,670	10,552	9,433	46,122	3,984	8,086	3,733	17,880	8,388
Mar. 7.....	190,151	4,356	76,792	4,083	18,285	6,619	9,080	28,677	2,114	7,212	2,675	19,710	548
Mar. 14.....	220,741	21,955	75,922	9,500	27,529	7,742	5,372	34,895	4,243	8,159	4,380	18,542	2,502
Mar. 21.....	248,235	22,221	67,851	4,175	39,191	16,278	12,857	42,011	571	11,293	9,525	19,471	3,291

CONDITION OF REPORTING MEMBER BANKS IN LEADING CITIES.

PRINCIPAL RESOURCES AND LIABILITIES OF REPORTING MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS FROM FEBRUARY 21 TO MARCH 14, 1923.

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT.

[In thousands of dollars.]

Federal reserve district.	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Number of reporting banks:													
Feb. 21.....	778	46	106	56	84	78	39	107	36	30	78	52	66
Feb. 28.....	777	45	106	55	84	78	39	107	36	30	78	52	66
Mar. 7.....	777	46	106	55	84	78	39	107	36	30	78	52	66
Mar. 14.....	777	46	106	55	84	78	39	107	36	30	78	52	66
Loans and discounts, gross:													
Secured by U. S. Government obligations—													
Feb. 21.....	278,285	15,001	99,165	20,010	31,731	10,527	7,463	38,957	17,768	7,735	8,449	5,491	15,988
Feb. 28.....	282,521	14,633	93,452	19,145	32,004	10,192	7,534	47,601	17,630	7,665	8,702	7,552	16,110
Mar. 7.....	272,169	14,231	88,131	19,043	32,308	10,481	7,395	45,213	17,894	7,690	8,238	5,242	16,303
Mar. 14.....	269,408	14,866	85,191	18,291	32,746	10,720	7,455	44,789	18,033	7,572	8,234	5,116	16,381
Secured by stocks and bonds—													
Feb. 21.....	3,735,086	238,111	1,696,023	240,737	370,930	122,537	61,411	533,734	135,344	46,661	77,898	51,370	161,324
Feb. 28.....	3,799,712	242,354	1,735,929	245,326	371,566	121,308	61,659	542,358	140,042	47,642	80,546	52,392	158,590
Mar. 7.....	3,717,365	233,025	1,646,149	258,617	382,294	123,165	61,971	540,784	138,963	48,270	80,090	51,103	154,934
Mar. 14.....	3,711,365	237,745	1,629,367	261,940	379,172	124,441	60,737	548,891	137,001	44,709	79,945	51,155	156,202
All other loans and discounts—													
Feb. 21.....	7,517,372	603,938	2,348,675	335,071	658,097	322,933	332,621	1,098,324	302,359	189,973	359,457	210,200	755,724
Feb. 28.....	7,557,140	603,582	2,389,817	329,715	658,427	317,791	336,806	1,094,509	299,176	191,140	363,805	207,999	764,073
Mar. 7.....	7,645,393	605,348	2,441,412	330,034	663,302	319,918	337,459	1,114,963	305,342	191,810	361,285	211,043	763,477
Mar. 14.....	7,742,123	609,233	2,491,108	331,962	668,809	322,957	341,614	1,122,161	304,248	200,576	365,800	210,485	773,170
Total loans and discounts:													
Feb. 21.....	11,531,743	857,050	4,143,869	595,818	1,030,758	455,997	401,495	1,671,015	455,471	244,369	445,804	267,061	933,036
Feb. 28.....	11,639,373	860,569	4,219,198	594,187	1,031,997	449,291	405,999	1,684,768	456,848	246,447	453,053	268,243	938,773
Mar. 7.....	11,634,827	852,604	4,175,692	607,094	1,077,904	453,564	403,825	1,700,960	490,199	247,770	449,613	267,388	934,714
Mar. 14.....	11,722,895	861,844	4,205,686	612,193	1,080,722	458,118	409,800	1,715,835	459,342	252,857	453,999	266,756	945,733
U. S. pre-war bonds:													
Feb. 21.....	281,620	12,798	48,461	11,464	48,076	30,460	14,451	24,172	15,324	8,426	12,078	19,753	36,157
Feb. 28.....	282,800	12,798	48,456	11,464	48,056	30,460	14,551	24,596	15,324	8,831	12,359	19,753	36,152
Mar. 7.....	283,169	12,797	48,466	11,464	48,050	30,460	14,551	24,903	15,479	8,776	12,077	19,753	36,387
Mar. 14.....	282,871	12,721	48,456	11,464	48,001	30,460	14,521	24,903	15,323	8,776	12,078	19,754	36,384
U. S. Liberty bonds:													
Feb. 21.....	1,062,736	77,673	483,977	47,830	120,128	32,671	12,349	96,055	23,847	16,152	45,757	13,275	93,052
Feb. 28.....	1,042,296	78,006	466,121	48,080	119,937	32,635	12,054	93,585	23,725	15,218	46,668	13,419	92,818
Mar. 7.....	1,060,336	78,063	479,841	47,966	121,868	32,817	12,610	94,925	23,916	14,808	46,639	13,663	93,219
Mar. 14.....	1,061,544	78,289	479,407	48,085	121,585	32,427	12,445	95,359	24,826	14,382	44,887	13,905	95,947
U. S. Treasury bonds:													
Feb. 21.....	118,216	5,428	45,880	4,559	9,663	4,661	2,780	13,146	9,670	2,348	4,466	2,645	12,970
Feb. 28.....	112,261	5,380	44,074	4,180	8,949	4,657	1,772	12,646	9,910	1,733	3,518	2,729	12,713
Mar. 7.....	113,456	5,294	45,438	4,161	8,965	4,776	1,837	12,710	9,554	1,363	3,571	2,640	12,838
Mar. 14.....	112,252	6,066	42,847	4,166	8,816	4,718	1,838	12,728	9,587	1,323	4,530	2,645	12,988
U. S. Victory notes and Treasury notes:													
Feb. 21.....	943,377	28,405	505,784	52,757	56,602	9,601	6,785	147,842	25,180	23,983	21,359	14,941	50,138
Feb. 28.....	921,058	24,930	489,814	52,628	57,233	9,739	6,900	144,849	25,167	24,643	20,272	15,439	49,084
Mar. 7.....	942,713	24,769	514,745	53,947	57,635	9,462	7,242	143,889	25,515	24,940	21,392	17,059	42,118
Mar. 14.....	934,964	24,177	507,366	52,985	58,131	10,026	7,151	140,675	24,393	25,002	24,047	17,084	43,927
U. S. certificates of indebtedness:													
Feb. 21.....	145,655	8,480	68,727	1,569	9,926	2,741	3,724	23,921	3,795	2,196	5,349	3,288	11,939
Feb. 28.....	145,704	7,923	68,380	2,302	9,713	2,591	5,284	24,513	3,680	2,084	5,453	3,316	10,465
Mar. 7.....	117,094	1,831	46,507	1,650	9,745	2,701	4,319	24,284	3,420	1,904	5,995	3,389	11,340
Mar. 14.....	99,736	1,811	31,918	1,608	9,683	3,041	4,524	22,260	3,034	1,929	5,778	3,485	10,695
Other bonds, stocks, and securities:													
Feb. 21.....	2,180,991	171,836	735,807	187,461	291,803	52,569	37,076	362,763	88,306	30,336	59,134	8,846	155,054
Feb. 28.....	2,186,296	172,549	742,222	185,211	287,202	52,642	37,193	362,354	91,674	30,486	57,765	9,017	157,981
Mar. 7.....	2,188,035	172,965	741,654	184,437	286,273	52,573	36,938	365,824	88,895	30,701	58,442	9,022	158,311
Mar. 14.....	2,162,169	172,747	716,230	183,597	287,014	52,075	37,414	365,795	88,923	31,305	58,215	9,176	159,675
Total loans and discounts and investments:													
Feb. 21.....	16,264,368	1,161,670	6,032,505	901,458	1,595,956	588,700	478,660	2,338,914	621,593	327,810	593,947	329,809	1,292,346
Feb. 28.....	16,329,788	1,162,155	6,078,265	898,352	1,593,177	582,015	483,753	2,347,311	626,328	329,442	599,088	331,916	1,297,986
Mar. 7.....	16,337,730	1,148,323	6,032,346	911,328	1,610,444	586,353	484,322	2,367,495	626,978	330,262	598,029	332,923	1,288,927
Mar. 14.....	16,376,462	1,157,655	6,031,920	914,098	1,613,957	590,863	487,699	2,377,555	625,428	333,574	603,534	332,808	1,305,369
Reserve balance with F. R. banks:													
Feb. 21.....	1,425,098	82,327	640,976	69,931	109,198	35,719	35,892	210,718	44,053	25,068	50,010	27,574	93,632
Feb. 28.....	1,408,310	78,869	644,540	69,958	108,329	37,575	30,629	207,614	42,333	21,206	48,561	25,700	92,696
Mar. 7.....	1,408,014	84,440	617,432	72,337	105,285	36,389	33,119	208,528	45,155	25,631	49,446	28,167	97,088
Mar. 14.....	1,443,401	84,293	652,466	72,276	112,109	34,416	34,356	206,260	44,499	25,774	50,482	27,688	98,782

**PRINCIPAL RESOURCES AND LIABILITIES OF REPORTING MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS FROM
FEBRUARY 21 TO MARCH 14, 1923—Continued.**

ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT—Continued.

[In thousands of dollars.]

Federal reserve district.	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Cash in vault:													
Feb. 21.....	288,869	18,928	88,564	17,611	30,924	13,608	10,556	53,534	8,137	6,132	11,595	9,337	19,943
Feb. 28.....	277,480	18,945	79,818	16,472	29,381	13,946	10,907	52,788	7,899	5,993	11,788	9,805	19,738
Mar. 7.....	284,678	18,947	81,946	16,677	32,084	13,706	10,602	55,158	7,977	5,808	11,788	9,657	20,327
Mar. 14.....	288,588	18,673	81,117	16,639	30,572	13,955	11,075	56,702	8,158	5,760	11,867	9,289	24,781
Net demand deposits:													
Feb. 21.....	11,445,970	813,239	4,920,899	699,782	911,567	336,682	287,612	1,505,172	378,353	210,852	463,888	238,341	679,583
Feb. 28.....	11,524,612	804,063	4,967,431	700,795	932,774	337,358	287,739	1,517,589	376,217	214,735	469,637	247,213	669,061
Mar. 7.....	11,385,154	810,838	4,809,592	718,675	933,036	336,886	286,632	1,514,613	377,656	218,265	470,137	244,883	663,941
Mar. 14.....	11,463,614	812,865	4,839,940	711,564	935,499	340,559	295,395	1,524,279	380,804	220,363	467,361	246,377	688,608
Time deposits:													
Feb. 21.....	3,772,556	245,256	761,449	75,059	550,840	149,826	164,636	757,314	184,741	85,263	126,844	74,702	596,626
Feb. 28.....	3,775,827	245,527	768,377	75,467	547,603	151,784	164,837	759,810	184,211	82,641	122,652	74,762	598,156
Mar. 7.....	3,855,553	246,738	833,652	71,566	553,061	152,514	166,048	765,001	184,089	82,737	123,899	74,989	601,259
Mar. 14.....	3,891,274	247,363	855,921	83,583	551,839	152,732	166,354	767,260	183,487	83,280	124,252	74,830	600,373
Government deposits:													
Feb. 21.....	98,747	7,699	41,813	9,631	5,079	4,578	2,443	12,189	3,852	3,007	1,081	1,304	6,071
Feb. 28.....	100,109	7,429	41,813	9,631	4,948	4,578	2,359	14,085	3,852	3,007	1,081	1,305	6,071
Mar. 7.....	100,275	7,389	41,813	9,631	5,179	4,578	2,444	13,948	3,852	2,984	1,081	1,305	6,071
Mar. 14.....	108,817	7,389	41,813	9,631	4,892	4,578	2,499	13,898	3,852	3,142	1,476	1,305	14,342
Bills payable and discounts with F. R. banks:													
Secured by U. S. Government obligations													
Feb. 21.....	278,548	11,483	173,880	23,665	15,243	11,888	1,198	19,689	2,751	365	2,760	850	14,776
Feb. 28.....	267,180	8,234	157,708	19,484	8,683	13,128	606	33,074	6,901	115	3,440	.....	15,807
Mar. 7.....	247,496	9,019	152,138	14,323	5,666	10,472	1,371	36,983	2,620	1,115	4,323	675	8,891
Mar. 14.....	273,879	10,338	156,849	20,747	18,163	11,980	586	37,404	2,733	1,190	6,785	.....	7,104
All other:													
Feb. 21.....	138,905	30,777	42,458	13,028	7,061	13,348	3,397	10,012	2,321	3,479	2,671	2,970	7,383
Feb. 28.....	118,334	22,409	27,159	11,456	2,260	12,674	4,218	11,034	4,297	1,245	2,250	3,071	16,281
Mar. 7.....	124,112	16,789	26,256	8,970	11,215	13,825	4,735	8,344	7,118	1,266	3,104	3,532	18,958
Mar. 14.....	131,655	22,900	28,578	10,723	9,384	13,960	2,277	10,486	6,162	1,909	3,907	3,719	17,650

REPORTING MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

Number of reporting banks:													
Feb. 21.....	260	23	63	43	8	10	6	49	13	6	16	8	15
Feb. 28.....	259	23	63	42	8	10	6	49	13	6	16	8	15
Mar. 7.....	259	23	63	42	8	10	6	49	13	6	16	8	15
Mar. 14.....	259	23	63	42	8	10	6	49	13	6	16	8	15
Loans and discounts, gross:													
Secured by U. S. Government obligations—													
Feb. 21.....	190,232	12,257	90,220	18,096	6,748	2,141	1,995	29,335	13,878	4,952	2,317	1,720	6,573
Feb. 28.....	190,246	11,922	84,073	17,240	6,767	1,962	2,069	37,201	13,638	4,831	2,323	1,581	6,639
Mar. 7.....	182,865	11,522	79,070	17,154	6,720	2,248	2,015	35,095	13,846	4,854	2,065	1,595	6,681
Mar. 14.....	179,534	12,151	75,782	16,332	6,775	2,255	2,014	35,017	14,092	4,747	2,143	1,495	6,731
Secured by stocks and bonds—													
Feb. 21.....	2,725,651	188,776	1,521,241	220,392	137,687	20,224	10,686	402,006	99,806	26,006	22,318	10,473	66,036
Feb. 28.....	2,780,163	192,825	1,557,692	224,560	137,671	19,741	10,740	407,902	104,432	26,315	22,456	10,280	65,549
Mar. 7.....	2,693,162	183,754	1,460,990	237,653	144,014	19,684	11,440	409,029	101,149	27,284	22,094	10,073	65,998
Mar. 14.....	2,682,693	188,380	1,443,543	240,923	141,836	19,765	10,846	414,826	100,743	23,014	21,782	11,407	65,628
All other loans and discounts—													
Feb. 21.....	4,623,863	455,943	2,050,441	303,694	305,905	64,404	55,638	644,869	173,772	90,174	120,529	55,885	302,609
Feb. 28.....	4,653,398	456,264	2,087,816	297,688	307,555	64,783	57,547	637,769	170,463	90,668	117,816	57,039	307,990
Mar. 7.....	4,723,079	456,822	2,137,150	298,130	309,460	64,298	56,117	654,343	174,233	89,290	117,938	55,901	309,397
Mar. 14.....	4,801,271	459,350	2,185,512	299,306	310,344	66,029	58,508	662,008	173,482	95,950	120,790	55,658	314,334
Total loans and discounts:													
Feb. 21.....	7,539,746	656,976	3,661,902	542,182	450,340	86,769	68,319	1,076,210	287,456	121,132	145,164	68,078	375,218
Mar. 28.....	7,623,807	661,011	3,729,581	539,488	451,993	86,486	70,356	1,082,872	288,533	121,814	142,595	68,900	380,178
Mar. 7.....	7,599,106	652,098	3,677,210	552,937	460,194	86,230	69,572	1,098,467	289,228	121,428	142,097	67,569	382,076
Mar. 14.....	7,663,498	659,881	3,704,837	556,561	458,955	88,049	71,368	1,111,851	288,317	123,711	144,715	68,560	386,693
U. S. pre-war bonds:													
Feb. 21.....	98,902	2,344	37,835	7,358	4,530	1,805	2,927	2,652	8,224	3,031	2,131	4,875	21,190
Feb. 28.....	99,262	2,444	37,805	7,358	4,530	1,805	2,927	3,050	8,224	3,031	2,131	4,875	21,182
Mar. 7.....	99,818	2,343	37,815	7,358	4,530	1,805	2,927	3,361	8,224	3,031	2,131	4,875	21,418
Mar. 14.....	99,760	2,267	37,835	7,358	4,530	1,805	2,927	3,361	8,223	3,031	2,131	4,875	21,417
U. S. Liberty bonds:													
Feb. 21.....	643,287	34,228	414,334	36,933	25,197	3,673	308	37,657	15,211	6,638	20,294	4,493	44,321
Feb. 28.....	623,273	34,224	396,790	37,175	25,938	3,669	320	35,418	15,573	6,492	20,499	4,718	42,457
Mar. 7.....	638,906	34,131	411,389	37,058	25,165	3,669	320	36,577	15,535	6,614	20,376	5,267	42,625
Mar. 14.....	640,392	34,156	410,936	37,172	25,185	3,672	285	37,770	15,355	6,624	18,804	5,252	45,181

**PRINCIPAL RESOURCES AND LIABILITIES OF REPORTING MEMBER BANKS IN LEADING CITIES ON WEDNESDAYS FROM
FEBRUARY 21 TO MARCH 14, 1923—Continued.**

REPORTING MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

Federal reserve district.	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
U. S. Treasury bonds:													
Feb. 21.....	63,701	2,601	36,164	3,695	1,846	294	117	5,927	7,772	1,022	726	1,103	5,434
Feb. 28.....	62,873	2,553	33,433	3,296	1,842	294	105	5,422	7,815	887	743	1,103	5,400
Mar. 7.....	63,987	2,566	34,795	3,277	1,851	294	105	5,439	7,651	757	699	1,103	5,450
Mar. 14.....	62,419	3,538	32,206	3,255	1,851	194	105	5,482	7,686	759	760	1,103	5,480
U. S. Victory notes and Treasury notes:													
Feb. 21.....	727,438	20,809	474,717	49,868	9,744	1,578	310	103,579	16,645	8,599	9,088	6,646	25,855
Feb. 28.....	704,210	17,259	458,699	49,891	9,664	1,568	310	102,174	16,574	8,997	7,277	6,645	25,152
Mar. 7.....	725,851	17,152	483,347	50,908	9,855	1,568	310	101,586	16,786	9,241	7,367	6,765	20,966
Mar. 14.....	716,560	16,691	475,927	49,899	9,851	1,506	310	98,839	15,876	9,319	10,790	6,770	20,782
U. S. certificates of indebtedness:													
Feb. 21.....	93,266	2,044	66,089	1,493	1,587	1,318	888	12,051	2,496	879	1,126	1,509	1,786
Feb. 28.....	93,177	1,719	65,767	2,226	1,587	1,318	1,050	12,490	2,466	939	1,192	1,537	1,626
Mar. 7.....	70,457	1,369	43,889	1,589	1,616	1,278	888	12,285	2,487	784	1,131	1,610	1,531
Mar. 14.....	52,828	1,373	28,675	1,538	1,622	1,318	888	9,714	2,297	784	1,139	1,706	1,772
Other bonds, stocks, and securities:													
Feb. 21.....	1,178,195	80,110	534,756	150,654	65,658	5,815	3,358	185,641	56,455	13,458	11,221	1,499	69,570
Feb. 28.....	1,185,090	80,721	540,677	148,668	63,927	5,816	3,504	186,686	59,585	13,396	10,439	1,596	70,075
Mar. 7.....	1,189,851	81,801	543,290	147,644	66,250	5,759	3,780	188,672	57,004	13,252	11,477	1,594	69,367
Mar. 14.....	1,169,144	80,986	522,963	147,050	66,569	5,234	3,598	188,881	57,021	13,737	11,451	1,993	69,661
Total loans and discounts and investments:													
Feb. 21.....	10,347,535	799,112	5,225,797	792,183	558,902	101,252	76,227	1,423,717	394,259	154,759	189,750	88,203	543,374
Feb. 28.....	10,392,432	799,831	5,262,752	788,102	559,481	100,956	78,572	1,428,112	398,770	155,536	184,876	89,374	546,070
Mar. 7.....	10,388,015	791,460	5,231,735	800,771	539,461	100,603	77,902	1,446,567	396,915	155,107	185,278	88,783	543,433
Mar. 14.....	10,404,599	798,892	5,213,379	832,833	568,563	101,778	79,481	1,455,898	394,775	157,965	189,790	90,259	550,986
Reserve balance with F. R. banks:													
Feb. 21.....	1,015,047	64,979	594,954	64,167	31,274	6,558	6,315	147,493	28,590	13,233	16,439	8,126	32,919
Feb. 28.....	1,005,997	61,745	598,049	64,062	33,614	6,203	3,561	147,537	25,709	9,679	16,103	7,487	32,248
Mar. 7.....	999,136	65,440	587,869	65,882	33,783	7,182	5,951	150,675	29,856	13,609	16,890	7,572	33,447
Mar. 14.....	1,025,456	66,689	602,979	66,061	30,313	6,167	5,347	145,376	28,481	12,890	16,555	8,842	35,756
Cash in vault:													
Feb. 21.....	151,857	8,636	73,325	14,505	8,278	1,015	1,992	28,581	3,780	1,867	2,409	1,458	6,011
Feb. 28.....	142,987	8,536	66,336	13,396	8,278	846	2,184	29,173	3,596	1,856	2,331	911	5,544
Mar. 7.....	146,959	8,456	67,209	13,249	8,752	902	2,149	30,624	3,654	1,855	2,764	1,311	6,034
Mar. 14.....	147,184	8,043	68,959	13,323	8,838	918	2,269	31,150	3,785	1,792	2,339	1,275	6,493
Net demand deposits:													
Feb. 21.....	7,863,672	628,528	4,435,136	617,042	233,638	58,828	46,495	1,012,607	252,280	101,067	166,655	63,343	248,053
Feb. 28.....	7,908,653	618,589	4,469,536	618,130	237,603	56,449	47,704	1,030,135	251,516	100,682	165,917	70,249	242,143
Mar. 7.....	7,786,082	627,678	4,319,334	636,294	233,864	56,792	47,964	1,037,673	251,099	103,653	165,866	66,344	236,551
Mar. 14.....	7,799,253	627,993	4,333,928	628,817	237,425	56,977	49,613	1,026,472	250,719	103,706	164,374	68,918	250,311
Time deposits:													
Feb. 21.....	1,808,025	102,932	505,189	57,940	319,494	25,378	21,478	364,130	103,608	37,048	16,315	13,870	240,643
Feb. 28.....	1,811,100	102,757	508,750	58,094	318,411	25,369	21,580	367,688	104,004	37,221	12,007	13,839	241,380
Mar. 7.....	1,874,052	103,452	571,136	53,890	321,198	25,395	21,818	370,822	103,337	37,288	12,329	13,898	239,479
Mar. 14.....	1,911,124	103,731	593,560	65,445	319,434	25,413	21,859	373,184	102,976	38,034	12,595	13,789	241,104
Government deposits:													
Feb. 21.....	74,739	6,282	38,591	8,942	826	261	403	8,942	3,268	1,512	518	615	4,579
Feb. 28.....	74,339	6,012	38,591	8,942	696	261	403	8,942	3,268	1,512	518	615	4,579
Mar. 7.....	74,545	6,012	38,591	8,942	926	261	403	8,942	3,268	1,480	518	615	4,579
Mar. 14.....	74,549	6,012	38,591	8,942	826	201	463	8,893	3,268	1,647	518	615	4,513
Bills payable and discounts with F. R. banks:													
Secured by Government obligations—													
Feb. 21.....	209,259	9,270	146,740	22,640	200	3,108	280	10,701	1,968	115	717	.....	13,520
Feb. 28.....	202,129	6,386	132,995	18,184	715	3,370	35	19,776	5,005	115	1,212	.....	14,336
Mar. 7.....	185,961	6,921	131,655	12,923	515	2,544	.....	18,666	1,832	1,115	811	500	8,479
Mar. 14.....	200,457	8,728	133,736	19,247	275	2,887	.....	25,074	1,500	1,115	2,142	.....	5,753
All other—													
Feb. 21.....	100,848	30,347	31,195	13,028	3,686	3,195	667	8,246	1,604	2,491	254	1,106	5,029
Feb. 28.....	78,905	21,999	17,636	11,456	293	3,587	744	6,410	2,592	316	454	1,221	12,197
Mar. 7.....	83,738	16,219	17,323	8,970	7,979	4,288	644	3,331	6,037	341	717	1,749	16,140
Mar. 14.....	97,242	22,314	18,159	10,723	7,821	4,452	650	8,431	5,032	1,311	1,206	1,814	15,329
MEMORANDA.													
Bank deposits:													
Due to banks—													
Feb. 21.....	2,009,264	111,594	921,196	155,555	44,371	32,425	14,721	356,846	91,533	47,994	114,106	33,155	85,768
Feb. 28.....	2,161,780	109,748	1,058,851	162,242	44,623	32,791	15,812	366,577	91,381	49,588	113,275	26,222	90,670
Mar. 7.....	2,122,084	114,291	985,350	168,394	45,115	34,887	17,787	383,070	89,837	53,927	114,568	25,999	88,858
Mar. 14.....	2,059,808	113,918	969,632	162,641	43,816	33,783	16,534	360,398	84,330	50,841	108,182	25,854	89,879
Due from banks—													
Feb. 21.....	502,737	36,707	77,843	55,406	19,098	13,008	7,019	141,306	24,271	13,078	43,632	23,060	48,246
Feb. 28.....	528,691	42,106	76,859	57,525	20,749	13,767	7,962	149,815	24,087	19,537	45,931	21,357	48,996
Mar. 7.....	506,832	34,467	72,092	52,576	18,441	14,019	11,016	146,956	24,302	16,135	46,188	22,304	48,336
Mar. 14.....	514,414	36,310	76,101	54,783	20,493	13,521	8,572	149,403	24,376	17,055	43,560	21,326	48,944

DEBITS TO INDIVIDUAL ACCOUNTS BY BANKS IN SELECTED CITIES.

MONTHLY SUMMARY FOR BANKS IN 141 SELECTED CITIES.

[In thousands of dollars.]

Federal reserve district.	Number of cities.	January, 1923.	February, 1923.	March, 1923.	January, 1922.	February, 1922.	March, 1922.
No. 1—Boston.....	11	2,197,997	1,889,899	2,144,960	1,928,021	1,611,605	1,857,809
No. 2—New York.....	7	22,763,018	19,595,761	23,231,535	19,644,551	17,029,426	20,977,917
No. 3—Philadelphia.....	10	1,914,857	1,648,925	1,926,493	1,583,008	1,431,593	1,628,117
No. 4—Cleveland.....	13	2,305,963	1,949,330	2,206,665	1,709,232	1,538,886	1,665,926
No. 5—Richmond.....	7	746,047	631,628	737,293	630,971	535,864	618,568
No. 6—Atlanta.....	15	1,005,714	827,440	991,806	774,821	676,960	781,076
No. 7—Chicago.....	21	4,810,899	4,383,007	4,828,941	3,858,652	3,523,914	4,389,187
No. 8—St. Louis.....	5	1,178,722	952,892	1,112,395	858,795	739,485	859,417
No. 9—Minneapolis.....	9	647,312	510,811	600,805	492,323	455,305	556,282
No. 10—Kansas City.....	14	1,202,253	996,423	1,199,481	950,759	872,689	1,012,278
No. 11—Dallas.....	11	605,258	494,600	547,188	526,519	460,149	524,469
No. 12—San Francisco.....	18	2,374,873	2,043,173	2,581,355	1,979,295	1,703,434	2,061,228
Total.....	141	41,752,913	35,924,402	42,108,017	34,936,967	30,585,310	36,932,274
New York City.....	1	22,087,155	19,019,491	22,541,298	19,054,575	16,543,428	20,397,109
Other cities.....	140	19,665,757	16,904,911	19,566,719	15,872,392	14,041,882	16,535,165

WEEKLY SUMMARY FOR BANKS IN 238 CITIES.

[In thousands of dollars.]

Federal reserve district.	Number of centers included.	1923 Week ending—				1922 Week ending—			
		Feb. 28.	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.
No. 1—Boston.....	15	483,489	559,091	498,111	564,488	452,085	419,672	495,890	445,717
No. 2—New York.....	12	4,669,969	6,018,845	4,844,499	5,271,185	5,198,490	4,550,880	4,531,274	4,944,353
No. 3—Philadelphia.....	18	452,990	478,491	436,412	498,020	449,474	397,507	388,514	405,879
No. 4—Cleveland.....	23	571,434	589,892	593,553	615,268	515,895	449,052	432,165	470,980
No. 5—Richmond.....	21	242,104	283,888	259,412	277,041	244,817	225,989	223,863	226,331
No. 6—Atlanta.....	25	223,623	249,401	232,552	239,537	198,964	192,430	183,167	187,102
No. 7—Chicago.....	31	1,415,915	1,112,164	1,055,233	1,158,255	1,063,044	964,122	1,017,857	1,025,259
No. 8—St. Louis.....	11	245,403	268,795	255,930	282,829	239,945	234,896	215,259	213,236
No. 9—Minneapolis.....	16	128,593	149,373	133,134	156,859	128,240	138,766	138,056	154,564
No. 10—Kansas City.....	26	276,372	317,779	269,455	278,827	235,679	254,652	236,200	239,108
No. 11—Dallas.....	15	147,125	159,812	147,106	156,725	137,189	143,433	159,033	142,419
No. 12—San Francisco.....	25	529,533	694,957	559,933	605,235	486,403	516,303	481,407	491,249
Total.....	238	9,384,561	10,882,389	9,285,271	10,104,254	9,362,109	8,457,645	8,532,745	8,926,785

DATA FOR EACH CITY.

[In thousands of dollars.]

		1923 Week ending—				1922 Week ending—			
		Feb. 28.	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.
District No. 1—Boston:									
Bangor, Me.....	3,026	3,876	3,017	2,972	3,302	3,102	3,077	3,596	
Boston, Mass.....	338,418	392,961	343,830	400,608	307,040	285,828	351,959	304,171	
Brockton, Mass.....	3,929	4,738	5,008	5,437		4,320	4,855	5,030	
Fall River, Mass.....	6,411	6,741	7,330	7,538	5,394	5,243	6,023	6,029	
Hartford, Conn.....	22,481	26,523	22,084	24,014	23,603	21,022	19,965	20,179	
Holyoke, Mass.....	3,227	3,850	3,643	4,010	2,667	3,104	2,769	3,183	
Lowell, Mass.....	3,969	5,041	4,792	5,199	4,381	4,312	4,248	4,424	
Lynn, Mass.....	5,429	5,827	6,339	5,700	5,010	5,357	6,008	6,113	
Manchester, N. H.....	3,793	4,454	4,050	4,910	3,776	3,522	5,245	3,473	
New Bedford, Mass.....	6,541	8,786	7,319	7,330	6,412	5,670	5,928	6,057	
New Haven, Conn.....	16,975	21,245	17,183	18,317	14,094	17,096	17,323	17,705	
Portland, Me.....	7,942	9,863	8,655	9,100	7,731	7,310	7,479	6,691	
Providence, R. I.....	30,630	31,879	32,600	35,992	34,696	27,836	32,766	30,229	
Springfield, Mass.....	14,694	16,897	16,001	15,795	13,475	12,270	12,652	13,223	
Waterbury, Conn.....	6,271	6,251	6,241	6,975	6,867	5,436	6,435	6,478	
Worcester, Mass.....	13,662	14,897	15,024	16,028	13,637	12,564	14,013	14,166	

DATA FOR EACH CITY—Continued.

[In thousands of dollars.]

	1923				1922			
	Week ending—				Week ending—			
	Feb. 28.	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.
District No. 2—New York:								
Albany, N. Y.	27,426	20,268	19,438	27,333	42,151	20,555	20,036	26,417
Binghamton, N. Y.	3,915	4,406	4,474	4,601	4,346	3,762	4,073	3,742
Buffalo, N. Y.	59,086	65,713	61,656	68,940	60,705	52,181	54,226	53,457
Elmira, N. Y.	3,453	3,511	3,549	3,864	3,356	2,688	2,722	2,741
Jamestown, N. Y.	3,289	4,019	3,851	4,299	3,291	3,143	3,193	3,325
Montclair, N. J.	2,480	2,769	2,532	3,190	1,986	2,299	2,144	2,365
Newark, N. J.	53,258	62,870	58,175	67,956	49,977,750	4,383,912	4,365,972	47,449
New York, N. Y.	4,488,471	5,802,558	4,661,234	5,058,843	4,997,750	4,383,912	4,365,972	4,771,300
Northern New Jersey Clearing House Association	30,721	47,183	34,113	38,458	33,335	33,691	30,200	30,836
Passaic, N. J.	5,787	6,537	6,555	6,928	5,413	4,865	5,898	6,157
Rochester, N. Y.	30,619	40,377	30,713	34,821	30,353	28,003	28,109	28,542
Stamford, Conn.	2,217	2,543	2,521	2,750	2,274	2,928	2,327	1,955
Syracuse, N. Y.	12,503	18,961	13,854	17,158	13,449	12,853	12,374	13,516
District No. 3—Philadelphia:								
Allentown, Pa.	5,715	6,497	5,712	7,010	5,966	5,103	5,227	5,382
Altoona, Pa.	3,690	3,712	3,888	3,638	2,989	2,545	3,173	2,840
Camden, N. J.	9,359	9,944	9,756	11,818	9,392	8,747	9,227	9,930
Chester, Pa.	5,808	4,899	4,841	5,629	5,235	3,551	4,091	4,632
Harrisburg, Pa.	6,199	8,820	7,913	8,760	6,647	6,662	6,741	6,678
Hazleton, Pa.	2,516	2,478	2,243	2,394	2,585	2,044	2,188	1,896
Johnstown, Pa.	5,475	5,092	4,916	5,001	4,766	4,279	4,072	3,825
Lancaster, Pa.	5,134	5,345	5,851	7,239	5,274	5,157	5,026	5,410
Lebanon, Pa.	1,327	1,449	1,422	1,327	1,182	1,060	956	1,081
Norristown, Pa.	681	1,928	963	858	638	638	586	644
Philadelphia, Pa.	346,261	365,989	325,713	379,439	331,495	306,370	292,575	305,912
Reading, Pa.	8,074	9,212	9,405	9,757	7,037	6,560	7,209	7,294
Scranton, Pa.	17,086	16,297	15,607	16,840	16,613	13,459	13,432	14,656
Trenton, N. J.	11,260	12,663	12,915	13,016	15,153	10,439	10,998	11,527
Wilkes-Barre, Pa.	9,581	9,373	9,134	9,710	8,353	6,882	8,512	8,077
Williamsport, Pa.	3,918	4,408	4,151	4,260	4,064	3,809	4,201	4,114
Wilmington, Del.	7,242	7,320	7,509	7,496	9,101	6,137	6,870	7,774
York, Pa.	3,664	3,975	4,473	3,828	3,984	4,065	3,430	4,207
District No. 4—Cleveland:								
Akron, Ohio	14,363	15,215	16,263	14,887	11,295	10,657	10,858	11,360
Butler, Pa.	2,395	2,519	2,648	2,411	1,969	1,756	1,833	1,654
Canton, Ohio	9,033	9,706	12,208	10,463	6,926	6,995	5,819	9,048
Cincinnati, Ohio	71,778	78,625	76,423	92,602	65,998	59,235	65,404	65,434
Cleveland, Ohio	134,269	140,341	133,208	144,305	118,550	105,382	107,572	104,381
Columbus, Ohio	29,415	32,374	31,325	32,159	26,337	23,617	28,849	26,847
Connellsville, Pa.	1,382	1,750	1,759	1,315	1,037	953	995	1,051
Dayton, Ohio	16,196	21,102	15,877	18,161	11,683	15,353	11,610	12,676
Eric, Pa.	6,179	7,003	7,218	7,261	5,874	6,299	6,737	5,640
Greensburg, Pa.	4,398	4,862	4,795	6,088	4,198	3,177	4,047	3,427
Homestead, Pa.	667	823	704	831	543	602	597	594
Lexington, Ky.	7,630	9,527	8,643	8,046	9,944	8,013	8,246	7,952
Lima, Ohio	3,901	4,771	3,494	4,164	3,509	3,490	3,280	2,879
Lorain, Ohio	1,086	1,187	1,216	1,289	886	876	1,032	1,163
New Brighton, Pa.	2,360	2,353	2,327	2,107	2,018	1,657	1,885	1,652
Oil City, Pa.	2,767	3,325	2,902	3,372	2,469	2,484	2,591	2,444
Pittsburgh, Pa.	194,828	178,629	193,697	193,369	183,350	142,194	135,431	154,498
Springfield, Ohio	5,005	5,989	5,497	4,705	4,518	5,213	4,012	3,904
Toledo, Ohio	36,511	40,060	42,907	39,797	30,855	28,607	27,492	31,828
Warren, Ohio	2,297	3,147	4,103	3,086	3,028	2,072	3,295	2,077
Wheeling, W. Va.	9,516	9,746	11,153	10,296	8,109	7,453	7,300	8,254
Youngstown, Ohio	13,077	14,457	12,183	10,756	10,832	8,802	10,642	9,723
Zanesville, Ohio	2,381	2,381	3,003	3,798	1,967	2,165	2,638	2,494
District No. 5—Richmond:								
Asheville, N. C.	4,614	4,868	4,674	4,467	93,055	80,950	76,681	76,703
Baltimore, Md.	76,300	96,200	80,300	89,100	5,500	6,009	5,860	4,860
Charleston, S. C.	11,181	7,627	6,918	7,155	7,468	6,456	6,966	7,003
Charleston, W. Va.	8,664	7,966	7,643	9,452	6,737	6,538	5,959	6,969
Charlotte, N. C.	8,511	9,907	10,160	9,649	5,574	5,757	4,125	5,665
Columbia, S. C.	5,430	7,357	6,700	5,896	1,845	1,680	1,712	1,622
Cumberland, Md.	1,541	1,877	2,086	2,285	2,204	1,820	1,925	1,848
Danville, Va.	1,776	2,194	1,976	1,933	3,310	3,309	3,298	3,363
Durham, N. C.	3,677	4,487	5,063	4,514	3,669	3,820	3,404	3,303
Greensboro, N. C.	4,623	5,358	5,516	4,900	1,730	1,955	1,697	1,789
Greenville, S. C.	5,700	5,076	5,600	4,900	4,461	4,437	4,224	4,444
Hagerstown, Md.	1,906	2,077	2,275	2,483	4,059	4,423	4,307	4,063
Huntington, W. Va.	6,830	6,246	5,905	6,496	1,651	1,486	1,726	1,496
Lynchburg, Va.	4,179	4,765	4,811	4,566	14,170	13,886	13,733	13,734
Newport News, Va.	1,709	1,738	1,654	1,924	4,100	3,500	4,300	3,800
Norfolk, Va.	15,416	18,478	16,695	17,101	29,518	25,585	26,373	23,625
Raleigh, N. C.	6,300	6,300	8,100	8,000	4,858	4,348	4,119	4,452
Richmond, Va.	26,567	30,896	28,422	30,085	1,885	1,992	1,813	1,987
Roanoke, Va.	4,490	5,945	4,689	5,618	39,176	38,229	41,857	44,510
Spartanburg, S. C.	2,132	3,189	3,256	3,517	4,475	5,112	4,838	4,659
Washington, D. C.	36,986	46,478	43,986	47,139	3,372	4,697	4,946	6,439
Wilmington, N. C.	4,907	6,575	5,058	5,009				
Winston-Salem, N. C.	6,956	7,639	7,662	9,697				

DATA FOR EACH CITY—Continued.

[In thousands of dollars.]

	1923				1922			
	Week ending—				Week ending—			
	Feb. 28.	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.
District No. 6—Atlanta:								
Albany, Ga.....	1,058	1,218	1,700	1,133	775	917	896	827
Atlanta, Ga.....	29,117	33,623	31,245	36,791	26,007	25,333	25,264	24,726
Augusta, Ga.....	8,024	10,267	9,482	9,121	6,088	5,382	5,556	5,544
Birmingham, Ala.....	25,528	25,336	23,272	22,653	17,156	18,801	17,147	16,539
Brunswick, Ga.....	617	682	621	636	512	541	469	485
Chattanooga, Tenn.....	7,439	8,634	8,838	10,519	7,127	7,181	7,321	7,133
Columbus, Ga.....	2,368	3,253	3,735	2,981	2,249	2,349	2,251	2,301
Cordele, Ga.....	346	471	365	291	230	257	224	268
Dothan, Ala.....	676	617	615	482	477	475	400	460
Elberton, Ga.....	213	339	304	201	302	350	223	182
Jackson, Miss.....	3,779	3,213	3,181	3,497	2,524	2,155	2,339	2,529
Jacksonville, Fla.....	11,478	13,448	13,056	14,663	10,724	11,233	10,970	11,007
Knoxville, Tenn.....	6,747	8,008	6,728	6,973	6,104	5,516	5,774	6,482
Macon, Ga.....	3,865	5,208	5,201	5,270	3,513	3,288	3,400	3,758
Meridian, Miss.....	2,038	2,325	2,506	2,794	2,042	1,941	1,549	2,200
Mobile, Ala.....	7,274	8,020	6,452	6,463	5,957	6,673	6,226	5,767
Montgomery, Ala.....	4,654	6,263	5,605	5,639	3,311	3,832	3,404	3,327
Nashville, Tenn.....	14,603	17,928	16,335	18,112	15,379	16,158	15,062	15,827
Newman, Ga.....	412	534	558	618	338	301	231	320
New Orleans, La.....	72,188	75,613	70,192	69,343	67,606	60,988	55,995	59,886
Pensacola, Fla.....	1,300	2,082	1,512	1,537	1,358	1,444	1,617	1,144
Savannah, Ga.....	9,891	10,969	10,310	9,514	10,053	9,079	8,950	8,684
Tampa, Fla.....	6,690	8,036	7,614	7,606	6,633	5,932	5,543	5,905
Valdosta, Ga.....	1,134	1,484	1,174	1,041	924	1,013	992	919
Vicksburg, Miss.....	2,184	1,830	1,951	1,659	1,575	1,291	1,364	1,382
District No. 7—Chicago:								
Adrian, Mich.....	621	785	1,008	853	759	709	751	679
Aurora, Ill.....	3,196	4,062	3,512	3,261	3,026	3,065	2,681	2,768
Bay City, Mich.....	1,987	2,333	1,905	2,078	2,767	2,235	2,061	2,360
Bloomington, Ill.....	3,357	5,601	3,032	3,003	3,018	4,183	2,684	2,756
Cedar Rapids, Iowa.....	5,380	8,144	6,845	5,810	8,854	8,730	5,649	4,819
Chicago, Ill.....	1,010,107	684,597	635,392	705,385	709,703	633,101	668,550	656,000
Danville, Ill.....	3,200	4,000	4,500	4,700	3,100	2,500	3,100	3,200
Davenport, Iowa.....	9,435	11,695	6,600	6,692	10,662	9,261	7,184	7,559
Decatur, Ill.....	3,364	4,205	3,452	3,544	3,406	3,615	3,201	3,135
Des Moines, Iowa.....	15,063	26,863	22,843	18,920	15,801	22,320	17,627	16,055
Detroit, Mich.....	151,492	126,013	156,451	184,448	113,737	91,365	118,538	138,602
Dubuque, Iowa.....	3,236	4,190	3,559	3,551	3,832	3,501	2,857	2,929
Flint, Mich.....	7,382	7,787	7,582	7,741	4,961	4,400	4,200	5,700
Fort Wayne, Ind.....	4,223	2,832	3,961	2,689	8,737	7,414	6,652	6,582
Gary, Ind.....	13,729	16,026	13,881	10,904	14,052	12,970	12,513	14,358
Grand Rapids, Mich.....	2,283	2,702	2,258	2,475	2,475	2,475	2,475	2,475
Green Bay, Wis.....	2,870	3,520	3,000	3,719	3,184	2,291	30,583	30,427
Hammond, Ind.....	43,679	35,270	35,197	36,925	3,439	3,418	2,935	3,076
Jackson, Mich.....	4,244	5,312	4,266	4,722	4,486	3,030	4,623	3,814
Kalamazoo, Mich.....	4,036	8,900	8,200	10,300	5,143	4,788	4,306	5,372
Lansing, Mich.....	6,900	3,738	2,592	2,396	2,040	2,765	2,063	2,065
Mason City, Iowa.....	2,337	3,738	2,592	2,396	2,040	2,765	2,063	2,065
Milwaukee, Wis.....	57,339	68,411	59,351	63,102	51,898	54,818	60,873	62,412
Moline, Ill.....	1,677	2,232	1,739	1,786	1,936	1,676	1,873	1,835
Muscatine, Iowa.....	1,083	2,234	2,021	1,714	1,250	2,073	1,479	1,395
Oshkosh, Wis.....	2,300	2,600	2,500	2,700	1,800	2,300	2,400	2,500
Peoria, Ill.....	9,140	9,983	9,315	8,814	8,422	9,248	8,026	7,640
Rockford, Ill.....	4,308	6,671	6,418	6,345	3,938	4,626	4,539	4,454
Saginaw, Mich.....	5,216	4,524	5,349	5,243	5,243	5,243	5,243	5,243
Sioux City, Iowa.....	16,562	23,407	17,447	18,960	13,403	19,240	17,454	15,837
South Bend, Ind.....	7,509	7,772	8,034	7,628	6,084	5,810	5,627	6,275
Springfield, Ill.....	6,787	7,088	7,232	5,881	6,667	6,335	6,388	5,746
Terre Haute, Ind.....	6,377	5,751	6,024	5,299	4,204	3,232	3,806	3,674
Waterloo, Iowa.....	3,490	6,286	4,498	4,204	3,232	4,073	3,806	3,674
District No. 8—St. Louis:								
East St. Louis and National Stock Yards, Ill.....	8,565	8,850	9,288	9,770	9,705	7,984	7,945	7,754
Evansville, Ind.....	10,463	6,926	7,504	6,994	6,855	7,419	6,701	5,400
Fort Smith, Ark.....	2,703	2,799	2,706	2,840	2,840	2,840	2,840	2,840
Greenville, Miss.....	1,154	1,150	815	997	1,048	897	808	725
Helena, Ark.....	1,317	1,548	1,174	1,237	828	864	860	914
Little Rock, Ark.....	15,400	14,417	14,620	14,000	9,244	9,857	9,467	9,332
Louisville, Ky.....	33,717	40,474	37,591	37,483	34,485	29,428	32,032	32,727
Memphis, Tenn.....	31,159	37,923	33,890	43,576	23,683	23,928	23,891	22,752
Owensboro, Ky.....	1,482	1,942	1,702	1,752	1,737	1,541	1,435	1,302
Quincy, Ill.....	2,330	3,453	2,972	2,819	2,137	2,491	2,162	2,087
St. Louis, Mo.....	136,726	148,727	143,181	160,928	138,242	117,306	127,069	127,529
Springfield, Mo.....	3,090	3,385	3,193	3,267	2,981	3,091	2,889	2,714
District No. 9—Minneapolis:								
Aberdeen, S. Dak.....	1,142	1,187	1,116	991	1,014	1,109	1,220	941
Billings, Mont.....	1,883	2,466	1,774	1,673	1,432	1,552	1,964	1,429
Dickinson, N. Dak.....	295	386	275	355	183	448	235	208
Duluth, Minn.....	13,417	13,491	14,317	15,529	10,266	12,158	15,671	13,479
Fargo, N. Dak.....	2,232	2,688	3,076	2,484	1,910	2,423	2,005	2,343
Grand Forks, N. Dak.....	1,371	1,845	1,873	1,694	1,214	1,384	1,945	1,361
Helena, Mont.....	2,255	2,572	1,835	2,001	2,251	2,307	1,742	1,728
Jamestown, N. Dak.....	387	422	380	391	311	434	375	310

DATA FOR EACH CITY—Continued.

[In thousands of dollars.]

	1923				1922			
	Week ending—				Week ending—			
	Feb. 28.	Mar. 7.	Mar. 14.	Mar. 21.	Mar. 1.	Mar. 8.	Mar. 15.	Mar. 22.
District No. 9—Minneapolis—Continued.								
La Crosse, Wis.	2,692	2,848	2,875	2,657	664	943	561	580
Lewistown, Mont.	875	1,175	1,450	849	664	943	561	580
Minneapolis, Minn.	60,283	70,139	63,962	73,107	65,761	72,986	70,108	68,612
Minot, N. Dak.	1,008	1,121	1,063	403	827	900	803	685
Red Wing, Minn.	395	519	457	366	468	483	431	410
St. Paul, Minn.	34,922	43,342	34,854	49,771	36,136	35,165	36,046	36,770
Sioux Falls, S. Dak.	3,477	4,980	3,898	4,210	3,335	3,813	3,210	2,958
Superior, Wis.	1,682	1,776	1,808	1,974	1,640	1,674	1,885	1,559
Winona, Minn.	969	1,264	966	1,052	788	987	855	1,183
District No. 10—Kansas City:								
Atchison, Kans.	1,348	1,351	1,328	1,456	1,290	1,402	1,182	1,202
Bartlesville, Okla.	2,994	3,796	2,924	2,431	2,743	2,552	2,114	1,730
Casper, Wyo.	3,540	3,959	3,455	3,709	2,368	2,840	2,437	2,945
Cheyenne, Wyo.	4,113	1,996	1,475	1,826	3,153	2,198	1,481	1,694
Colorado Springs, Colo.	2,603	2,955	2,957	3,340	2,511	2,516	2,519	2,376
Denver, Colo.	36,900	44,438	31,506	37,888	32,658	32,080	31,678	30,077
Enid, Okla.	3,013	3,261	2,871	3,073	865			
Fremont, Nebr.	985	2,020	1,102	865				
Grand Island, Nebr.	1,131	1,667	1,220	1,083	1,220	1,378	1,155	1,153
Grand Junction, Colo.	563	745	709	696	660	628	677	647
Guthrie, Okla.	711	908	821	872	534	566	533	525
Hutchinson, Kans.	3,175	3,213	2,836	2,364	3,405	2,807	2,337	2,439
Independence, Kans.	2,237	2,967	2,742	2,733				
Joplin, Mo.	3,458	3,410	4,173	3,589	2,239	2,092	2,816	1,675
Kansas City, Kans.	4,056	4,110	3,890	4,157	3,411	3,317	3,461	3,990
Kansas City, Mo.	74,855	89,415	73,427	81,695	75,206	71,251	64,001	65,218
Lawrence, Kans.	1,181	1,190	995	990	1,022	1,019	925	978
McAlester, Okla.	1,030	1,038	790	1,104	1,018	933	1,000	870
Muskogee, Okla.	5,028	6,600	5,490	6,140	5,734	7,076	5,360	6,551
Oklahoma City, Okla.	16,118	22,330	19,460	20,268	19,606	19,055	17,122	19,551
Okmulgee, Okla.	2,315	2,384	2,284	2,452	1,863	2,003	1,834	1,954
Omaha, Nebr.	46,153	57,385	50,517	45,942	47,951	47,576	43,217	45,345
Parsons, Kans.	808	1,164	854	1,028	807	1,017	797	884
Pittsburgh, Kans.	1,677	1,542	1,415	1,380	1,757	977	1,233	1,153
Pueblo, Colo.	2,916	4,096	2,964	2,783	3,427	4,097	3,912	4,323
St. Joseph, Mo.	16,796	17,187	13,568	13,439	12,427	13,682	9,531	11,222
Topeka, Kans.	3,835	4,971	4,092	3,478	3,414	3,513	3,113	2,988
Tulsa, Okla.	26,778	23,676	26,901	24,816	23,915	18,394	23,196	18,423
Wichita, Kans.	12,290	12,244	9,474	9,901	11,340	9,683	8,569	9,255
District No. 11—Dallas:								
Albuquerque, N. Mex.	2,092	2,543	2,408	1,973	1,976	2,140	1,710	1,839
Austin, Tex.	3,569	4,327	3,829	3,628	2,552	3,437	2,988	2,595
Beaumont, Tex.	3,150	3,714	3,628	3,920	3,358	3,559	3,567	3,695
Corsicana, Tex.	1,281	1,269	1,493	1,336	985	1,160	1,198	1,037
Dallas, Tex.	41,485	43,127	35,891	39,379	34,674	36,263	32,504	34,205
El Paso, Tex.	7,024	8,961	7,460	9,098	6,858	7,662	7,747	6,661
Fort Worth, Tex.	26,200	25,900	25,364	24,360	30,840	31,444	32,530	31,422
Galveston, Tex.	17,364	20,057	17,128	18,265	9,736	15,141	13,090	15,163
Houston, Tex.	23,851	25,062	25,842	28,608	24,900	21,545	22,700	25,600
Roswell, N. Mex.	422	634	859	656	704	636	524	624
San Antonio, Tex.	5,573	7,406	7,401	7,656	5,830	6,226	6,538	6,525
Shreveport, La.	8,000	9,201	8,035	8,574	7,742	6,792	7,468	6,742
Texarkana, Tex.	2,157	1,553	2,285	3,827	1,790	1,369	1,569	1,953
Tucson, Ariz.	1,490	1,974	1,760	1,688	1,687	1,619	1,349	1,561
Waco, Tex.	3,468	4,084	3,723	3,757	3,557	4,140	3,551	2,897
District No. 12—San Francisco:								
Bakersfield, Calif.	2,812	3,621	2,660	2,720		4,523	3,967	2,322
Bellingham, Wash.	1,494	1,805	2,340	2,320	1,330	1,448	1,583	1,807
Berkeley, Calif.	3,171	4,729	3,846	3,933	4,034	4,642	5,238	3,844
Boise, Idaho.	2,868	2,592	2,775	3,119	2,512	2,684	1,739	2,423
Eugene, Ore.	1,860	2,176	2,249	2,381	1,332	1,557	1,589	1,651
Fresno, Calif.	11,058	12,007	12,545	10,609	10,519	9,325	9,230	8,590
Long Beach, Calif.	14,147	15,907	14,290	13,515	7,160	8,103	6,836	6,878
Los Angeles, Calif.	145,527	197,626	158,927	166,513	124,409	127,770	117,783	116,080
Oakland, Calif.	33,445	37,908	29,164	27,327	17,615	20,192	17,719	19,103
Ogden, Utah.	6,687	7,691	6,912	6,554	4,041	5,168	4,208	4,495
Pasadena, Calif.	6,822	11,239	7,481	7,668	4,840	8,279	5,673	5,802
Phoenix, Ariz.	3,921	4,479	4,463	4,908	3,540	3,535	3,412	3,221
Portland, Ore.	30,242	36,812	33,093	33,962	33,237	32,707	33,711	34,675
Reno, Nev.	1,557	2,281	1,992	2,276	1,999	2,056	2,242	2,456
Ritzville, Wash.	94	147	173	182	205	147	225	148
Sacramento, Calif.	9,631	8,269	9,314	9,461	13,906	11,630	17,087	14,703
Salt Lake City, Utah.	13,708	15,116	12,955	14,269	13,497	11,961	11,752	11,427
San Bernardino, Calif.	1,455	1,749	1,633	1,391	1,478	1,651	1,434	1,470
San Diego, Calif.	10,752	12,988	11,755	10,311	9,290	8,687	9,521	8,782
San Francisco, Calif.	170,627	247,192	172,261	200,695	167,851	193,107	160,261	168,976
San Jose, Calif.	5,095	5,632	4,877	4,962	2,850	4,598	4,214	4,309
Seattle, Wash.	33,144	38,703	40,135	46,453	35,581	29,718	38,312	39,206
Spokane, Wash.	9,003	11,223	11,075	12,465	9,816	12,088	10,785	12,104
Stockton, Calif.	4,135	5,575	4,841	5,955	4,876	4,831	5,083	5,135
Tacoma, Wash.	7,418	8,977	8,583	11,374	8,312	7,534	9,193	11,204
Yakima, Wash.	1,702	2,134	2,224	2,572	2,888	2,918	2,637	2,760

FEDERAL RESERVE CLEARING SYSTEM.

OPERATIONS DURING FEBRUARY, 1923.

[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 for- warded to other Federal reserve banks and their branches.		Items for- warded to parent banks or to branches in same district.		Total items handled, including duplications.				Number of member banks at end of month.		Number of nonmember banks at end of month.			
	In Federal reserve bank or branch city.		Outside Federal reserve bank or branch city.										Number.		Amount.				On par list.	Not on par list. ¹		
	Num- ber.	Amount.	Num- ber.	Amount.	Num- ber.	Amount.	Num- ber.	Amount.	Num- ber.	Amount.	Num- ber.	Amount.	1923	1922	1923	1922	1923	1922		1923	1922	
Boston.....	560	568,031	3,427	381,827	131	14,624	4,118	964,482	192	46,739	.....	.....	4,310	3,812	1,011,221	857,015	427	435	234	257	.....	.....
New York.....	1,917	3,493,412	4,688	566,025	928	91,751	7,533	4,151,188	1,149	125,965	22	5,519	8,704	7,273	4,282,672	4,145,100	726	716	263	255	.....	.....
Buffalo.....	181	100,478	399	47,010	12	2,653	592	150,141	128	21,080	28	18,204	748	698	189,425	136,641	86	83	78	77	.....	.....
Philadelphia.....	1,003	737,790	2,052	248,686	146	25,320	3,201	1,011,796	426	86,123	.....	.....	3,627	4,034	1,097,919	920,621	715	710	492	470	.....	.....
Cleveland.....	610	253,421	1,268	144,263	77	7,361	1,955	405,045	58	4,647	25	4,526	2,038	1,549	414,218	308,686	311	318	517	514	.....	.....
Cincinnati.....	209	297,894	791	83,408	63	10,449	1,072	586,879	83	36,999	29	8,917	1,100	958	402,486	174,209	226	222	313	319	.....	1
Pittsburgh.....	485	484,916	876	97,335	39	4,628	1,400	586,879	83	36,999	29	8,917	1,100	958	402,486	174,209	226	222	313	319	.....	.....
Richmond.....	117	280,516	1,918	273,947	44	5,684	2,079	560,147	170	54,182	33	8,025	2,282	1,960	622,354	362,824	474	465	698	717	561	585
Baltimore.....	252	178,401	676	63,511	48	5,850	976	247,762	129	32,929	69	6,947	1,174	970	287,638	196,272	161	161	263	266	.....	.....
Atlanta.....	120	100,593	365	44,390	37	4,535	522	149,518	32	9,009	26	3,672	580	494	162,199	105,692	227	229	90	96	456	487
Birmingham.....	51	45,453	198	16,224	13	1,666	262	63,343	20	13,451	27	30,018	309	381	106,812	60,075	93	76	33	33	145	119
Jacksonville.....	73	71,235	191	20,734	10	1,401	274	93,370	46	8,357	8	1,341	328	261	103,068	44,638	78	75	60	64	148	143
Nashville.....	63	76,371	211	19,517	15	2,045	289	97,933	7	1,527	4	731	300	269	100,191	43,834	89	87	144	145	159	159
New Orleans.....	76	42,050	117	15,356	37	5,035	230	62,441	45	12,308	6	841	281	242	75,590	67,347	55	55	50	51	224	225
Chicago.....	987	833,621	3,658	303,402	359	54,228	5,004	1,191,251	351	32,695	11	2,663	5,366	4,530	1,226,609	795,601	1,318	1,319	3,989	3,975	.....	.....
Detroit.....	247	366,556	472	45,091	36	3,663	755	415,310	19	5,467	4	1,544	778	681	422,321	157,495	123	124	258	259	.....	.....
St. Louis.....	381	315,761	1,342	79,038	106	8,867	1,829	403,666	37	4,096	11	956	1,877	1,627	408,718	246,076	391	373	1,690	1,724	.....	.....
Little Rock.....	64	41,008	316	20,199	10	1,083	390	62,290	1	738	7	729	398	340	63,757	35,935	71	69	236	231	.....	.....
Louisville.....	104	137,956	444	25,295	32	3,054	580	166,305	11	852	1	92	592	502	167,249	72,111	95	94	348	341	.....	.....
Memphis.....	76	36,979	186	12,637	11	1,320	273	50,936	2	479	2	222	277	221	51,637	33,855	59	56	187	187	159	164
Minneapolis.....	248	98,652	1,374	69,886	33	5,033	1,660	217,529	73	13,099	1	80	1,734	1,405	190,708	159,169	825	824	2,405	2,421	176	180
Helena.....	22	12,397	105	7,551	7	1,203	134	21,151	4	1,962	1	838	139	189	23,951	20,394	187	200	186	209	6	3
Kansas City.....	358	189,206	1,241	83,345	69	9,527	1,668	282,078	236	31,359	65	8,138	1,969	1,765	321,575	311,429	328	330	1,413	1,451	3	.....
Denver.....	132	39,434	335	20,587	24	3,378	491	63,399	72	17,215	43	11,347	606	511	91,961	77,094	162	161	245	273	6	.....
Oklahoma City.....	64	46,347	951	63,894	10	1,306	1,025	111,547	56	6,664	18	8,387	1,093	932	126,598	105,613	414	375	410	471	7	13
Omaha.....	188	50,404	553	31,906	23	2,164	2,765	284,797	41	5,436	18	3,803	824	648	94,036	76,724	248	252	898	884	151	205
Dallas.....	204	125,344	1,231	162,486	34	4,286	1,469	292,116	71	8,155	39	4,325	1,579	1,400	304,596	224,579	659	654	725	788	53	34
El Paso.....	41	9,367	119	8,709	17	1,482	177	19,558	12	1,513	6	627	195	183	21,698	19,678	63	68	58	67	.....	.....
Houston.....	69	38,167	334	27,744	14	1,423	417	67,334	17	2,529	4	1,067	438	395	70,930	64,534	139	134	256	260	.....	.....
San Francisco.....	298	343,128	630	39,158	69	17,544	997	399,830	29	4,306	28	3,118	1,054	699	407,254	202,867	192	209	265	276	.....	.....
Los Angeles.....	412	172,180	1,535	109,506	54	17,085	2,001	298,771	105	16,614	56	8,193	2,162	1,639	323,578	201,488	159	169	190	165	.....	.....
Portland.....	69	30,155	210	10,787	19	4,116	298	45,058	5	1,649	33	3,452	336	277	50,159	43,520	136	131	136	162	27	.....
Salt Lake City.....	46	29,074	344	20,696	15	3,659	405	53,429	13	3,281	9	2,251	427	394	58,961	46,274	160	174	101	104	.....	.....
Seattle.....	106	36,129	218	14,557	36	6,523	360	57,209	21	5,678	38	4,424	419	364	67,311	52,906	66	63	92	95	.....	.....
Spokane.....	39	15,455	165	8,304	9	1,254	213	25,013	12	2,267	17	2,141	242	213	29,421	28,336	109	102	147	162	1	.....
Total:																						
February.....	9,872	9,697,881	32,940	3,187,011	2,587	335,200	45,414	13,225,867	3,681	624,694	703	160,755	49,798	43,091	14,011,316	10,690,431	9,917	9,856	17,724	18,019	2,282	2,318
January.....	12,006	11,040,202	38,740	3,926,212	3,309	631,643	54,072	15,604,462	4,356	740,333	852	199,534	59,280	47,879	16,544,329	11,534,523	9,911	9,852	17,777	18,071	2,289	2,321

¹ Incorporated banks other than mutual savings banks.

² Includes items drawn on banks in other Federal reserve districts forwarded direct to drawee banks as follows: Cincinnati, 9,000 items, \$1,494,000; Minneapolis, 5,000 items, \$3,958,000; Omaha, 1,000 items, \$323,000. Total, 15,000 items, \$5,775,000.

NOTE.—Number of business days in period for Boston, Richmond, Baltimore, Atlanta, Jacksonville, St. Louis, Little Rock, Kansas City, and Oklahoma City was 23. and for other Federal reserve bank and branch cities, 22 days.

GOLD SETTLEMENT FUND.

INTERBANK TRANSACTIONS FROM FEBRUARY 23, 1923, TO MARCH 22, 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.....	14,000		638,848	667,335		14,487	40,874
New York.....	5,000	102,000	2,140,874	2,140,954		97,080	295,407
Philadelphia.....	18,000		646,338	653,491	10,847		25,565
Cleveland.....	15,000		579,083	590,123	3,970		68,990
Richmond.....	9,000		487,600	487,420	9,180		21,542
Atlanta.....	11,000		256,781	264,639	3,142		17,273
Chicago.....			1,045,548	1,022,825	22,723		73,354
St. Louis.....	12,000	1,000	516,864	511,571	16,293		6,715
Minneapolis.....	10,000	1,000	137,044	143,691	2,353		21,348
Kansas City.....		1,000	353,749	351,800	949		35,502
Dallas.....	2,000	2,000	225,175	216,900	8,275		10,027
San Francisco.....	12,000	1,000	296,192	273,357	33,835		31,625
Total four weeks ending—							
Mar. 22, 1923.....	108,000	108,000	7,324,106	7,324,106	111,567	111,567	648,222
Feb. 21, 1923.....	17,100	17,100	6,182,140	6,182,140			574,857
Mar. 23, 1922.....	113,500	113,500	5,518,607	5,518,607			513,483
Feb. 23, 1922.....	93,000	93,000	4,833,964	4,833,964			518,152

MONEY IN CIRCULATION, MARCH 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 reserve system.	Money in circulation.	
			Amount.	Per capita.
Gold coin and bullion.....	¹ \$3,960,955,432	\$3,549,996,970	\$410,958,462	\$3.71
Gold certificates.....	² (682,553,859)	367,960,778	314,593,081	2.84
Standard silver dollars.....	464,464,404	404,897,765	59,566,639	.54
Silver certificates.....	² (378,117,963)	60,850,445	317,267,518	2.86
Treasury notes of 1890.....	² (1,476,483)	1,000	1,475,483	.01
Subsidiary silver.....	268,891,383	27,804,821	241,086,562	2.17
United States notes.....	346,681,016	63,189,653	283,491,363	2.56
Federal reserve notes.....	2,647,563,480	420,869,052	2,226,694,428	20.10
Federal reserve bank notes.....	34,036,000	4,054,913	29,981,087	.27
National-bank notes.....	767,043,704	41,521,659	725,522,045	6.55
Total.....	8,489,635,419	³ 4,941,147,056	4,610,636,668	41.61
Comparative totals:				
Feb. 1, 1923.....	8,442,726,010	³ 4,998,202,265	4,509,127,518	40.74
Mar. 1, 1922.....	8,076,223,365	³ 4,653,072,774	4,401,984,542	40.31
Apr. 1, 1917.....	5,312,109,272	³ 3,896,318,653	4,100,590,704	39.54
July 1, 1914.....	3,738,288,871	³ 1,843,452,323	3,402,015,427	34.35
Jan. 1, 1879.....	1,007,084,483	³ 212,420,402	816,266,721	16.92

¹ Does not include gold bullion or foreign coin outside of vaults of the Treasury, Federal reserve banks, and Federal reserve agents.² 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.³ 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.

GOLD AND SILVER IMPORTS AND EXPORTS.

IMPORTS INTO AND EXPORTS FROM THE UNITED STATES, DISTRIBUTED BY COUNTRIES.

Countries.	Gold.				Silver.			
	February—		Eight months ending February—		February—		Eight months ending February—	
	1922	1923	1922	1923	1922	1923	1922	1923
IMPORTS.								
Denmark.....	\$5,168,676		\$8,596,207	\$1,115,469			\$844	\$987
France.....	1,425,881	\$984,406	120,628,690	16,784,133	\$7,890	\$1,765	121,987	77,553
Germany.....	1,341		19,920,823	29,707	64,591		5,688,970	55,764
Greece.....			5,003	4,798,294				21,156
Netherlands.....			4,186,976	10,044,247			1,669	
Norway.....	3,307		666,192	543,592			7,767	11,732
Spain.....	10,265	12,473	316,389	48,655	24,158	24,512	49,439	98,621
Sweden.....	8,821,246	15	36,832,591	1,326,968			1,354	1,180
United Kingdom—England.....	8,309,644	1,047,114	118,618,289	107,520,188	43,680	31,723	124,005	185,731
Canada.....	1,648,525	4,643,823	15,798,321	25,554,634	271,527	540,462	2,640,588	5,804,627
Central America.....	395,917	170,199	4,400,691	2,014,359	58,597	79,448	1,088,267	1,000,773
Mexico.....	313,427	315,438	3,574,698	3,601,575	3,675,598	2,250,072	30,895,033	29,562,764
West Indies.....	229,084	17,406	2,843,199	479,517		8,111	440,484	179,868
Bolivia.....		800	7,682	4,234		17,194	316,488	542,932
Chile.....	2,611	4,436	376,542	114,288		12,831	1,152,456	1,502,053
Colombia.....	534,895	394,129	7,408,282	3,946,732		21,199	145,765	135,204
Peru.....	116,373	123,384	1,224,166	1,142,001	575,252	587,323	3,878,107	5,472,310
Uruguay.....	104,006		3,966,970	8,959			25,347	2,167
Venezuela.....	131,893	33,843	643,870	461,418		70	1,478	1,819
China.....	342,479	47,000	4,236,999	5,895,896		120	1,702	10,924
British India.....			14,863,765				11,718	
Dutch East Indies.....		170,000	1,124,624	1,378,612		60,000	296,997	538,111
Philippine Islands.....	56,264	111,786	947,624	704,613	803	1,467	13,483	9,451
British Oceania.....	929,628	78,699	12,587,932	1,076,376	146	86	1,409	1,188
Egypt.....	110,295	26,635	7,210,097	3,271,242			227	12,730
Portuguese Africa.....		55,925	283,735	608,671		13,899	15,978	154,572
All other.....	83,163	145,225	9,345,512	885,639	11,864	17,972	152,461	147,465
Total.....	28,738,920	8,382,736	400,615,869	193,359,989	4,785,957	3,792,387	47,074,023	45,531,687
EXPORTS.								
Netherlands.....				19,000				1,645
Spain.....	217,000		450,200	20,000				
Sweden.....			2,721,013					600
Switzerland.....		7,487	3,123	1,354,866				
United Kingdom—England.....		7,959	134,256	1,921,715	220,928	7,869,528	7,174,885	
Canada.....	108,502	113,387	1,982,832	21,770,433	240,976	3,719,802	1,241,607	
Central America.....						6,543	3,950	
Mexico.....	462,680	546,124	3,874,595	3,096,839	145,573	135,084	1,197,023	1,190,815
West Indies.....			350	899	5,625	2,360	25,360	14,102
Colombia.....				500,000	191,000		191,000	10,000
Venezuela.....					364,000		649,000	
China.....			350,200	2,248,328	1,134,121	13,777,103	14,021,314	
British India.....	824,057		2,003,057	6,493,929	1,417,323	2,974,422	9,625,278	
Dutch East Indies.....				75,000				
French Indo-China.....					422,400	3,168,000		
Hongkong.....	119,555	719,200	8,680,680	2,778,360	134,725	6,461,496	6,471,529	
All other.....		4,932	79,740	7,930		1,563,310	2,749	
Total.....	1,731,794	1,399,089	19,795,590	36,601,712	7,091,665	2,191,059	41,602,587	39,758,474

DISCOUNT RATES OF FEDERAL RESERVE BANKS IN EFFECT MARCH 31, 1923.

Federal reserve bank.	Paper maturing—					
	Within 90 days.				After 90 days, but within 6 months.	After 6, but within 9 months.
	Commercial, agricultural and live-stock paper, n. e. s.	Secured by United States Government obligations.	Bankers' acceptances.	Trade acceptances.	Agricultural ¹ and live-stock paper.	Agricultural and live-stock paper.
Boston.....	4½	4½		4½	4½	
New York.....	4½	4½	4½	4½	4½	
Philadelphia.....	4½	4½	4½	4½	4½	
Cleveland.....	4½	4½	4½	4½	4½	
Richmond.....	4½	4½	4½	4½	4½	
Atlanta.....	4½	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.....	4½	4½	4½	4½	4½	4½

¹ Including bankers' acceptances drawn for an agricultural purpose and secured by warehouse receipts, etc.

DISCOUNT AND INTEREST RATES.

In the following table are presented actual discount and interest rates prevailing during the 30-day period ending March 15, 1923, in the various cities in which the 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 BULLETINS.

A comparison of the discount and interest rates for the various centers during the 30-day period ending March 15 with the 30-day period ending

February 15 shows higher rates in most centers for nearly all paper, although in some centers rates for prime commercial paper remained unchanged and in a few they were reported lower. Rates for interbank loans remained generally unchanged, but in some centers they were higher. Collateral demand loan rates were reported higher. Compared with the corresponding period ending March 15, 1922, all rates were reported lower.

DISCOUNT AND INTEREST RATES PREVAILING IN VARIOUS CENTERS DURING THE 30-DAY PERIOD ENDING MARCH 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.									
No. 1....	Boston.....	H. L. C. 5½ 5 5½	H. L. C. 5½ 5½ 5½	H. L. C. 5 4½ 4½	H. L. C. 5 4½ 4½	H. L. C. 5½ 5 5½	H. L. C. 4 4 4	H. L. C. 4½ 4 4	H. L. C. 5½ 5 5½	H. L. C. 6 5½ 5½	H. L. C. 6 5½ 5½	H. L. C. 6 5½ 5½	H. L. C. 6 5½ 5½	H. L. C. 5½ 5½ 5½
No. 2....	New York ¹	8 4½ 4½-5	6 4½ 5	5 4½ 5	5½ 4½ 5	8 4½ 5	5 4 4-4½	4½ 4 4½	6 4½ 5	6 4½ 5-5½	6 4½ 5-5½	6 4½ 5-5½	6 4½ 5-5½	6 4½ 4½-5
No. 3....	Buffalo.....	7 5 6	6 5 6	5 4½ 5	5 4½ 5	8 5 6		4½ 4 4½	7 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6
No. 4....	Philadelphia.....	6 4½ 5½	6 4½ 5½	5½ 4½ 5	5 4½ 5	6 5 5		5 4½	6 5 5	6 5 5	6 5 5	6 5 5	6 5 5	6 5 5
	Cleveland.....	7 4½ 6	7 4½ 6			6 5 5½		6 4	7 6 6	7 6 6	7 6 6	7 6 6	7 6 6	6 6 6
	Pittsburgh.....	6 5 6	6 5 6	5½ 5 5	5½ 5 5	6 6 6	4½ 4 4½	4½ 4½ 4½	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 6 6
	Cincinnati.....	6 5 6	6 5 6	6 5½ 6	6 5½ 6	6 5 5½	4½ 4 4	4½ 4 4	6 5 5½-6	5 5½ 5½-6	6 6 6	6 6 6	6 6 6	5-5½
No. 5....	Richmond.....	6 4½ 6	6 4½ 6	5½ 5 5½	5½ 5 5½	6 4½ 6			6 5 6	6 5 6	6 5 6	6 5 6	6 4½ 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	6 5 5½	6 5 6
No. 6....	Atlanta.....	7 4½ 6	7 4½ 6			7 4½ 5	6 5 5	6 5 5	7 4½ 6	7 5 6	7 5 6	7 5 6	7 5 6	8 4½ 6-7
	Birmingham.....	8 5 6-7	8 5 6-7	5 4 4½-5	5 4 4½-5	7 5 6			8 5 6	8 5 6-7	8 6 6	8 6 6	8 6 6	8 5 6-7
	Jacksonville.....	7 5 6	7 5 6	5½ 4½ 5	5½ 4½ 5	6 5 6			7 6 6-7	7 6 6-7	7 6 6-7	7 6 6-7	7 6 6-7	6 5 6
	New Orleans.....	7 5½ 5½	7 5½ 6	5½ 4½ 5	5½ 4½ 5	6½ 5 5½	5 4½ 4½	6 6 6	6½ 5½ 5½	7 5½ 5½	7½ 5½ 6	6½ 5½ 6	6½ 5½ 6	6½ 5½
	Nashville.....	8 6 7	8 6 7			8 6 6			7 6 6-7	8 6 7	8 6 7	8 6 7	8 6 7	7 6 6
No. 7....	Chicago.....	6 4½ 5-6	6 4½ 5-6	5 4½ 5	5 4½ 5	6 5 5-5½	4½ 4 4	4½ 4 4-4½	6 4½ 5-5½	6 5 5-5½	6 4½ 5-5½	6 5 5-6	6 5 5-6	6 4½ 5
	Detroit.....	6 5 5½	6 5 5½	5 4½ 4½	5 4½ 4½	6 5 5½			6 5 5½	6 5 5½	6 5 5½	6 5 5½	6 5 5½	6 5 5½
No. 8....	St. Louis.....	6 4 5	6 4 5	5 4½ 5	5 4½ 5	6 5 6			6½ 4½ 5½	6½ 4½ 5½	6½ 4½ 5½	7 5 5½-6	6½ 5 5½-6	6 4½ 5½
	Louisville.....	6 4½ 6	6 5 6	5 4½ 5		6 5 6			6 5 6	6 5 6	6 5 6	6 6 6	6 6 6	6 5 6
	Memphis.....	6 6 6	6 6 6			6 5 6			6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 5 6
	Little Rock.....	7 6 6	7 6 6	5 4½ 5	5 4½ 5	6 6 6			7 6 7	8 6 7	8 6 7	7 6 6	7 6 6	6 6 6
No. 9....	Minneapolis.....	5½ 5 5	6 5 5-5½	5 4½ 4½-4½	5½ 4½ 4½-5	6 5½ 5½	4½ 4½ 4½	6 4½ 4½	6½ 4½ 5-6	6½ 5 5-6	6½ 5 5-6	7 6 6-6½	6½ 4½ 6	5½ 5 5
	Helena.....	8 7 8	8 7 8	6 5 5	6 5 5	8 7 8			8 8 8	8 7 8	8 7 8	8 7 8	8 7 8	8 8 8
No. 10....	Kansas City.....	7 4½ 6	7 5 6	5 4 4½-5	5 4 4½-5	7 6 6			7 5 6	8 5 6	8 5 6	8 6 6	7 5½ 6	8 5 6
	Omaha.....	7½ 4½ 6	7½ 4½ 6	5 4½ 4½	5 4½ 4½	8 5½ 6			7½ 6 7	7½ 6 7	7½ 6 7	8 5½ 7	8 5½ 7	7 6 6½
	Denver.....	8 5 6-7	8 5 6-7	4½ 4½ 4½	4½ 4½ 4½	8 6 6-7			8 5 6	8 5 6	8 5 6	8 6 6-7	8 6 6-7	8 5 6
	Oklahoma City.....	10 5½ 7	10 5½ 7	6 5 5½	6 5½ 6	8 6 6			10 6 8	10 6 8	10 6 8	10 6 8	10 6 8	10 6 7
No. 11....	Dallas.....	7 4½ 5½	7 5 6	6 5 6	6 5 6	7 4½ 5½			8 6 7	8 6 7	8 6 7½	8 7 7½	8 7 7½	8 4½ 6
	El Paso.....	10 6 8	10 8 8	5½ 4 4½	10 8 8	9 6 6			10 8 8	10 8 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	7 6 7	7 6 7	5 4½ 5
No. 12....	San Francisco.....	6 5 5-5½	6 5 5½-6	4½-4½ 4½ 4½	4½ 4½ 4½	6 5 5½	4½ 4 4	4 4 4	6 5 5½-6	6 5 6	6 5½ 6	6 6 6	6 5½ 6	6 5½ 5½-6
	Portland.....	8 4½ 7	8 4½ 6	5 4½ 4½	5 4½ 4½	7 6 6	4½ 4 4		8 6 7	8 6 7	8 6 6	7 6 6½	8 6 7	8 6 7
	Seattle.....	8 4½ 7	8 4½ 6½	5 4½ 4½	5 4½ 4½	7 6 6	5½ 4 5½	5½ 5½ 5½	8 6 6	8 4½ 7	8 6 7	8 6 6	8 6 7	8 6 7
	Spokane.....	8 5 6½	8 6½ 6½	5 4½ 4½	5 4½ 4½	7 6 7			7 7 7	8 5 7	8 7 7	8 6 7	8 6½ 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 7	8 7 7	8 6 7
	Los Angeles.....	8 4½ 6½	8 4½ 6½	5 4½ 4	5 4½ 4	7 5 5½	6 4½ 5	4½ 3½ 4	7 5 6	8 5 6	8 6 6	8 7 7	10 6 6	7 5 6½

¹ Rates for demand paper secured by prime bankers' acceptances—high, 5; low, 4; customary, 4-5.

FOREIGN EXCHANGE RATES.

[General index for March, 1923 (preliminary), 67; for February, 1923, 67; for March, 1922, 70. Noon buying rates for cable transfers in New York as published by Treasury. 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). ¹	
			March.	February.	March.	February.	March.	February.	March.	February.
Belgium.....	Franc.....	19.30	5.2100	5.1100	5.9400	5.6600	5.4800	5.3955	28.39	27.91
Denmark.....	Krone.....	26.80	19.0800	18.6400	19.3100	19.5200	19.1970	19.0905	71.67	71.23
France.....	Franc.....	19.30	6.0300	5.9200	6.7400	6.4500	6.3237	6.1459	32.77	31.84
Great Britain.....	Pound.....	486.65	467.6900	466.4600	470.8300	472.1900	469.5693	469.0809	95.49	96.39
Italy.....	Lira.....	19.30	4.7600	4.7300	5.0200	4.8900	4.8550	4.8177	25.16	24.96
Netherlands.....	Florin.....	40.20	39.3600	39.1900	39.5900	39.6900	39.4893	39.5273	98.23	98.33
Norway.....	Krone.....	26.80	18.0600	18.4000	18.4100	18.6600	18.1578	18.5518	67.75	69.22
Spain.....	Peseta.....	19.30	15.3600	15.5900	15.6100	15.8100	15.4652	15.6577	80.13	81.13
Sweden.....	Krona.....	26.80	26.5600	26.5200	26.6300	26.7600	26.6000	26.5959	99.25	99.24
Switzerland.....	Franc.....	19.30	18.4400	18.7200	18.7600	18.9100	18.5896	18.7977	96.32	97.40
Canada.....	Dollar.....	100.00	97.4328	98.1094	98.4813	98.9201	98.0570	98.6724	98.06	98.67
Argentina.....	Peso (gold).....	96.48	83.8600	83.8200	84.7000	84.8600	84.1452	84.2164	87.22	87.29
Brazil.....	Milreis.....	32.44	10.7900	11.2000	11.3700	11.5900	11.0874	11.4282	34.18	35.23
Chile.....	Peso (paper).....	² 19.53	12.2200	11.7300	12.9800	12.2800	12.6725	11.9941	64.89	61.41
China.....	Shanghai tael.....	² 66.85	73.9800	71.2100	76.5400	74.0400	75.5300	71.8191	112.98	107.43
India.....	Rupee.....	48.66	31.3500	31.5700	31.8200	32.0800	31.5659	31.8495	64.87	65.45
Japan.....	Yen.....	49.85	48.3000	48.3600	48.6100	48.5100	48.4559	48.4359	97.20	97.16

OTHER COUNTRIES.

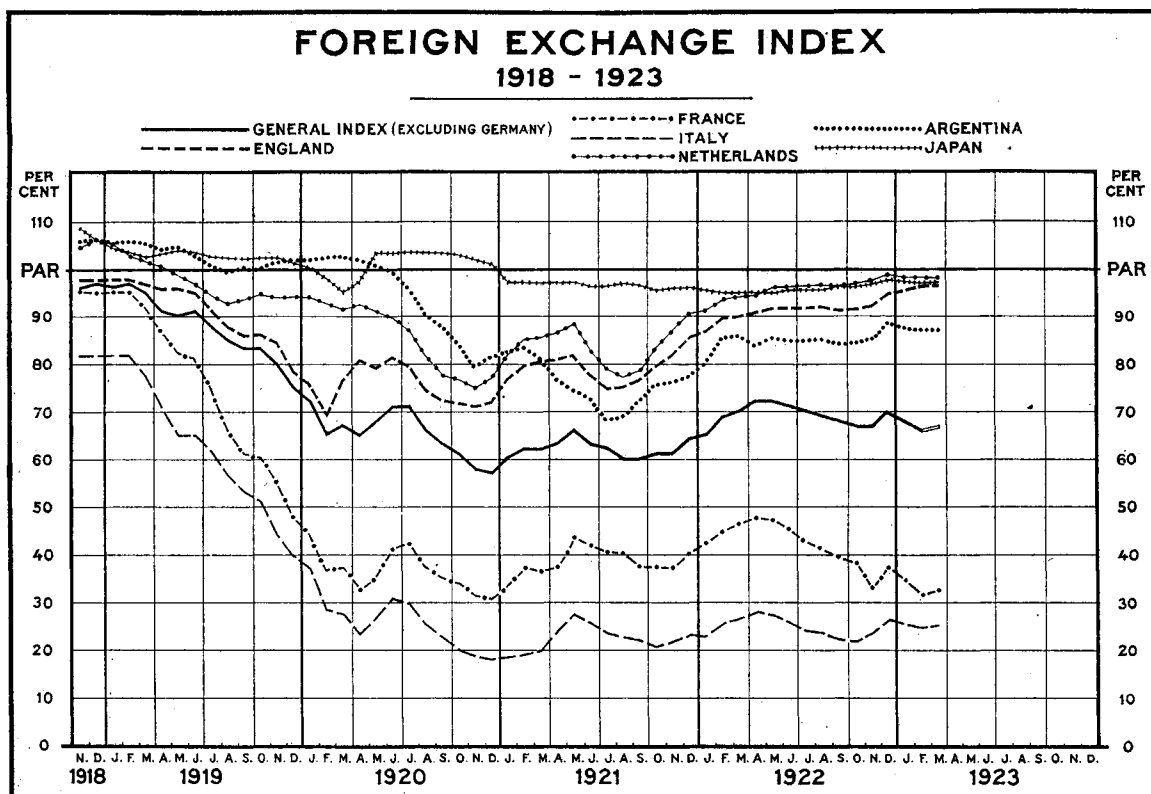
Austria.....	Krone.....	20.26	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014	0.01	0.01
Bulgaria.....	Lev.....	19.30	.6100	.6000	.8086	.6900	.6543	.6372	3.39	3.30
Czechoslovakia.....	Crown.....	19.30	2.9648	2.8720	2.9795	2.9780	2.9693	2.9580	14.28	13.59
Finland.....	Markka.....	19.30	2.7111	2.4906	2.7933	2.7328	2.7553	2.6226	.02	.02
Germany.....	Reichsmark.....	23.82	.0044	.0024	.0048	.0052	.0047	.0038	5.68	6.08
Greece.....	Drachma.....	19.30	1.0522	1.0811	1.1711	1.2194	1.0962	1.1739	.14	.19
Hungary.....	Krone.....	20.26	.0203	.0343	.0346	.0395	.0289	.0381	4.02	4.03
Poland.....	Polish mark.....	19.30	.0022	.0020	.0026	.0029	.0024	.0025	2.51	2.47
Portugal.....	Escudo.....	108.05	4.1600	4.2400	4.8900	4.5000	4.3430	4.3582	5.40	5.02
Rumania.....	Leu.....	19.30	.4728	.4208	.4919	.5164	.4842	.4769	99.99	99.96
Yugoslavia.....	Dinar.....	19.30	1.0025	.8875	1.1288	1.0040	1.0417	.9681	98.02	98.34
Cuba.....	Peso.....	100.00	99.9500	99.9250	100.0156	100.0125	99.9858	99.9554	81.75	80.41
Mexico.....	do.....	49.85	48.5833	48.8958	49.0781	49.1875	48.8605	49.0234	113.35	108.19
Uruguay.....	do.....	103.42	84.1400	82.5300	85.1200	84.7000	84.5496	83.1582	115.93	110.88
China.....	Mexican dollar.....	² 48.11	53.3100	51.5200	55.4400	53.7500	54.5333	52.0505	96.54	96.61
Hongkong.....	Dollar.....	² 47.77	54.0000	52.5200	56.3000	54.0200	55.3804	52.9691		
Straits Settlements.....	Singapore dollar.....	56.78	54.6700	54.5800	55.0800	55.0000	54.8133	54.8532		

¹Based on average.² 1913 average.

SILVER.

[Average price per fine ounce.]

	March.	February.
London (converted at average rate of exchange).....	\$0.68360	\$0.65221
New York.....	.67963	.64716



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. ¹				London bankers' clearing house returns—total clearings.	Government floating debt.			Discount rates.			Capital issues in United Kingdom. ⁴	Index numbers of securities prices. ⁵	Statist index number of foreign exchange value of £. ⁶
	Gold and silver coin and bullion. ¹	Bank notes in circulation. ²	Currency notes and certificates outstanding.	Total deposits.	Money at call and short notices.	Discounts and advances.	Investments.	Total deposits.		Treasury bills.	Temporary advances.	Total floating debt.	Three months' Treasury bills.	Three months' bank bills.	Six months' trade bills.			
Average of end of month figures:													Per cent.	Per cent.	Per cent.			
1913.....	38	29	.....	57	.....	.....	.....	.....	1,370	15	.....	.....	6½	4½	4½	21	.....	.....
1920.....	146	103	348	147	.....	.....	.....	.....	3,252	1,078	219	1,297	6½	6½	7½	40	.....	99.6
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	1,068	372	1,727	3,097	796	165	961	2½	2½	3½	49	111.7	120.6
1922, end of—																		
March.....	157	103	300	151	103	1,097	369	1,747	3,452	882	148	1,030	2½	3	4½	40	107.3	118.3
April.....	157	102	303	134	107	1,065	378	1,737	3,305	758	193	951	2½	2½	4½	100	113.3	118.0
May.....	157	103	298	130	109	1,061	392	1,745	3,307	771	172	943	2½	2½	4½	52	113.4	118.2
June.....	157	103	295	131	113	1,070	388	1,755	2,917	760	205	965	1½	2½	3½	29	112.8	118.2
July.....	154	104	296	122	110	1,056	386	1,730	3,236	755	159	914	1½	1½	3½	43	114.4	120.3
August.....	154	103	293	124	105	1,020	390	1,688	2,885	715	153	868	2½	2½	3½	21	114.7	121.3
September.....	154	101	289	121	104	1,007	381	1,660	2,690	724	148	872	2½	2½	3½	7	114.0	122.7
October.....	154	101	287	125	105	1,033	370	1,686	3,124	740	179	919	2½	2½	3½	31	115.1	123.0
November.....	154	102	288	121	98	1,031	365	1,667	2,989	732	179	911	2½	2½	3½	19	114.1	124.6
December.....	154	104	301	133	106	1,030	360	1,684	2,769	719	222	941	2½	2½	3½	15	113.2	125.8
1923, end of—																		
January.....	154	101	280	121	108	1,046	357	1,692	3,262	715	206	922	2	2½	3½	34	114.2	123.4
February.....	155	102	279	131	103	1,023	349	1,644	3,006	698	154	852	2	2½	3½	19	115.3	126.0

¹ Held by the Bank of England and by the Treasury as note reserve.

² Less notes in currency notes account.

³ Average weekly figures.

⁴ Statist.

⁵ Bankers Magazine.

⁶ Excluding Germany.

FRANCE.

[Amounts in millions of francs.]

	Bank of France.					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 (-).	New stock and bond issues.	
	Gold reserve. ¹	Silver reserve.	War advances to the Government.	Note circulation.	Total deposits.					Value.	Average rate of return.
Average of end of month figures:											
1913.....	3,343	629	.....	5,565	830	.....	86.77	59	-65	.....	.....
1920.....	3,586	253	26,000	38,066	3,527	.....	57.34	554	+48	702	.....
1921.....	3,568	274	25,300	37,404	2,927	.....	56.56	550	+67	1,100	6.70
1922.....	3,597	285	23,042	36,177	2,307	.....	58.48	525	+53	574	6.41
1922, end of—											
February.....	3,577	281	22,500	36,151	2,429	.....	59.55	489	+100	344	6.61
March.....	3,578	282	21,500	35,528	2,236	60,839	56.70	455	+49	377	6.57
April.....	3,579	283	22,100	35,787	2,412	61,528	57.60	411	+58	459	6.45
May.....	3,579	284	23,100	35,982	2,303	62,890	57.70	454	+55	644	6.37
June.....	3,580	285	23,300	36,039	2,448	63,809	57.95	474	+53	947	6.30
July.....	3,582	285	23,000	36,050	2,432	62,525	58.25	562	+62	485	6.02
August.....	3,583	286	23,900	36,385	2,170	62,936	60.10	512	+66	151	6.32
September.....	3,584	287	24,000	36,603	2,199	63,404	61.10	484	+58	636	6.36
October.....	3,635	288	23,600	36,694	2,170	.....	58.25	556	+17	421	6.41
November.....	3,636	289	22,900	36,114	2,184	.....	59.00	783	+43	179	6.59
December.....	3,670	289	23,600	36,359	2,309	.....	59.02	630	+33	1,453	6.22
1923, end of—											
January.....	3,671	290	23,100	36,780	2,208	.....	58.80	726	+44	.....	.....
February.....	3,671	291	23,200	37,055	2,279	.....	58.65	792	+85	.....	.....
March.....	3,672	292	23,100	37,188	2,066	.....	.....	.....	.....	.....	.....

¹ Not including gold held abroad.

ITALY.

[Amounts in millions of lire.]

	Banks of issue.					Leading private banks. ¹							Short-term treasury bills.	Index numbers of security prices. ²
	Reserve.		Loans and discounts.	Note circulation.		Total deposits.	Cash.	Loans and discounts including treasury bills.	Due from correspondents.	Participations.	Total deposits.			
	Gold.	Total.		For account of commerce.	For account of the State.									
Average of end of month figures:														
1913 ²	1,375	1,661	857	2,284	10,581	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	5,945	446	15,810	13,200	.....
1921.....	1,074	2,020	7,586	9,304	9,064	2,475	1,200	10,677	5,575	465	16,001	.....	87.12
1922.....	1,120	1,998	9,466	9,734	8,214	2,759	.....	.....	.....	.....	.....	.....	.....
1921, end of—														
November.....	1,089	1,948	7,888	9,435	8,485	2,388	1,174	8,862	3,981	293	12,778	.....	83.99
December.....	1,092	1,999	10,088	10,304	8,505	3,108	1,997	8,012	3,785	316	12,502	21,926	80.13	
1922, end of—														
January.....	1,109	1,996	10,225	10,183	8,570	3,082	1,426	7,782	3,552	317	11,616	.....	96.61
February.....	1,100	1,971	10,095	9,631	8,626	2,794	1,081	8,169	3,275	315	11,482	.....	94.10
March.....	1,118	1,956	9,899	9,589	8,523	2,890	965	8,250	3,157	316	11,403	24,442	88.82	
April.....	1,122	1,964	10,181	9,360	8,350	2,663	908	8,572	3,180	317	11,708	.....	88.43
May.....	1,104	1,963	9,391	9,259	8,061	2,751	841	8,500	3,232	316	11,698	.....	93.13
June.....	1,106	1,976	9,573	9,615	8,049	2,935	845	8,800	3,180	318	11,863	23,862	94.83	
July.....	1,125	1,991	9,118	9,947	8,050	2,681	861	8,846	3,272	337	11,896	.....	95.19
August.....	1,125	2,024	9,142	9,695	8,050	2,779	783	.....	3,286	337	11,883	.....	103.01
September.....	1,125	2,024	8,858	9,924	8,066	2,661	769	8,706	3,460	337	11,897	25,574	105.68	
October.....	1,136	2,039	9,082	9,782	8,075	2,638	781	8,659	3,568	339	11,960	.....	109.90
November.....	1,141	2,034	8,680	9,892	8,074	2,634	781	8,797	3,554	336	12,045	.....	111.94
December.....	1,126	2,042	9,345	9,935	8,076	2,602	.....	.....	.....	.....	.....	.....	112.91

¹ Includes Banca Commerciale Italiana, Credito Italiano, Banco di Roma, and until November, 1921, Banca Italiana di Sconto.² Figures for 1921 based on quotations of Dec. 31, 1920=100; those for 1922 on quotations of Dec. 31, 1921=100.³ End of December figures.

GERMANY.

[Amounts in millions of marks.]

	Reichsbank.					Darlehns- kassen- scheine in circu- lation.	Treasury bills out- standing.	Value of new stock and bond issues placed on Ger- man market.	Index of security prices. ¹	
	Gold reserve.	Note cir- culation.	Total deposits.	Discounts.					Total clear- ings.	
				Treasury bills.	Commer- cial bills.					
Average of end of month figures:									Per cent.	Per cent.
1913.....	1,068	1,953	668			6,136				
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	192,832	2,655	
1922.....	1,002	339,677	108,633	338,147	72,211	530,647	11,217	475,835		
1922, end of—										
February.....	996	120,026	26,526	134,252	1,857	109,816	7,977	262,817	2,101	
March.....	997	130,671	33,358	146,531	2,152	170,357	8,701	271,935	6,416	
April.....	1,001	140,420	31,616	155,618	2,403	175,977	9,183	280,935	3,992	121
May.....	1,003	151,949	33,128	167,794	3,377	179,370	9,440	289,246	4,152	
June.....	1,004	169,212	37,174	186,126	4,752	191,414	10,374	311,600	2,762	
July.....	1,005	189,795	39,976	207,858	8,122	243,493	12,234	307,810	2,330	85
August.....	1,005	238,147	56,124	249,766	21,704	374,856	13,383	331,000	2,468	
September.....	1,005	316,870	110,012	349,770	50,234	473,715	13,995	451,000	7,937	
October.....	1,005	469,457	140,779	477,201	101,155	789,341	14,009	614,000	7,187	169
November.....	1,005	754,086	240,969	672,222	246,949	1,463,766	13,809	839,000	15,223	
December.....	1,007	1,280,095	530,526	1,184,464	422,235	2,078,969	13,450	1,495,000		1,334
1922, end of—										
January.....	1,005	1,984,496	762,264	1,609,081	697,216	3,826,206	13,395	2,082,000		1,378
February.....	1,005	3,512,788	1,582,981	2,947,364	1,829,341		12,625	3,583,000		4,668
March.....	1,005	5,517,920	2,272,084	4,552,012	2,372,102		12,600			3,664

¹ End of March, 1913.² 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.		Value of stock issues registered during month.	Index number of stock prices.	Index number of foreign exchange value of krona.
	Gold coin and bullion.	Note circulation.	Total deposits.	Clearings.	Loans and discounts.	Bills discounted with Riksbank.			
Averages of end of month figures:									
1913 ¹	102	235	108	535	2,287	139	24	258	.....
1920.....	269	733	226	3,596	6,008	476	61	176	112.9
1921.....	280	661	193	2,715	5,948	389	31	121	121.8
1922.....	274	579	269	2,109	5,317	340	29	103	123.4
1922, end of—									
February.....	274	579	346	2,122	5,572	429	18	94	129.2
March.....	274	626	312	2,354	5,474	447	23	89	128.3
April.....	274	582	301	1,936	5,430	404	15	100	126.6
May.....	274	567	293	2,162	5,378	380	50	115	124.8
June.....	274	585	247	2,118	5,388	320	63	113	125.6
July.....	274	551	243	2,015	5,268	307	35	113	127.0
August.....	274	559	213	1,803	5,221	293	22	110	128.8
September.....	274	605	180	1,902	5,181	288	14	103	130.5
October.....	274	569	178	1,995	5,149	206	15	98	131.7
November.....	274	575	191	1,979	5,099	252	59	90	132.2
December.....	274	584	389	2,588	4,984	331	12	96	129.9
1923, end of—									
January.....	274	520	321	.....	4,888	214	.....	93	129.9
February.....	274	538	270	.....	4,903	175	.....	.....	.....

¹ End of December figures.

CANADA.

[Amounts in millions of dollars.]

	Chartered banks.						Gold reserve against Dominion notes.	Dominion note circulation.	Bank clearings.*
	Gold coin and bullion. ¹	Current loans and discounts.	Money at call and short notice.	Public and railway securities	Note circulation.	Individual deposits—demand and time.			
Average of end of month figures:									
1921.....	72	1,403	282	369	195	2,125	85	272	1,454
1922.....	75	1,272	280	332	166	2,009	90	240	1,353
1922, end of—									
January.....	70	1,287	261	361	163	1,925	81	255	1,349
February.....	70	1,299	273	352	164	1,987	81	247	1,149
March.....	70	1,301	267	354	163	1,981	81	241	1,346
April.....	70	1,314	278	343	165	2,000	81	242	1,193
May.....	70	1,285	288	313	156	2,059	83	222	1,497
June.....	70	1,266	274	319	166	2,053	85	233	1,323
July.....	70	1,248	272	323	152	2,016	87	231	1,278
August.....	70	1,248	277	331	158	1,979	89	229	1,172
September.....	71	1,250	279	322	177	1,985	91	235	1,253
October.....	87	1,276	301	310	179	2,020	93	240	1,497
November.....	92	1,255	303	317	170	2,036	96	251	1,619
December.....	93	1,230	284	341	176	2,061	129	257	1,555
1923, end of—									
January.....	91	1,197	281	356	153	1,963	132	241	1,507

¹ Includes gold in central gold reserve but not gold held abroad.

* Total for month.

ARGENTINA.

[Amounts in millions of pesos.]

	Banco de la Nación.				Commercial banks. ¹				Caja de Conversión.		Clearings in Buenos Aires (paper).
	Cash.		Dis- counts and advances (paper).	Total deposits (paper).	Cash.		Dis- counts and advances (paper).	Total deposits (paper).	Gold reserve.	Note cir- culation (paper).	
	Gold.	Paper.			Gold.	Paper.					
End of—											
1913.....	32	180	478	541	62	435	1,541	1,464	263	823	1,471
1919.....	39	268	676	1,250	66	771	2,113	3,010	2,399	1,177	2,805
1920.....	25	406	804	1,412	46	1,081	2,505	3,530	470	1,363	3,612
1921.....	23	410	866	1,310	36	1,087	2,543	3,375	470	1,363	3,482
1921, end of— December.....	23	410	866	1,310	36	1,087	2,543	3,375	470	1,363	3,482
1922, end of— January.....	23	419	887	1,310	36	1,064	2,529	3,362	470	1,363	3,014
February.....	23	383	913	1,310	36	994	2,565	3,362	470	1,363	2,593
March.....	23	333	884	1,272	36	981	2,512	3,313	470	1,363	3,298
April.....	23	393	887	1,283	36	999	2,489	3,304	470	1,363	.....
May.....	23	386	906	1,294	35	1,016	2,461	3,278	470	1,363	3,016
June.....	23	395	933	1,329	35	1,060	2,461	3,326	470	1,363	2,716
July.....	23	399	920	1,322	35	1,013	2,473	3,308	470	1,363	2,814
August.....	23	407	946	1,353	35	1,041	2,491	3,356	470	1,363	2,570
September.....	23	402	950	1,346	35	1,048	2,514	3,379	470	1,363	2,725
October.....	23	405	921	1,328	35	1,028	2,549	3,354	470	1,363	2,827
November.....	23	396	934	1,345	35	1,053	2,557	3,394	470	1,363	2,827
December.....	23	340	1,036	1,389	35	1,025	2,664	3,456	470	1,363	2,954
1923, end of— January.....	23	359	992	1,369	.....	.....	.....	.....	470	1,363	.....

¹ Includes Banco de la Nación.² 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.							
	Specie re- serve for notes. ¹	Loans and dis- counts.	Ad- vances on foreign bills.	Note cir- culation.	Gov- ern- ment depos- its in Japan.	Private depos- its in Japan.	Cash on hand.	Total loans.	Total depos- its.	Total clear- ings.	Average dis- count rate.	Capital issues in Japan.	Index of se- curity prices. ²	
Average of end of month figures:														
1913.....	216	47	33	363	297	7	.....	333	.....	361	8.38	32	.....
1921.....	1,200	107	39	1,226	409	50	.....	1,932	.....	2,572	9.00	186	194
1922.....	1,172	208	94	1,291	.....	36	129	1,961	1,789	2,834	9.31	.....	.....
1922, end of—														
February.....	1,223	172	26	1,246	328	27	113	1,950	1,751	2,438	9.02	200	188	
March.....	1,289	248	58	1,289	422	29	141	1,963	1,749	3,099	9.09	163	182	
April.....	1,263	267	61	1,226	520	30	130	1,980	1,761	2,809	9.34	217	160	
May.....	1,203	178	50	1,203	469	33	120	1,973	1,748	3,143	9.42	110	168	
June.....	1,223	179	98	1,344	377	43	122	1,998	1,798	3,178	9.45	121	170	
July.....	1,220	133	82	1,224	427	35	127	1,971	1,802	2,766	9.38	101	165	
August.....	1,132	241	90	1,280	488	30	115	1,928	1,783	2,582	9.42	93	165	
September.....	1,069	134	115	1,237	382	29	145	1,921	1,822	2,750	9.38	150	152	
October.....	1,068	160	142	1,236	437	33	126	1,926	1,812	2,697	9.38	98	160	
November.....	1,066	183	141	1,241	445	40	126	1,929	1,828	2,971	9.45	.....	161
December.....	1,064	375	205	1,590	333	66	169	2,011	1,869	3,329	9.34	.....	.....
1923, end of—														
January.....	1,062	180	159	1,308	380	34	113	2,002	1,860	2,246	.....	.....	.....
February.....	1,080	157	140	1,261	396	31	117	2,051	1,894	2,592	.....	.....	.....
March.....	1,057	241	109	1,238	463	29	.....	.....	.....	.....	.....	.....	.....

¹ Includes gold credits abroad, gold coin and bullion in Japan.² Tokyo market.

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FEDERAL RESERVE DISTRICTS

