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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.

Readjustment situation. During the recent period of economic readjustment the important relationships existing between public finance and banking have been apparent, as well as between business and banking. The former phase of the subject has now become of distinctly less significance than for some time past. Business readjustment, on the other hand, has continued to absorb a greater proportion of public attention. It had been supposed that before this time very decided progress toward the completion of such readjustment would have been attained. The facts which have come to light during the past month or more have, however, made it apparent that the process will be slower than had been expected. The attention of the public and of the banking community particularly has therefore been closely concentrated upon the elements or factors which are of chief importance in the situation with a view to determining which of them are distinctly responsible for the slowing down of progress toward normal conditions. A review of the existing situation shows that the outstanding features of the present problem include wages, prices, transportation rates, and costs of raw materials, as well as the relationship of banking and credit to each of these fields of economic organization. Business conditions during the month of April reflect the varying changes in these different elements, and suggest that the significant feature in the present outlook is the unevenness with which relationships between the chief factors have been adapted to one another. Recovery in business, when viewed at any particular moment, is in fact distinctly irregular and uneven.

This state of things is of fundamental importance to banking and credit prospects because of the fact that complete restoration of soundness of banking institutions can occur only in proportion as a well-rounded and well-planned system of credit is again brought into existence. Failure to restore such a condition in credit necessarily implies the existence of discrepancies in business progress as between different centers, while it also involves the continued existence of "frozen" credit in those lines in which readjustment has been slow and halting or in which the absence of demand from other quarters, due to incomplete readjustment and reorganization, has sufficed to hold back complete adaptation to new conditions. While it has been customary in many quarters to regard the slowness of economic readjustment as in large measure due to the curtailment of export demand, the fact remains that a situation very closely parallel to our own exists in numerous foreign countries. In fact, the conditions in some of these countries are more pronounced and more seriously retarded than they are in the United States. While due weight must, of course, be given to the destruction of wealth resulting from the war, the continued and burdensome tax systems which prevail in almost all countries, and to the general disorganization and uncertainty resulting in part from disturbed currency and exchange conditions, it remains true that these factors taken by themselves do not fully explain the state of things in any one country. If all have been similarly affected, it is evidently unsatisfactory to attribute the condition of any one of them to reduction of export demand. The retardation of the readjustment process and the fact that it has

proceeded more rapidly in some fields than in others evidently calls for additional analysis and explanation. The importance of such considerations from the credit standpoint has already been made evident. It would seem to be true that in nearly all countries failure to bring about a steady and moderate return to normal conditions has been in part due to the fact that the receding power both of capital and labor, and, in fact, of all elements of cost, has been different in different industries and to some extent in different portions of the same industry, or in different parts of the country. Irregularity and uncertainty in the process of readjustment inflicts serious hardship upon those who find their output falling in price while their expenses are but little, or not at all, changed. Particularly is the hardship of falling return and fixed cost felt by the wage earner who is either partly or wholly unemployed or who finds his income reduced at the same time that he is able to lower but little his actual cost of living.

From some standpoints the fundamental factor, perhaps the foremost cause of this unevenness in readjustment, is seen in the irregular movement of prices of commodities that normally move in concert. Such lack of adjustment is seen at practically every stage of the productive process, in that a fall in the price of raw materials is not adequately reflected in the price of the manufactured article, nor do reductions in retail prices correspond with those in wholesale. When the decline of wholesale prices began, several factors operated to retard the parallel reduction of charges made by retailers. One of these was the indisposition on the part of retailers to sell below their original cost, an attitude in which they were supported by many wholesalers and manufacturers who recognized that the collection of the amounts owing to them would depend upon recovery by the retailer from the public of at least a substantial percentage of the original cost to him of his goods. Another element in the situation was undoubtedly the influence of

associations of middlemen and of retailers who by agreement among themselves succeeded in sustaining prices, not perhaps at their original level but at a level considerably above that which was warranted by changes in wholesale prices. A third element of considerable importance is seen in the fact that certain elements of cost, such as wages, had become thoroughly stereotyped as the result of law or agreement or by decisions of semigovernmental bodies. Perhaps the best example of conditions of this kind is offered by the situation on our railways and by conditions in some basic lines of industry where positive contracts or agreements extending over a series of years had been entered into, as, for example, coal mining. The effect of the various retarding factors, at any rate, has been that of preventing at all times a close correspondence between changes in wholesale and changes in retail prices. The progress of the situation may be best illustrated by comparative index numbers reflecting wholesale and retail prices during the past year or more.

These index numbers differ materially among themselves. Wholesale price indexes are far more sensitive and respond far more quickly to changes in costs or conditions of production than do retail price indexes. The field covered by wholesale price indexes has also been much more carefully studied than has that of retail prices. Retail prices vary considerably as between different localities and respond to differences in buying power among consumers, differences in cost of distribution, and other elements. Satisfactory retail price indexes are in fact not available. The Bureau of Labor Statistics publishes such an index including only the prices of foodstuffs, but no index numbers are available to show the movement of prices of clothing and other important elements in the retail price field. As things stand, the purchaser of commodities at retail is in a peculiarly difficult situation, because of his lack of a standard by which to judge the fairness of the price which he is expected to pay for the necessities of life. He can not be expected to be closely acquainted with

changes in wholesale prices from day to day, nor can he in any adequate way allow for the various factors which prevent such changes from being immediately reflected in the charges which are made to him by dealers in consumable commodities. The following table, however, exhibits the movement of prices as shown by the wholesale price indexes of the Federal Reserve Board and the Bureau of Labor Statistics and compares with them the index of the retail prices of foods as published by the Bureau of Labor Statistics.

Prices in the United States.
[Average price for 1913=100.]

	Wholesale price index, Federal Reserve Board.	Wholesale price index, Bureau of Labor Statistics.	Retail prices of food, Bureau of Labor Statistics.
1920.			
January.....	242	248	201
February.....	242	249	200
March.....	248	253	200
April.....	263	265	211
May.....	264	272	215
June.....	258	269	219
July.....	250	262	219
August.....	234	250	207
September.....	226	242	203
October.....	208	225	198
November.....	190	207	193
December.....	173	189	178
Average price for the year...	233	243	203
1921.			
January.....	163	178	172
February.....	154	167	158
March.....	150	162	156

Special interest attaches to the irregularity and unevenness with which changes in prices have progressed in varying groups of commodities since the peak of the price movement was reached. The figures regularly published by the Federal Reserve Board for this class of goods exhibit this situation clearly in contrast with the figures for the price level of 1913 taken as a base. Such a comparative showing is furnished in the following brief tabulation:

Index numbers of wholesale prices in the United States for principal classes of commodities—Bureau of Labor Statistics—regrouped by Federal Reserve Board.

[Average price for 1913=100.]

Year and month.	Raw materials.				
	Farm products.	Animal products.	Forest products.	Mineral products.	Total raw materials.
January, 1921.....	155	119	245	220	175
February, 1921.....	145	114	227	207	165
March, 1921.....	136	116	213	197	158

The effect of this price irregularity has been to inflict serious hardship upon some classes in the community. Such hardship is especially felt by the farming class, since the decline in prices of agricultural products has proceeded much more rapidly than the fall in prices of those articles which the farmer needs in the course of his operations. Whereas certain grains and cotton have gone back to prewar figures, the prices of fertilizer, agricultural machinery, wire, tools, and others have undergone no such reduction, or in other cases have been maintained at or near their high levels of cost. This situation has necessarily tended to bring about an artificial distribution of the load of readjustment among different classes of the community. Those classes which are not organized for the purpose of keeping up charges to the other members of the community and which, therefore, are obliged to absorb their losses must carry the largest proportion of the load. In thus specializing and localizing the effects of readjustment a number of factors have cooperated. Among them are the wage agreements to which reference has already been made and which have resulted in putting some classes of workers upon an entirely different basis than others; also associations of business men whose object is that of maintaining prices by tacit agreement or perhaps of raising them. Finally may be cited the cases where certain classes of payments are practically fixed in amount, as, for example, railroad rates. Suffering resulting from this unevenness in the movement of prices both in different parts of the country, as between different products, and in the retail as compared with the wholesale field, has been the moving factor in the demand which has made itself felt in various quarters for more extensive credit for the purpose of carrying commodities pending the establishment of the market upon a firmer basis. It has also been responsible for much of the complaint about excessive railroad rates and for a large part of the demand for the immediate enactment of tariff duties designed to protect specified industries against the undue competition of foreign products in those lines in which prices have most sharply fallen. So important is the influence of this price irregularity as to demand

careful discrimination and analysis of the factors which have tended to promote it.

During the past month the Federal Reserve Board has instituted a survey of the labor field for the purpose of ascertaining to what extent the readjustment process has affected wages. The results of this inquiry are reviewed elsewhere in this issue, but it may be stated here that a general survey of plants which a year ago employed over 1,700,000 workers shows a general decline in the numbers employed of 25 per cent; the reduction in the amount of the weekly pay roll has, however, been even greater, i. e., 29.8 per cent, indicating that wage rates have on the average been somewhat cut. It should be said, however, that as many of these plants were working a greater number of hours per week, often overtime, a year ago, some part of the pay-roll reduction is undoubtedly to be attributed to this fact and may have taken place without reductions in wage rates. But supplementary information indicates that the actual rates paid have been reduced, this being especially true in the case of unskilled labor and to a certain extent in the case of unorganized skilled labor. In some instances, especially in the southeastern portion of the United States, ordinary unskilled labor has sustained reductions of fully 50 per cent. The great group of textile workers has been affected also by wage reductions, as have iron and steel workers in the independent mills.

According to information published by the Bureau of Labor Statistics, the increase in weekly full-time rates of wages of workers in certain well-organized groups, such as the building, printing, trucking, and metal trades, was 89 per cent between 1913 and May, 1920. Such statistics of course do not take account either of increases in earnings due to overtime or reductions in earnings due to unemployment. However it seems likely that during the past year, i. e., since May, 1920, weekly rates of wages of these particular classes of workers have not been materially changed, although earnings have been very generally reduced as a result of lack of employment. Railroad workers and coal miners and other

highly organized groups in standard basic industries, however, have not as yet experienced the general reductions that have occurred in other lines. A wage cut announced by the United States Steel Corporation on May 4, represents a step toward adjustment.

This condition of things naturally suggests a close connection between high wages and high prices in not a few classes of business, while it also throws a bright light upon the effect of such high wages and high prices as one element in retarding completion of the process of adapting the relationship between the industries in which they exist and the rank and file of other industries. Such retardation takes place through the lessening of demand in other industries for the products or services turned out by the high-price industries, or may result from the fact that in those cases where the products of high-price industries are ranked as "necessities" they exact from the other industries which consume their output an undue share of the product of the latter. The President in his opening message to Congress on April 12 referred to this situation as reported to him by the Federal Trade Commission, and said:

"One condition in the business world may well receive your inquiry. Deflation has been in progress but has failed to reach the mark where it can be proclaimed to the great mass of consumers. Reduced cost of basic production has been recorded, but high cost of living has not yielded in like proportion. For example, the prices on grains and live stock have been deflated, but the cost of bread and meats is not adequately reflected therein. It is to be expected that nonperishable staples will be slow in yielding to lowered prices, but the maintained retail costs in perishable foods can not be justified.

"I have asked the Federal Trade Commission for a report of its observations, and it attributes, in the main, the failure to adjust consumers' costs to basic production costs to the exchange of information by 'open-price associations,' which operate, evidently, within the law, to the very great advantage of their members and equal disadvantage to the consuming public. Without the spirit of hostility or haste in accusation of profiteering, some suitable inquiry by Congress might speed the price readjustment to normal relationship,

with helpfulness to both producer and consumer. A measuring rod of fair prices will satisfy the country and give us a business revival to end all depression and unemployment."

The report from which the President quoted in this message, after reviewing the situation and discussing conditions in the price field, stated the following view with respect to the question of readjustment as such:

"It should be said in conclusion that following the disordered condition of the world's affairs, a shrinkage in values is inevitable and that normal conditions will be the more quickly restored if the producer, the laborer, the manufacturer, the jobber, and the retailer will each share at once in the unavoidable loss, and further that any effort by any element to place its share of the common loss on the shoulders of others, and particularly of the consumer, can but result in a continuation of the conditions under which the country is now suffering."

A phase of the readjustment situation which will necessarily receive very careful attention as an element in the restoration of business to a satisfactory condition is the problem presented by railroad rates. The advance of prices and costs during the war necessitated an increase of rates during the period when the roads were under Government control, which amounted to between 25 and 40 per cent of their previous level. This amount did not prove sufficient to furnish the roads with a revenue adequate to their expenses. Railroad wages were several times advanced during the war, the aggregate increase amounting to 150 per cent of prewar wages. The increase in wages and in the number of men employed is estimated to have added probably about \$2,400,000,000 to the gross wage bill of the roads as compared with the amount disbursed on that account in 1914. The fact that rates, even with the heavy traffic which developed during the war, were not sufficient to meet expenses is shown by the necessity the Government was under of appropriating from March 21, 1918, when the "revolving fund" was created, down to and through the Transportation Act, about \$2,682,000,000 for the purpose of making up to the roads the amounts which were necessary to enable them to meet

operating expenses and provide for capital expenditures. Provision was thus made to pay their security holders the same dividends and interest which had been disbursed to the latter during the period before the war and for continuing guaranties for a six months' period after the close of Government operation. When the reaction in business set in there was a large curtailment of the volume of traffic, with the result that although railroads were able to reduce their wage bills by reducing their staffs of employees the loss of operating revenue went so far as to wipe out in many cases their net earnings and in many cases a deficit resulted. Rates had again been raised to the extent of 25-40 per cent of their then existing level by the action of the Interstate Commerce Commission in August, 1920, but these advances, like those which were made under Government control during the war, were not adjusted to the necessities of the different kinds of traffic, with the result that some classes of rates were raised to a point that was unproductive of additional revenue. Since that time considerable reductions have been made in selling prices, while freight rates have remained the same. The most general way of measuring changes in freight rates is by calculating the revenue per ton per mile. Such calculations show that before the increase in rates which occurred last summer prewar rates had been advanced by approximately 35 per cent. Since then there has been on the average for the country as a whole the further increase of 25 to 40 per cent. While in the eastern district rates have been increased by 40 per cent, in the southern and western districts the increases have been less. On the average, present freight rates are approximately 72 per cent above prewar. The view is frequently expressed that a readjustment of rates will probably result beneficially both to the roads and to shippers. As things stand, the effect of the present level of rates is undoubtedly that of tending to interfere with the normal movement of products and the well-developed relationship of markets and industries. The Secretary of Commerce in some recent remarks spoke of present rates on agricultural products as being so high that their continued maintenance would necessitate a rewriting of the

commercial geography of the country, meaning thereby that with rates at their present level or basis of adjustment various classes of producers were unable to put their products successfully into competitive markets. In this state of affairs it would seem that the result of existing conditions in the railroad rate structure is twofold, (1) railroad charges and costs are at present retained upon a basis which has undergone no readjustment such as has occurred in other branches of industry, so that they exact too large a proportion of the selling price of commodities, while (2) the lack of satisfactory adaptation of the rates to the various types of freight has resulted in preventing the movement of some classes of commodities to competitive markets. Moreover, increased expenses of delivery render it difficult or impossible for consumers to purchase freely so long as they are not able to get higher prices for their own products than are now prevalent.

The condition of business is illustrated by the index numbers of production and trade regularly computed by the Board, notwithstanding that they are, as heretofore remarked, necessarily about 30 days behind the date of publication. The latest figures for these indexes are, however, presented herewith:

[000 omitted.]

	February, 1921.		March, 1921.		March, 1920.	
	Total.	Relative.	Total.	Relative.	Total.	Relative.
Receipts of live stock at 15 western markets (head)....	4,738	94.7	4,700	93.9	5,004	100
Receipts of grain at 17 interior centers (bushels).....	66,515	97.9	78,899	118.1	67,920	100
Sight receipts of cotton (bales).....	745	93.5	554	69.5	797	100
Shipments of lumber reported by three associations (million feet).....	538	59.1	664	72.9	910	100
Bituminous coal production (short tons).....	30,851	65.9	30,328	64.8	46,832	100
Anthracite coal production (short tons).....	7,845	99.8	7,603	96.8	7,857	100
Crude petroleum production (barrels).....	35,348	98.6	40,802	113.8	35,831	100
Pig-iron production (long tons).....	1,937	57.4	1,596	47.3	3,376	100
Steel-ingot production (long tons).....	1,749	53.0	1,571	47.6	3,299	100
Cotton consumption (bales).....	396	68.7	438	76.0	576	100

As shown by an analysis of these figures, but little reduction in volume or activity is revealed in some classes of business, while in others the reaction has been very pronounced.

The business situation thus parallels quite closely the status of things in regard to wages as already illustrated by the Board's wage investigation. In some branches of industry and business the volume of production remains nearly normal and the flow of commodities from producer to consumer at least reasonably so, while in others the reduction has been marked and decisive, just as in some branches of employment considerable decline in wages is noted notwithstanding that in others the level of pay remains practically unaffected. Altogether, therefore, business restoration may be said to be progressing as fast as the conditions of readjustment, the modification of rates, wages, profits, and the like, and the economic pressure of organizations of producers and employees will permit.

The conditions which have tended to retard readjustment in the United States have in nearly all cases operated in a similar way in foreign countries. There has been the same difficulty in bringing about a parallel change in retail and wholesale prices abroad that has been experienced in the United States, while the difficulties growing out of the fact that some industries adapted themselves to the new conditions much more rapidly than others have given rise to the same one-sidedness in the new development that has been witnessed here. Added to these general—not to say universal—obstacles to the restoration of a harmonious price and cost situation has been the difficulty of foreign trade growing out of fluctuations in exchange. The past few weeks have seen but little improvement in this regard and the general outlook has been if anything impaired as a result of the delay in effecting a satisfactory settlement of the German reparations question. Lack of such settlement has seriously interrupted trade between the central empires and other countries, while it has left producers and exporters throughout the allied nations in a condition of doubt with reference to the date at which the return of less uncertain conditions might be expected. Labor controversies in some of the allied countries also have tended to check, or even have stopped, the production of essential commodities such as coal and have thereby limited the scope of actual foreign trade.

The movement of exchange rates has been as follows:

Foreign exchange rates.

	Week ended—			
	Apr. 2.		Apr. 9.	
	High.	Low.	High.	Low.
England.....	3.9350	3.9038	3.9288	3.8788
France.....	.0705	.0691	.0715	.0698
Italy.....	.0419	.0400	.0442	.0413
Spain.....	.1405	.1395	.1400	.1382
Germany.....	.0161	.0158	.0164	.0161
Switzerland.....	.1743	.1722	.1734	.1722
Sweden (Stockholm).....	.2370	.2315	.2370	.2335
Holland.....	.3463	.3435	.3470	.3442
Belgium.....	.0736	.0722	.0745	.0727
Argentina.....	.3369	.3333	.3321	.3188
China (Hongkong).....	.4888	.4788	.4938	.4788
China (Shanghai).....	.6513	.6288	.6563	.6338
Japan (Yokohama).....	.4825	.4825	.4825	.4825
Canada.....	.8875	.8813	.8950	.8863
Bar silver in New York.....	.5825	.5638	.5900	.5725

	Week ended—			
	Apr. 16.		Apr. 23.	
	High.	Low.	High.	Low.
England.....	3.9250	3.8863	3.9438	3.9200
France.....	.0715	.0707	.0736	.0712
Italy.....	.0494	.0444	.0488	.0465
Spain.....	.1401	.1380	.1390	.1381
Germany.....	.0163	.0157	.0161	.0138
Switzerland.....	.1736	.1727	.1733	.1729
Sweden (Stockholm).....	.2385	.2355	.2380	.2359
Holland.....	.3468	.3450	.3484	.3460
Belgium.....	.0745	.0734	.0755	.0731
Argentina.....	.3259	.3177	.3179	.3154
China (Hongkong).....	.5138	.4938	.5188	.5038
China (Shanghai).....	.6688	.6538	.6738	.6588
Japan (Yokohama).....	.4825	.4825	.4825	.4825
Canada.....	.8925	.8825	.8925	.8838
Bar silver in New York.....	.6375	.5863	.6200	.5988

In so far as relates to our own trade with foreign countries, the tendencies that were noted a month ago have become increasingly plain with the publication of the official figures for March. The value of exports declined to \$387,000,000, as compared with \$489,000,000 in February and \$820,000,000 for March, 1920. Imports, on the other hand, which are reported at \$252,000,000, show somewhat of an increase over the low figures recorded in January and February, although remaining at only about one-half the level of imports in March of last year. The drop in exports is due partly to price declines, but the fact remains that exports of many lines of goods, more especially manufactures, are at a standstill. Among raw materials the most noticeable reduction in the quantities exported occurs in the case of cotton, the exports of which in March were 195,000,000 pounds as against

407,000,000 pounds a year ago. Exports of wheat, corn, and barley, however, continue to move in larger volume than in the same month of 1920. In the nine months ending March, 1921, wheat was exported to the amount of 224,000,000 bushels, compared with 95,000,000 bushels in the similar period of 1919-20. These official trade statistics indicate that our foreign trade is at last returning to a more normal balance between exports and imports, and if there is anything unexpected in the latest returns it is that the readjustment has been so long delayed. The unfortunate feature of the present trade situation is in the inability of many foreign countries to meet their obligations, with an accompanying curtailment of export credits extended by us in this country. Under these circumstances the improvement of our export trade on a scale at all commensurate with our agricultural and industrial capacity therefore presents an important commercial and financial problem. Figures for European countries, while not yet available in detail, are likewise reported to show a very material slowing down in the movement toward recovery, due to the difficulties which have already been sketched and which have been generally reflected in a decline of buying power in most of the countries of the world. In those countries, like some of the South American States where moratoria have been declared, further importation, particularly from the United States, has been brought almost to a standstill because of the difficulty of absorbing and paying for goods which were already on hand.

Reflection of the unevenness of readjustment can be seen in the banking situation in various parts of the country. It is illustrated by the rapid growth of reserves and lending power in some of the reserve districts as compared with a much slower development under these heads in other districts. As has been shown in an earlier number of the BULLETIN, it has been true throughout the readjustment process that certain of the Federal Reserve Banks were continuous and steady lenders while other Federal Reserve Banks were and have since continued to be during much of the past winter and

Banking results of uneven readjustment.

spring borrowers or rediscounters at other Federal Reserve Banks. The growth of reserve resources in some of the Federal Reserve Banks which have been steady lenders to others has resulted in some unusually high reserve percentages within the past few weeks. At the Federal Reserve Bank of Boston, for example, there has been a steady accumulation of reserve funds which has brought the cash reserve of the bank as high as about 74 per cent of its outstanding liabilities. On April 15 the Federal Reserve Bank of Boston accordingly announced a 6 per cent rate on 90-day commercial paper, at the same time, however, raising its rate on notes secured by Government obligations from $5\frac{1}{2}$ per cent to 6 per cent, and thus putting into effect a uniform 6 per cent rate applicable to all classes of paper offered to it for rediscount by its member banks. A reduction to $6\frac{1}{2}$ per cent on all classes of commercial paper was announced by the Federal Reserve Bank of New York on May 4. No other changes were announced prior to that time.

During the autumn and winter of 1920-1921, the development of interreserve bank accommodation reached a high point. But in recent weeks there has been a steady reduction in the amount of such interbank indebtedness produced by the gradual liquidation of interbank accommodations. The amount thus advanced had been cut to \$17,437,000 by April 22. The following table shows the reserve position of the several Federal Reserve Banks, both with and without the adjustment which is due to consideration of the advances made to them by others.

Reserve ratio of 12 Federal Reserve districts, Apr. 22, 1921.

District.	Actual.	Adjusted. ¹
	<i>Per cent.</i>	<i>Per cent.</i>
No. 1 (Boston).....	71.9	72.4
No. 2 (New York).....	53.9	54.6
No. 3 (Philadelphia).....	54.8	54.8
No. 4 (Cleveland).....	67.0	68.3
No. 5 (Richmond).....	42.7	37.6
No. 6 (Atlanta).....	45.7	45.7
No. 7 (Chicago).....	48.1	48.1
No. 8 (St. Louis).....	57.0	57.0
No. 9 (Minneapolis).....	39.8	39.8
No. 10 (Kansas City).....	42.3	42.3
No. 11 (Dallas).....	40.6	33.5
No. 12 (San Francisco).....	56.2	56.2
System.....	54.1	54.1

¹ Adjusted to eliminate the effect of rediscount operations.

Parallel information is obtained when attention is given to the position of the member banks in the several districts. Figures on that subject show that the extent of accommodation required by member banks in some parts of the country and the duration of the period for which they require funds is very much greater relatively speaking than elsewhere.

One of the best indications of the character of the business situation is **Credit activity.** afforded by the debits to individual deposit account which the Board has gathered on a weekly basis for nearly three years past. Reference has already been made on a former occasion to the showing afforded by these indexes. In recent months the credit activity index points to a very sharp reduction in the use of bank deposit accounts. The latest figure computed upon a monthly basis is \$34,160,000,000 for March, 1921, while the general course of events in connection with these indexes may be observed in the following table:

Volume of business as shown by debits to individual accounts.

[In millions of dollars.]

April, 1920.....	41,598
May, 1920.....	41,375
June, 1920.....	39,779
July, 1920.....	39,910
August, 1920.....	36,334
September, 1920.....	37,195
October, 1920.....	40,503
November, 1920.....	39,877
December, 1920.....	41,834
January, 1921.....	38,310
February, 1921.....	29,915
March, 1921.....	34,160
April, 1921.....	32,470

As shown by these figures, a falling off in the activity of credit during recent months is observable, although an upward movement in March is noted. With this should be compared the situation revealed in the recent report of the Comptroller of the Currency, which shows a decline of about \$1,500,000,000 in the total deposit accounts of all national banks since a date approximately a year ago. This falling off of about 10 per cent in the gross outstanding amount of national-bank deposits is the result of the lessened activity of credit. Borrowers who find the activity of their credit reduced naturally endeavor to cur-

tail the amount of balances upon which they are paying interest at the banks, so that a decline in the total volume of credit outstanding may be expected to follow a corresponding decline in the activity of credit itself. A survey of the returns from the several districts shows a considerable amount of variation in the relative degrees of credit activity, the falling off seeming most noteworthy in those regions where the reduction of industrial operations has resulted in a smaller turnover for wages and being less marked in those portions of the country where large disbursements are steadily made for consumptive purposes, as in centers of population, where distributive industry has been less sharply affected than manufacturing.

Treasury finance operations during the past month have included further issues of certificates and the settlement of interest due on the fourth Liberty loan. Total ordinary receipts for the month have been \$296,170,666, and ordinary disbursements \$494,091,190, resulting in a deficit on ordinary account of \$197,920,524. The March 31 daily statement of the United States Treasury shows that the total receipts from income and excess-profits taxes had amounted to about \$727,000,000 as compared with approximately \$918,000,000 on the corresponding date a year ago. This shows a decline of less than \$200,000,000 in the total receipts from income and excess-profits taxes and is a much more favorable outcome than had been expected. Most predictions had placed the income and excess-profits taxes returned at a decidedly lower level. The total of Treasury certificates offered during the month was \$150,000,000 and the amount allotted \$190,511,500. Transactions have proceeded with comparatively little disturbance to banking and financial conditions during the month, the withdrawals from banks being well distributed and at no time of sufficient amount to cause serious disturbance. In consequence there has been neither stringency nor plethora in the financial markets which could be directly traced to Government operations whether in connection with taxation, sale of certificates, or disbursement of interest.

During the month ending April 10 the net inward movement of gold was \$91,895,000, as compared with a net inward movement of \$61,768,000 for the month ending March 10. Net imports of gold since August 1, 1914, were \$1,067,032,000, as may be seen from the following exhibit:

[In thousands of dollars.]

	Imports.	Exports.	Excess of imports over exports.
Aug. 1 to Dec. 31, 1914.....	23,253	104,972	¹ 81,719
Jan. 1 to Dec. 31, 1915.....	451,955	31,426	420,529
Jan. 1 to Dec. 31, 1916.....	685,745	155,793	529,952
Jan. 1 to Dec. 31, 1917.....	553,713	372,171	181,542
Jan. 1 to Dec. 31, 1918.....	61,950	40,848	21,102
Jan. 1 to Dec. 31, 1919.....	76,534	368,185	¹ 291,651
Jan. 1 to Dec. 31, 1920.....	417,181	322,091	95,090
Jan. 1 to Apr. 10, 1921.....	196,707	4,520	192,187
Total.....	2,467,038	1,400,006	1,067,032

¹ Excess of exports over imports.

France furnished \$44,652,000 and England \$18,471,000, or about 48 and 20 per cent, respectively, of the \$92,403,000 of gold imported during the monthly period ending April 10, Canada, Sweden, Netherlands, China, British India, and South American countries furnishing most of the remainder. Of the gold exports, amounting to \$508,000, over two-fifths, or \$244,000, was consigned to Mexico and the remainder to Canada and Hongkong. Since the removal of the gold embargo, on June 7, 1919, total gold exports have amounted to approximately \$680,407,000, the net exports amounting to \$29,422,000. Of the total exports, \$195,414,000 was consigned to Japan, \$146,555,000 to Argentina, \$72,038,000 to Hongkong, \$67,396,000 to China, \$41,052,000 to British India, \$29,778,000 to Spain, and the remainder principally to Mexico, Uruguay, the Dutch East Indies, Canada, the Straits Settlements, and Venezuela.

During the same monthly period the net inward movement of silver was \$860,000, as compared with a net inward movement of \$1,275,000 for the month ending March 10. Net exports of silver since August 1, 1914, were \$455,600,000, as may be seen from the following exhibit.

[In thousands of dollars.]			
	Imports.	Exports.	Excess of exports over imports.
Aug. 1 to Dec. 31, 1914.....	12, 129	22, 182	10, 053
Jan. 1 to Dec. 31, 1915.....	34, 484	53, 599	19, 115
Jan. 1 to Dec. 31, 1916.....	32, 263	70, 595	38, 332
Jan. 1 to Dec. 31, 1917.....	53, 340	84, 131	30, 791
Jan. 1 to Dec. 31, 1918.....	71, 376	252, 846	181, 470
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 Apr. 10, 1921.....	14, 414	15, 086	672
Total.....	395, 476	851, 076	455, 600

Mexico furnished over 58 per cent, or \$2,035,000, of the \$3,509,000 of silver imported during the monthly period ending April 10, the remainder coming principally from Peru, Canada, Honduras, and Chile. Silver exports, amounting to \$2,649,000, were consigned principally to England, British India, Japan, China, Hongkong, and Canada.

Loan liquidation by member banks continued during the month in moderate volume and is reflected in reduction of deposits and of borrowings from the Federal Reserve Banks. Government operations were not sufficiently heavy to neutralize the effect of commercial loan liquidation, with the consequence that the reserve ratio of the Federal Reserve Banks shows a rise of more than 3 per cent during the four weeks between March 25 and April 22. During this period total loans and discounts of reporting member banks show a continuous decline by about \$354,000,000, all classes of loans sharing in the general decline—loans secured by Government obligations to the extent of \$22,000,000; loans secured by corporate obligations to the extent of \$54,000,000, and other loans and discounts, composed largely of commercial loans proper, to the extent of \$233,000,000. Changes in the investment block were less uniform. Thus the banks report an increase of about \$7,000,000 in their holdings of United States bonds and notes, and liquidation of about \$36,000,000 of Treasury certificates, notwithstanding an increase in holdings of \$69,000,000 reported on April 15, in consequence of the allotment on that date of \$190,511,500 of loan certificates. Considerable fluctuations are shown in net demand deposits, though the total

at the close of the period shows a decline of only one-half per cent from the March 25 total.

A larger relative reduction is seen in the total figures of accommodation of the reporting member banks at the Federal Reserve Banks. Total borrowings from the Reserve Banks declined almost steadily from \$1,764,000,000 to \$1,583,000,000, or from 11 to about 10.1 per cent of the banks' aggregate loans and investments. For the member banks in New York City, a reduction of accommodation at the local Reserve Bank from \$605,000,000 to \$542,000,000, and a decline in the ratio of accommodation from 11.7 to 10.8 per cent, are noted.

In the following table are shown figures of principal items in the weekly statement of reporting member banks:

Reporting member banks.

[In millions of dollars.]

Date.	Number of reporting banks.	Loans and discounts ¹ and investments.	Rediscounts and bills payable with Federal Reserve Banks.	Ratio of accommodation (3÷2).	Net demand deposits.
	1.	2.	3.	4.	5.
Mar. 25.....	823	15, 983	1, 764	<i>Per cent.</i> 11.0	10, 186
Apr. 1.....	822	15, 903	1, 685	10.6	10, 271
Apr. 8.....	821	15, 777	1, 630	10.3	10, 204
Apr. 15.....	820	15, 756	1, 581	10.0	10, 263
Apr. 22.....	821	15, 629	1, 583	10.1	10, 127

¹ Including rediscounts with Federal Reserve Banks.

For the four weeks between March 25 and April 22, the Federal Reserve Banks report further liquidation of \$172,800,000 of discounted bills, of \$18,600,000 of purchased acceptances, and of \$10,200,000 of Treasury certificates, largely "Pittman" certificates held on deposit with the Treasurer of the United States to secure Federal Reserve Bank note circulation. On March 31 and April 15 the Government redeemed \$3,500,000 of these certificates from the New York and Chicago banks upon deposit by these banks of equivalent amounts of lawful money to reduce their liabilities upon Federal Reserve Bank notes, while on March 29 and April 19 it redeemed \$10,000,000 of Pittman certificates held as excess collateral by the Boston, New York, Philadelphia, Atlanta, Chicago, and Dallas banks. An increase of \$3,300,000 is

shown in the holdings of other certificates, composed largely of certificates taken over from nonmember banks under short-term repurchase agreements. In consequence of the above changes, total earning assets of the Federal Reserve Banks show a continuous decline for the four weeks of \$201,700,000, and on April 22 stood at \$2,490,700,000, or 27 per cent below the figure reported on October 15, 1920, and about 22 per cent below the total shown on the corresponding date last year.

Rediscounting operations are reported by the Richmond and Dallas Reserve Banks. On April 22 these two banks had outstanding with the Boston, New York, and Cleveland banks a total of \$17,400,000, of which \$10,000,000 represented the amount rediscounted by the Richmond bank with the Federal Reserve Bank of New York.

Total deposits show a decline for the period of \$91,500,000, all classes of deposits, but largely those on Government account, sharing in the decline. Federal Reserve note circulation continued its decline from \$2,930,700,000 to \$2,856,700,000, or at an average weekly rate of \$18,500,000. Between December 23, 1920, and April 22 of the present year the decline in Federal Reserve note circulation amounts to \$548,200,000, or to 16 per cent, while as compared with the total reported on the corresponding Friday last year, the decline is \$211,600,000, or 7 per cent. There is also noted a reduction during the four weeks under review of \$15,900,000 in the Reserve Banks' net liabilities on Federal Reserve Bank notes, as against a reduction of \$13,500,000 in the amount of Pittman certificates held by the banks.

A further gain for the period of \$87,300,000 is shown in gold reserves, as against a loss of \$16,500,000 in other reserves. Since the beginning of the year gold holdings of the Federal Reserve Banks, largely through purchase of imported gold, have increased by \$235,300,000. During the four weeks the banks' reserve ratio, owing to the substantial reductions in note and deposit liabilities and the simultaneous gains in cash reserves, shows a steady rise from 50.8 to 54.1 per cent.

Some of the principal changes in the status of the Federal Reserve Banks are brought out in the following exhibit:

Federal Reserve Banks.
[In millions of dollars.]

Date.	Bills discounted.		Total deposits.	Federal Reserve notes in actual circulation.	Reserve ratio.
	Secured by United States Government obligations.	All other.			
Mar. 25.....	1,010	1,276	1,841	2,931	50.8
Apr. 1.....	951	1,264	1,789	2,908	52.4
Apr. 8.....	936	1,219	1,745	2,894	53.5
Apr. 15.....	929	1,175	1,755	2,869	53.7
Apr. 22.....	943	1,171	1,749	2,857	54.1

The Federal Reserve Board on April 13-15 held conferences with the governors and certain of the directors of the several Reserve Banks in Washington. A portion of the session was devoted to a general review of credit conditions throughout the country and to discussion of current rates of interest and discount. The situation of the member banks and the extent to which they are required to get additional accommodation was also taken under careful advisement.

Index-Digest of Federal Reserve Bulletin.

The Federal Reserve Board will publish shortly, primarily for its use and that of Federal Reserve Banks, an index-digest of the FEDERAL RESERVE BULLETIN, prepared by Mr. C. S. Hamlin, one of its members. The digest covers the first six volumes of the BULLETIN, from the years 1914 to 1920, inclusive, and contains an abstract of all published decisions and rulings of the Federal Reserve Board and of the other matter contained in the BULLETIN.

The Board will print a sufficient number of copies to supply the demand of banks and others who may desire to purchase it.

The price will be \$2 per volume, bound in cloth in the same manner as the BULLETIN. Subscriptions should be addressed to the Federal Reserve Board, Washington. As the edition is to be a limited one, those desiring copies should send in their orders promptly.

BUSINESS, INDUSTRY, AND FINANCE, APRIL, 1921.

Complete business recovery is proving to be slower than was predicted by many observers at the close of the year 1920. The expectations of many that the spring of 1921 would see economic and business readjustment fairly completed have not been realized. The month of April has, however, given evidence of the development of an improved feeling in many sections of the country with regard to the business situation and outlook. While there is still much uncertainty as to when the readjustment now in process may be expected to reach its end, and while the business situation in some sections of the country and in some fields of industry is still beset with difficulties, some of the recent factors of uncertainty are either being eliminated or are of diminishing importance. Moreover, increasing appreciation of the nature of the readjustment process in business circles and in the community at large is focusing attention upon the factors that are delaying business recovery and is promoting discussion with a view to removing obstacles and expediting the return to normal conditions.

The point upon which the business situation has pivoted since the recession movement began last autumn has been prices. The fall of wholesale prices, which has been continuous and at times precipitate in recent months (especially for the agricultural raw materials group), appears to be in process of arrest. At any rate, many wholesale prices have shown a greater degree of stability during the month of April. Prices of many basic commodities have shown, both by general index numbers and by reports from the several Federal Reserve districts, less sensitiveness than during the preceding month. This fact is being recognized by buyers, who are showing an increasing disposition to regard present price levels as a satisfactory basis for dealings.

Among the factors that are retarding readjustment are retail prices, high transportation charges, wages, and the relatively high prices of such highly important requisites of production as coal and steel. The most important immediate point at which the readjustment process appears to be "sticking" is the retail price situation.

Wage and employment conditions were recently made the subject of a special inquiry by the Federal Reserve Board, the results of which are given in this issue of the BULLETIN. While the inquiry shows that labor is participating in the process of readjustment, the participation has been uneven as between different sections of the country, as between different lines of industry, and as between different groups of labor. Wage readjustment has been greater among unskilled workers and those not possessed of a strong trade organization, and especially in sections of the country whose industries have felt in a peculiarly high degree the effects of readjustment.

So far as the various industries themselves are concerned, the outlook continues good in nearly all branches of agriculture, with favorable crop prospects and a substantial acreage. Conditions in the iron and steel industry, despite the fact that the United States Steel Corporation has made a moderate reduction in prices, show little change. No improvement in condition has been noted in connection with the nonferrous metals, and most of the principal copper mines have suspended mining operations. The textile industry has continued to show a seasonal increase in productive activity and this has extended to the knit goods and other allied branches of the trade. In the retail field demand has been well sustained in the eastern sections of the country. Wholesale trade has shown an upward tendency, due, no doubt, to the depletion of the stocks of retail dealers which were already low and have been further reduced by the seasonal spring demand. Financially the month has been quiet, with indications of betterment in condition. There still remain large unliquidated loans in certain parts of the country representing commodities which are being carried over from last year and which the banks have had to provide for. In some parts of the country building activity has shown distinct improvement. Export demand continues to be light and declining, while the increase in idle tonnage is marked. About 46 per cent of the vessels owned by the United States Shipping Board are now laid up.

AGRICULTURE.

The agricultural situation during the month may be characterized as generally favorable. The unseasonable cold wave which swept over the country about April 1 did some injury to the spring wheat, but had very little effect upon the winter wheat. Thus, in district No. 11 (Dallas) it is stated that "reports from the wheat belt are generally satisfactory, and indicate that the crop is in excellent condition," and in district No. 8 (St. Louis) "little damage was done to winter wheat by the recent low temperature." However, the cold wave checked the ravages from the pests which had been prominent because of the especially mild winter and very little further trouble is contemplated. The condition of winter wheat on April 1, as reported by the Bureau of Crop Estimates of the United States Department of Agriculture, was 91 per cent, as compared with 75.6 per cent on the same date of 1920. On the basis of this report, it is estimated that there will be a very large production, nearing a banner year in winter wheat. The estimated production is 621,000,000 bushels as of April 1, 1921, against 577,763,000 bushels on April 1, 1920, while the acreage for 1921 is 40,605,000 acres, as against 41,757,000 acres on April 1, 1920. The seeding of spring oats has been practically completed in most sections and a considerable amount is already up and in good condition. Corn planting has made good progress, especially in some of the southern sections, although it has been delayed in others by the wet and cold weather. In most sections the germination of the seed has been retarded either by the cold weather or lack of moisture.

FRUIT.

The fruit throughout the fruit-growing sections suffered from the cold wave which was followed by frost. District No. 12 (San Francisco) states that "some damage is reported from practically every fruit and grape growing area but reports indicate no serious reduction of prospective crops from this cause," and district No. 10 (Kansas City) reports that "all fruits were injured more or less by the belated cold weather." The injury appears more serious in district No. 11 (Dallas), where "it is believed fruit has been damaged at least 25 per cent and in some sections even more."

COTTON.

Good progress has been made in the planting of cotton and in South Carolina, Georgia, Alabama, and Mississippi a considerable amount is up to a good stand. While the

earlier reports indicated a very large reduction in acreage, it is now generally understood that the reduction will not be as great as was previously indicated. In district No. 11 (Dallas) it is reported that the decrease will be at least 25 per cent and as much as 50 per cent in some sections. District No. 12 (San Francisco) states that "the acreage this season will be reduced approximately 50 per cent, and much of it will be 'volunteer' cotton grown from last year's plantings." However, district No. 6 (Atlanta) reports that "conservative estimates place the reduction in acreage compared with last year at from 10 to 20 per cent." The use of fertilizer has been considerably less than during previous years, being estimated at about one-fourth to one-third the amount used a year ago.

TOBACCO.

Although the leaf tobacco market has been dull throughout the past month, the warehouse sales have been in a larger volume than is usual at this season of the year. This was probably due to the fact that sales during the previous months have not been as large as in normal times. However, the demand has been for better grade tobacco rather than for the cheaper grades. District No. 8 (St. Louis) reports that "receipts of tobacco have been fairly heavy and prices for the better grades well maintained." District No. 3 (Philadelphia) states that "manufacturers are purchasing only such stocks as they actually need, and most of them have sufficient supplies on hand for present purposes." The demand for high-grade cigars has been in limited proportions, while the demand for cheaper cigars of a reasonably good quality has been more pronounced. Reports from this district indicate that although the industry as a whole is still operating considerably below normal, "firms which are manufacturing the cheaper products have increased production materially and are preparing to operate on a full-time basis."

GRAIN MOVEMENTS.

The March movement of grains has on the whole been in larger amounts than last month and the same month a year ago. Receipts of all grains at Minneapolis were 9 per cent greater than February receipts and 18.5 per cent greater than for March, 1920. While the March receipts at Duluth were less than February receipts by 10.6 per cent, they were greater than receipts of March a year ago by 59.9 per cent. The receipts for the two centers combined were 4.9 per cent greater than for February and 24.8 per cent greater than for

March, 1920. Combined receipts of wheat at Minneapolis and Duluth were 5.6 per cent smaller than February and 17.6 per cent greater than March, 1920. The same tendency is noted in the case of the four principal markets of district No. 10 (Kansas City), where receipts of wheat were 2.9 per cent less than for February and 18.4 per cent greater than for March, 1920. Receipts of corn at Minneapolis, Duluth, and the four principal markets of district No. 10 (Kansas City) showed increases over the previous month and the same month a year ago. Stocks of grain at the Minneapolis and Duluth terminals at the close of March were 2 per cent greater than at the close of February and 8.9 per cent greater than a year ago. Prices of grains during the month of March exhibited mixed tendencies, but there were more decreases than advances. The median price of cash wheat No. 1 Dark Northern at Minneapolis was \$1.72 as against \$1.75½ for February.

FLOUR.

Little new domestic demand for flour is reported, and buyers have shown hesitancy as a result of the continued fall in the price of wheat. Flour prices in general have declined similarly, although it is stated from district No. 12 (San Francisco) that millers who have stocks of wheat bought at higher prices and who hold flour milled from this higher priced wheat have shown reluctance to revise flour prices to correspond with present wheat prices. Some export demand is indicated. The export trade in district No. 10 (Kansas City) "is reported fairly satisfactory, with the demand becoming more general." Domestic trade in that district in the first week of April, however, was less encouraging, and mills which had been working on contracts had about caught up with the business on hand. Export trade in district No. 12 (San Francisco) has increased slightly, but the domestic demand on the whole has remained stationary, although improvements are noted in some local areas. Millers in district No. 8 (St. Louis) report some export demand, centering principally upon clears. Production of mills representing about 75 per cent of the total output in district No. 9 (Minneapolis) was 1,793,505 barrels during the 4 weeks ending March 26, a decrease of 3.1 per cent from the figure of 1,854,209 barrels during the 4 weeks ending February 26, but an increase of 19.9 per cent over the figure of 1,497,060 barrels during the 4 weeks ending March 27, 1920. March shipments of flour from Minneapolis and Duluth combined were 8 per cent larger than in February and 15 per cent larger than in March, 1920. March production of Kansas City mills

was 30.4 per cent greater than in March, 1920, but figures for all reporting mills in the district showed an increase of only 1.3 per cent, from 1,203,651 barrels in March, 1920, to 1,220,039 barrels in March, 1921, due to the falling off in the output of the 82 interior mills. No appreciable increase in activity is reported in district No. 12 (San Francisco), and mills continue to operate at approximately 45 per cent of capacity, as compared with 80 per cent during March, 1920. Output of 76 mills during March, 1921, was 627,417 barrels, as compared with 573,420 barrels during February reported by 80 mills. Plant operations in district No. 8 (St. Louis) have been at from 40 to 50 per cent of capacity during the 30-day period ending April 15.

LIVE STOCK.

The condition of live stock on farms and ranges continues excellent, although in certain sections, such as Arizona, rainfall has been deficient and stockmen have suffered heavy losses. The stocker and feeder movement of cattle and calves at 34 markets was 233,477 head during March, as compared with 164,504 head during February and 239,363 head during March, 1920. The large surplus of corn, it is stated, has given a new impetus to the swine industry in Kansas and Nebraska. The demand for stockers in March at Fort Worth, however, was "quite light, and few shipments were secured for return to the country." Reports from the principal markets in district No. 12 (San Francisco) state that "inquiries are few and stockmen are not buying to increase their herds." The season has been favorable for lambing in New Mexico and the "crop of lambs in that section and in the Panhandle is estimated at 85 per cent." A good lamb crop is reported to be in prospect in district No. 10 (Kansas City). Movement to market of the various classes of live stock differs somewhat. Receipts of cattle and calves at 15 western markets during March were 1,119,548 head, as compared with 835,686 head during February and 1,195,622 head during March, 1920. The respective index numbers were 111, 89, and 119. Receipts of hogs, however, showed a decrease from 2,902,107 head during February, corresponding to an index number of 141, to 2,390,480 head during March, corresponding to an index number of 109, as compared with 2,852,171 head during March, 1920, corresponding to an index number of 130. Receipts of sheep were greater during March than receipts for either February, 1921, or March, 1920. The March, 1921, figure was 1,161,549 head, the February figure was 972,647 head, and the March, 1920, figure was 899,760 head, while

the respective index numbers were 85, 76, and 66. On the Fort Worth market "the heavy increase in receipts of hogs was easily the most outstanding feature," but nevertheless there was a keen demand and the market was well maintained. The supply of meat animals at the six markets of district No. 10 (Kansas City) in the first three months of 1921 is stated to have been fully up to meat consumption requirements. March is said to have been one of the poorest months in the history of the industry in that district. The abundant supplies of beef in packers' coolers, it is reported from district No. 8 (St. Louis), has a tendency to hold down prices. Hog prices have continued to decline steadily and this is ascribed chiefly to diminished consumption of pork products, due to adverse industrial conditions. The fresh-pork market, however, remains exceptionally active in the Pacific Northwest and heavy shipments continue to be received from Middle Western points.

NONFERROUS METALS.

On March 29 seven of the largest copper companies of the United States ceased their mining operations. Several other companies stopped producing during April, and it is estimated that the production of the mines which continue to operate is less than 30 per cent of the normal total American production of copper. The cessation of operations by most of the larger producers was due to the large stocks of copper in the country and the present unremunerative copper prices. As a result of the announcement of this curtailment of mining operations the price of copper (New York, net refinery) rose from 12 cents to 12.50 cents in the latter part of March, but there has been some shading of the latter price in sales made since April 15. There was a slight increase in the price of zinc during April, which presumably resulted from the severe restriction in output. March production of zinc amounted to 15,741 tons, as compared with 17,769 tons produced in February. Lead production is also at a low level, although stocks of lead in the United States are believed to be much less in proportion to consumption than is the case for either copper or zinc. There has been little change in the price of lead since the increase to 4.25 cents (New York and St. Louis bases) on March 31, but demand continues slack. District No. 10 (Kansas City) reports that there are only 36 lead and zinc mines working at present out of a total of 208 mines.

COAL.

Little demand for bituminous coal is reported. Consumers are stated to be buying

only for immediate needs, while industrial demand is retarded by the general business situation. From several districts it is reported that there is no desire to contract for deliveries for next fall at present prices. Little change in prices, however, is reported, although in some districts it is stated that there is a slight downward trend. Railroads in district No. 10 (Kansas City) are relying on storage piles for a good part of their present requirements, and are buying little coal in the market. One of the principal producers in district No. 4 (Cleveland), however, states that more inquiries were received during the first half of April than during the first three months of the present year. Production shows some falling off, from 30,851,000 tons during February to 30,328,000 tons during March, as compared with 46,832,000 tons during March, 1920. The respective index numbers are 89, 82, and 126. Production of anthracite coal likewise declined in March, being 7,603,000 tons, corresponding to an index number of 103, as compared with 7,845,000 tons during February, corresponding to an index number of 114, and 7,857,000 tons during March, 1920, corresponding to an index number of 106. The customary spring reductions of 50 cents per ton on prepared sizes have been announced by all railroad coal companies but one, and retail prices in district No. 3 (Philadelphia) are from 75 cents to \$1.50 lower than winter prices. Some quickening of demand is reported from that district as a result of the slight reductions in retail prices effective April 1, but "on the whole the result has been disappointing to the dealers." Probably the larger part of March deliveries are stated to remain stored in the yards of dealers. The lack of retail demand is ascribed in part to the fact that the remarkably mild winter has left many consumers with a large part of last winter's supply on hand, as well as to the expectation of further decreases before fall, in view of the initial price reductions. Demand is least for the steam sizes. Further price declines are reported in coke, together with a decrease in production. It is stated from district No. 3 (Philadelphia) that "it is doubtful if more than one-fifth of the Nation's productive capacity is being utilized."

PETROLEUM.

Production of petroleum showed a slight gain during March. There has been a continuous increase in the production of the Kansas-Oklahoma fields since January 1, 1921, and the average daily production for four weeks ending April 18 was 370,500 barrels, as compared with an average daily production of

361,250 barrels for the four weeks ending March 11. In California the average daily output during March was 337,683 barrels, as compared with 327,864 barrels in February. These increases were partly offset by a decrease in average daily production of district No. 11 (Dallas) from 403,243 barrels in February to 394,174 barrels in March. There was a further decline in drilling operations during March. Most of this decrease occurred in district No. 11 (Dallas), where there were only 395 new wells completed in March, as compared with 491 wells in February. In district No. 10 (Kansas City) only 768 new wells were completed in March as compared with 771 in February, but new production amounted to 71,460 barrels daily as compared with 65,664 barrels in February. Sixty-six new wells were completed in the California fields during March, as compared with 60 in February. There was a distinct slowing down in the price recessions of petroleum products during March, and this was reflected by the maintenance throughout the month of a crude oil price of \$1.75 per barrel in most of the Texas fields. Refinery runs in Kansas and Oklahoma were materially increased on April 1 by the resumption of 13 refineries which were not operated in March.

IRON AND STEEL.

The outstanding event during the month in the iron and steel industry was the reduction by the United States Steel Corporation on April 12 of its schedule of prices on various standard products to figures 6 to 15 per cent below the prices of the Industrial Board. Prior to the cut, several of the larger independent producers announced advances of \$2 per ton on bars, plates, and structural steel shapes, while subsequently further reductions were announced by steel corporation mills. Prices of the two groups of producers are now, in general, at the same levels. The exact influence which these price changes will exert is as yet uncertain. It is stated from district No. 4 that "a dragging market in general has continued." Some betterment in that district, however, has been reported with respect to the automobile and building industries. "Suspensions of orders for steel with the mills have been lifted in an increasing way" by the former industry, and "some new buying has also resulted." The demand is stated from district No. 3 (Philadelphia), however, to have been far below expectations, and the total consumption of automobile and truck manufacturers is given as only 5 per cent of the total product of the iron and steel industry. This district also reports little demand from the building industry. It is

stated in the various reports that buyers, in general, apparently lack confidence in the present situation. These conditions are reflected in the statistics showing the scale of operations in the industry. At the close of March only 103 blast furnaces in the country were active, a decline of 52 during the month, as compared with 317 active at the close of September, the peak for last year. Pig-iron production during March was 1,595,522 tons, as compared with 1,937,257 tons during February. The respective index numbers were 69 and 90. Production of steel ingots declined from 1,749,477 tons during February to 1,570,978 tons during March. The respective index numbers were 80 and 67. A further decrease in the unfilled orders of the United States Steel Corporation is reported, from 6,933,867 tons at the close of February, corresponding to an index number of 132, to 6,284,765 tons at the close of March, corresponding to an index number of 119. Reports in district No. 3 (Philadelphia) indicate that production is less than 30 per cent of capacity, and, even with this output, stocks are accumulating in the hands of producers. Some resumption of activity in pig-iron production is reported in district No. 6 (Atlanta) since the beginning of April. Owing to large stocks of ore on dock and in furnace yards, there is a slow opening of the shipping season on the Great Lakes.

AUTOMOBILES.

A considerable increase in the demand for standard makes of automobiles is reported from district No. 7 (Chicago). The more conservative dealers in district No. 3 (Philadelphia), however, feel that the natural seasonal improvement appears larger than the facts warrant, as conditions in the trade were exceptionally dull last winter. A trend toward lower prices was reported in district No. 7 (Chicago), while in district No. 3 (Philadelphia) there was rather a tendency on the part of the dealer to give extra parts or accessories in place of reducing the price on standard models. Stocks of cars in the hands of retailers have been reduced below January figures. It is noted from district No. 7 (Chicago), however, that caution prevails and that there is still some disposition on the part of buyers to wait for lower prices, while other factors, which retard buying, are the lack of capital to finance large operations and the curtailed buying power of the agricultural sections. Carload shipments of manufacturers producing two-thirds of the country's output are reported by district No. 7 (Chicago) to have been 16,500 during March as compared with 9,920 during

February and 29,326 during March, 1920, while 10,000 machines were driven away under their own power in March, 1921, as compared with 7,491 during February and 57,273 during March, 1920. In some instances manufacturers show a marked increase in operations. From district No. 3 (Philadelphia) it is stated that operations in the fall and winter were not over 25 per cent of normal, many plants being entirely closed, while operations in general are now at about 60 per cent of normal. The improvement in business commencing in March reported by dealers in district No. 8 (St. Louis) has continued but "is fitful and irregular," and is found rather in the large cities than in the country.

COTTON TEXTILES.

Cotton consumption during March for the country as a whole amounted to 437,933 bales, which was 25 per cent below the totals for March of the preceding year. There was greater stabilization in the price of raw cotton during the month, and the price of gray goods, after declining to 6½ cents a yard for the standard 38½-inch width, advanced slightly. Nevertheless, district No. 1 (Boston) reports that at present prices the spread between a pound of cloth and a pound of raw cotton is only 22½ cents, whereas a year ago it was approximately \$1. Fall River sales of print cloths are of moderate proportions. Brown sheetings and standard brown drills can be purchased about one-half cent a yard below last month's levels. The demand for pillow tubings is such that three well-known brands, sold ahead for months, are withdrawn from the market. The demand for gingham has been good and some mills have sold their entire output from May to August. There seem to be no pronounced general tendencies, as the activity of certain mills manufacturing fabrics that happen to be in demand at the moment is offset by the relative inactivity in the gray goods mills. District No. 3 (Philadelphia) reports that the demand for heavy cotton fabrics such as are used in the manufacture of tires is slight, and mills manufacturing goods of this sort have largely curtailed operations. There has been little change in yarn prices during the month. Sales of low-priced cotton goods and low-priced hosiery were reported to have improved somewhat, but the demand has been largely met from stocks, as yarn mills have recently been curtailing their operations. In the South textile mills are reported to be running approximately full time in district No. 5 (Richmond). Some orders are being received for goods used for print cloth, and orders for

future delivery are also being taken by knitting mills in the district. Wage cuts in the southern mills have been more drastic than in other sections, and it is said that "many people in the trade claim that the reductions have been in keeping with the lowered prices for raw material." In district No. 6 (Atlanta) a number of reporting mills show an increase in yardage of 4.5 per cent during March as compared with February, although there was a decrease of 22.1 per cent as compared with a year ago. The increase in orders on hand during the month was negligible, but much greater than a year ago when new orders were not acceptable because of the press of work. It is said that few mills are as yet working at full capacity, although a number indicate orders on hand which will require full running time for several weeks for their completion. The increase in yarn output (by pounds) of reporting yarn mills increased 8 per cent during the month, although totals were 26.2 per cent below figures for March, 1920. There was a slight decrease of 1.1 per cent in orders on hand as compared with February, and the time required running full to complete orders on hand averages about one month for all reporting mills. There has been a recent increase in export sales of cotton goods, amounting to between 10,000 to 12,000 bales and consisting principally of drills and sheetings, to China, India, and the Levant.

FINISHING OF COTTON FABRICS.

Thirty-four of the 58 members of the National Association of Finishers of Cotton Fabrics reported total finished yards billed during the month at 86,732,621 yards, as compared with 55,436,871 yards in February. The total average percentage of capacity operated was 67 per cent for all reporting districts, as compared with 51 per cent during the preceding month. The total gray yardage of finishing orders received amounted to 88,342,599, as compared with 76,201,806 in February. The total average work ahead at the end of the month amounted to 8.4 days for all reporting districts, as compared with 8.5 days during the preceding month.

WOOLEN TEXTILES.

The Boston wool market has experienced little change during the past month. Not much wool is being sold but prices have nevertheless strengthened somewhat. A lot of the South American medium grade wool has been taken from the market. Receipts of foreign wool are considerably larger than a year ago,

it is stated, and competent wool men estimate that there has already been more wool imported into this country since the beginning of 1921 than has been consumed by our mills in that period. In all districts woolen and worsted mills are showing greater activity, and in district No. 1 (Boston) several mills are reported to have booked as many orders as they care to accept at the present time. Top manufacturers are well booked up and production is not far from capacity. In district No. 3 (Philadelphia) many cloth mills are operating at capacity, while others are running from 50 per cent to 75 per cent. In the Philadelphia market the increased activity is not reflected in the demand for yarn. Some yarn manufacturers are running at full capacity, but orders are being placed for current use almost entirely. Manufacturers of medium and lower counts of yarn have not done as active business as producers of the fine counts. The operations of the former are reported to be from one-third to two-thirds of normal. The latest figures available prepared by the Department of Commerce giving percentages of idle hours to the total reported on March 1, showed that 37.9 per cent of the worsted spindles and 50.5 per cent of the woolen spindles were idle, whereas on April 1 the percentages had fallen to 25.7 per cent and 34.1 per cent, respectively.

SILK TEXTILES.

There has been a continued increase in the manufacturing activity of the silk mills during the month, and one encouraging factor tending to sustain the improvement that has already taken place is the relative stability of the prices of raw silk. Demand for the raw material for immediate delivery is active but as yet confidence as to market developments is not great enough to have resulted in the placing of large orders for future delivery. The silk warehoused in New York at the end of the month amounted to 16,386 bales, as compared with 27,928 bales in February, while 14,043 bales were imported in March, as compared with 14,361 bales in February. The mills in Paterson and near-by towns are now reported to be operating at about 60 per cent of maximum capacity as compared with 49 per cent during the preceding month.

HOSIERY.

It is stated in the report from district No. 3 (Philadelphia) that there has been a general improvement in the hosiery industry during the past month, and that the demand for silk

lines has been especially marked. A strike is still in progress in the majority of the Philadelphia full-fashioned hosiery mills, and the result has been that mills in the Reading district have had more orders than they could accept, although the demand is for immediate delivery. The inability to secure deliveries on full-fashioned hosiery has increased the call for other lines, and mills are now working on orders. The demand for mercerized and lisle hosiery has shown improvement during the month, but it is estimated that it is only about 50 per cent that of a normal year. Twenty-five firms selling to the wholesale trade report an increase of 15.8 per cent in the product manufactured during March as compared with February, 1921. Orders booked during March showed a decrease of 30.6 per cent, but unfilled orders at the end of the month increased 17.4 per cent. Eight firms selling to the retail trade had a product 66.5 per cent in excess of February; orders booked during March were 5.5 per cent greater than in February, while unfilled orders on hand at the end of the month were 48.1 per cent in excess of the preceding month. The output as compared with a year ago was nevertheless negligible, being 93.3 per cent below those totals.

UNDERWEAR.

The majority of underwear mills in district No. 3 (Philadelphia) are booked to capacity until the end of the light-weight season. Normally orders are placed and largely made up for shipment by the middle of January, but this year buying was late and in limited quantities. Duplicate orders, placed in March as a result of the unexpectedly heavy public demand, have increased the volume of business beyond the present capacity of the industry. On the other hand, forward orders for heavy-weight underwear have been few, although some mills have booked sufficient orders to maintain total capacity until the end of August. The uncertainty regarding price trends and the lack of definite information as to stocks carried over from last winter make buyers hesitant to adopt a policy for the future. Twenty firms in district No. 3 (Philadelphia) which make monthly reports to the Federal Reserve Bank had an increase of 85.8 per cent in their output in March as compared with February, although it was still 29.5 per cent below the totals for the same month of the preceding year. Orders booked were 13.5 per cent below those for February and unfilled orders on hand at the end of the month were 10 per cent greater than at the end of February.

The 62 mills which make reports to the Knit Goods Manufacturers' Association of America had an output in March of 102,415 dozens of winter underwear, which was 31 per cent of normal. The production of summer underwear amounted to 318,725 dozens, or 62.5 per cent of normal. Thirty-eight mills which furnish data for both February and March had a production of 261,934 dozens during the latter month as compared with 147,822 dozens in February. Unfilled orders on the 1st of March dropped, however, from 588,127 dozens to 269,104 dozens. New orders received during the month of March rose from 205,260 dozens in February to 284,712 dozens in March. There was a slight increase in cancellations, which rose from 1,619 dozens to 5,173 dozens.

SHOES AND LEATHER.

Prices for hides and skins showed little change during March and the volume of trading has not increased perceptibly. Demand for sole leather and staple grades of upper leather continues to be slack, but demand for colored glazed kid, suede calf, ooze, and certain other kinds of calf leather continues to exceed the available supply. There was some increase in the demand for belting leather, harness leather, and upholstery leather during March. The volume of leather exports continues to be very small. District No. 1 (Boston) reports that "prices on the whole are showing a slight strengthening, but the very large supplies of leathers in the country act as a deadening influence on any general upward movement." There has been some slackening in the demand for women's shoes since Easter, but this has been largely counterbalanced by an improvement in demand for men's shoes. Both retail and wholesale sales of shoes are reported to be exceeding production at the present time. The net result of March operations in district No. 1 (Boston) was a reduction in the size of stocks of shoes on hand in factories and factory warehouses. Shipments of shoes from the factories of New England were considerably larger in March than in February, yet orders on hand April 1 showed an increase over those on the books March 1. "Production was apparently at a rate slightly below 50 per cent of capacity." In contrast to this, district No. 3 (Philadelphia) reports "that the shoe manufacturing industry at the present time is operating close to capacity and that business for the spring and summer seasons is approaching normal." However, buyers in that district still refrain from ordering for future delivery and the business in the hands of the manufacturers is practically entirely for im-

mediate shipment. District No. 8 (St. Louis) reports that shoe factory operation is larger than at any time this year, averaging from 80 to 90 per cent of capacity. Many plants turning out women's and children's footwear are operating at full time. "Prices show a further decline, except on goods in seasonal demand and the fancy grades of women's wear." Orders for summer goods are being obtained in some quantity by salesmen in district No. 7 (Chicago). Good qualities are wanted and the demand for novelty lines is stronger than for staple goods. "The retailers have brought prices down recently until they are more in line with replacement cost, but these prices have not kept pace with wholesale reductions."

LUMBER.

Demand for lumber increased somewhat during March, but only as a result of a further reduction in prices. District No. 12 (San Francisco) reports that "the volume of buying is increasing, although it is still conservative and purchases are only to meet current needs." Orders received during the four weeks ending March 26 by the four lumber manufacturers' associations of that district showed an increase of 30.2 per cent over the preceding four weeks. Production during the same period increased 17.1 per cent and shipments 68.1 per cent. Uncertainty as to the volume of this season's operations in the canned-fruit and salmon-packing industries has resulted in a curtailment of operations of box shoo mills to 50 per cent of capacity. One hundred and eighteen mills belonging to the West Coast Lumbermen's Association reported for the four weeks ending March 26 a cut of 187,917,000 board feet, shipments of 209,970,000 feet, and orders of 213,431,000 feet. Corresponding figures for the preceding four weeks, with the same number of mills reporting, were as follows: 162,648,000 feet, 157,970,000 feet, and 167,483,000 feet. In district No. 11 (Dallas) prices were practically stationary throughout March. Production of 29 southern pine mills during March was equal to 60 per cent of normal. Orders booked by these 29 mills were equivalent to 61 per cent of their normal production, whereas the 30 mills which reported during February booked orders equivalent to 56 per cent of their normal production. Prices of pine have sagged slightly in district No. 6 (Atlanta). Production of 134 mills belonging to the Southern Pine Association was 29.5 per cent below normal during the week ending April 1, while shipments were 25.8 per cent below normal production. Orders received during that week were larger than in any week since January, but

were 23.9 per cent below normal production. Production in the Tennessee hardwood mills for the first three months of 1921 is reported to be 75 per cent lower than in the same period of 1920, and many of the mills are being closed. District No. 8 (St. Louis) reports that industrial buying has increased somewhat in both softwoods and hardwoods. "Railroads are virtually out of the market, and in consequence the prices of heavy timber, crossties, and car stock have declined more heavily than in any recent month." Price reductions were made during March by a majority of the retailers and about half the manufacturers reporting in district No. 9 (Minneapolis). The March cut of 12 manufacturers was 7 per cent greater than in February, and shipments were 20 per cent greater, while stocks at the close of the month had increased 5 per cent. As compared with March, 1920, cut was 26 per cent less, shipments 66 per cent less, and stocks at the close of the month 51 per cent greater. The demand for lumber has improved somewhat in district No. 3 (Philadelphia), but the price trend has continued downward and 80 per cent of the orders are being filled from stock on hand.

BUILDING OPERATIONS.

Building operations showed increased activity during March, which is a normal condition for this season of the year. Number of building permits, value of building permits, and value of contracts awarded all registered marked increases as compared with February. This increase is particularly large in the case of number of permits, as a result of the continued increase in the building of residences. Contracts awarded in the New England States amounted to \$13,262,000 during March, an increase of 84 per cent over February. District No. 2 (New York) reports contracts amounting to \$29,846,000, an increase of 40 per cent over the February figure. Of this total 59 per cent were for residential buildings as compared with 48 per cent in February and 40 per cent in January. "The increase in residential construction has been confined almost entirely to the least expensive apartments and small homes." In district No. 3 (Philadelphia) there has been a large increase in the value of building permits issued during March in comparison with the February figures. Funds for mortgages have been difficult to obtain, but there has been a steady increase in number of houses bought through the building and loan associations. District No. 4 (Cleveland) shows an increase in value of building permits issued during March, but there still seems to be a tendency to wait for lower costs before

commencing construction. Reports from 23 cities in district No. 5 (Richmond) show 1,718 permits issued for new construction during March, in comparison with 894 permits issued in February. This number was greater than that for any month since February, 1920. Value of building permits in district No. 6 (Atlanta) increased about 50 per cent for March in comparison with February figures. Noteworthy increases in activity occurred in Atlanta, Birmingham, and Tampa. In district No. 7 (Chicago) there was an increase in value both for building permits and contracts awarded during March, as compared with February figures. District No. 8 (St. Louis) shows an increase in value of building permits for three leading cities in March, as compared with February, but these figures are very much below those for March, 1920. In district No. 9 (Minneapolis) 1,847 permits, valued at \$2,647,666, were issued in the reporting centers in March, as compared with 783 permits, valued at \$2,179,784, in February. This increase is due to a substantial gain in the number of permits issued for repairs and alterations. Seventeen cities in district No. 10 (Kansas City) issued 2,778 permits in March, an increase of about 100 per cent over the February figure and an increase of about 18 per cent over the total of March, 1920. District No. 11 (Dallas) reports that both the number and value of building permits issued in March was the largest monthly total since October, 1920. The value of building permits for 20 cities of district No. 12 (San Francisco) amounted to \$18,542,835, an increase of 57 per cent over February, 1921, and 27 per cent over March, 1920. Number of permits in those cities increased 47 per cent over February, 1921, and 38 per cent over March, 1920. "Declining prices of building materials and some reduction in labor costs have reduced the number of factors which have been retarding building operations."

EMPLOYMENT.

The Federal Reserve Banks have just completed a special inquiry into changes in employment conditions and in rates of wages occurring during the year ending April 1. The results of this inquiry are presented in considerable detail elsewhere in this issue of the BULLETIN and need not therefore be summarized again. In addition to presenting facts concerning wages and employment as compared with a year ago, however, several districts present comparative data for the months of February and March. In district No. 3 (Philadelphia), for example, the estimates of the local officers

of the Pennsylvania Bureau of Employment indicated that on April 15 unemployment was still increasing in the cities of Philadelphia, Altoona, Harrisburg, Johnstown, and Scranton taken as a group, since the total number of unemployed was reported at 177,645 on April 15, as compared with 147,115 on March 15. In district No. 7 (Chicago) questionnaires are sent regularly to representative manufacturing concerns and for the month of March returns were received from 61 firms then employing 41,000 persons, and statistics showed a reduction of 6.5 per cent in numbers employed as compared with February. The greatest reductions in volume of employment were in the metal and machinery trades and among the workers in railroad equipment shops. On the other hand, the automotive industry has shown a steady increase since December, on the basis of returns made by 79 firms to the Employers' Association of Detroit. In December only 14 per cent as many men were employed as in September, the time of greatest activity, when 176,000 were on the pay rolls. On April 12 the number had risen to 100,347 from the December minimum, or to 57 per cent of the September total. From district No. 8 (St. Louis) it is reported that "Federal and State labor commissioners and employment agencies show a further increase in unemployment, * * * with most acute conditions in the metal industries and transportation and common labor most affected." In textiles, boots and shoes, clothing, and furniture, however, the number of unemployed was considerably decreased during the month of March by resumption of plant operations.

It was likewise true that unemployment increased in district No. 9 (Minneapolis) during March. According to reports from the Federal employment agencies in Minneapolis, St. Paul, and Duluth, requests for help wanted were 73.4 per cent of those for February in the case of men while 83.5 per cent as many men were placed in March as in February. For women, however, there was an 8.4 per cent increase in requests for help wanted and a 5.2 per cent increase in numbers placed as compared with February. Reports of mining companies indicated no substantial change in numbers employed in March. As a matter of fact, the largest Montana and Michigan mines were closed on April 1. Lumber companies employing 1,762 men in March had reduced their forces 17 per cent as compared with the preceding month. District No. 12 (San Francisco) stated that unemployment in that territory was less than a month ago, excepting in the sections of Arizona and Utah in which the large copper mines, now closed, are located.

Outside of mining, the lumber industry reported the greatest amount of unemployment, but work was in process of resumption. Portland reported a decided decrease in unemployment as did Seattle, while conditions in Spokane were practically unchanged. Industrial concerns in California were employing more men than they were a month ago.

Although a large amount of surplus labor in the industrial centers has been absorbed by the seasonal increase in demand for farm labor, it is very generally commented upon that farmers are endeavoring to economize by doing more work themselves and depending less upon hired help. Consequently, the relief to the unemployed with the opening up of spring farming activities is not likely to be so great as was anticipated. In view of the unusual supply of farm labor and the restricted demand, it is inevitable that wages should show a sharp decline. District No. 4 (Cleveland) reports that in the State of Ohio wages for farm hands now average \$40 a month with board, as compared with \$52 last year. In district No. 6 (Atlanta) it is said that many farmers are without money to hire labor and are cultivating only so much land as can be managed with the help of their families. In district No. 9 (Minneapolis) economies in expenditures for hired help are likewise being practised. Farm laborers in consequence are receiving from \$35 to \$45 per month with board, as compared with \$70 to \$80 a year ago. A similar situation prevails in district No. 10 (Kansas City) and it is said that laborers are reluctant to work at the reduced rates of wages now prevalent.

WHOLESALE TRADE.

Although the sales of reporting wholesale firms are much below the totals given for a year ago, as would be expected in view of the heavy declines that have taken place in wholesale prices, a number of districts which present month to month comparisons for leading lines, such as groceries, dry goods, boots and shoes, and hardware, report decided increases in March sales as compared with February. In district No. 3 (Philadelphia) the hardware sales of 25 reporting firms increased 30.2 per cent during the month, although the volume of business was still 19.2 per cent below the totals for last year. It was stated that current sales largely represent small orders of goods wanted for immediate use, the result of a seasonal demand for such articles as farm implements, garden tools, wire fencing, and netting. In the wholesale grocery trade increased sales had also occurred and could be partially attributed

to a seasonal increase in demand. The net sales of 50 reporting stores were 18.6 per cent larger in March than in February, but 27.9 per cent below the figures for March, 1920. Purchases were said to be for immediate needs and business confined largely to staples. In district No. 4 (Cleveland) the net sales of 14 reporting grocery firms and 7 hardware firms showed declines as compared with a year ago, somewhat analogous to those of district No. 3 (Philadelphia), being 16.3 per cent lower for hardware and 33.1 per cent lower for groceries. Dry goods sales (6 firms reporting) were 14.9 per cent below last year. In district No. 5 (Richmond) sales of groceries (9 firms reporting), dry goods (8 firms), hardware (8 firms) and boots and shoes (8 firms) show increases over February ranging from 8.6 per cent in the case of groceries to 53.4 per cent in the case of boots and shoes. The Easter demand probably explains the heavy increase in March sales of boots and shoes. Decreases for these four lines as compared with March, 1920, ranged from 23.9 per cent in the case of groceries to 38.3 per cent in the case of dry goods. In all these cases the drop in the value of sales is probably entirely accounted for by lower prices and in some cases the amount of sales, if measured in physical units, would undeniably be greater. In district No. 6 (Atlanta) the four reporting lines, groceries (10 firms), dry goods (13 firms), hardware (8 firms), and boots and shoes (7 firms), all reported increases in March sales as compared with February ranging from 6 per cent in hardware to 72.6 per cent in the case of boots and shoes. The last named heavy increase was no doubt in great part seasonal. Decreases in sales as compared with a year ago varied from 33.6 per cent in the case of groceries to 45.6 per cent in the case of hardware. Wholesalers in district No. 7 (Chicago) report very cautious buying. Grocery sales were 25 per cent below the level of a year ago, with 22 firms reporting, a drop very close to the percentage reduction in sales of the 50 concerns reporting in district No. 3 (Philadelphia). The dry goods trade (13 firms) reported a decrease of 35.9 per cent for March as compared with a year ago, while the sales of 10 shoe wholesalers were 31.6 per cent below March, 1920, but 20 per cent above sales for the preceding month. Grocery sales in district No. 10 (Kansas City), with 4 firms reporting, increased 19.5 per cent during the month, while they were 22.7 per cent below the totals of a year ago. The very heavy increase in hardware sales of 65.5 per cent (3 firms) as compared with February is no doubt attributable to the seasonal demand of a largely agricultural district. Sales were 34.3 per cent

below those of March, 1920. District No. 11 (Dallas), in contradistinction to other sections, does not show the same tendency toward a revival of wholesale trade. Returns from 2 concerns selling hardware and 2 selling farm implements record declines of 29.3 per cent and 18.4 per cent, respectively, in sales as compared with the preceding month. Grocery sales (4 firms) which elsewhere show a decided increase are 0.7 per cent below February volume and dry goods sales (4 firms), although 16.1 per cent greater in March than in February, have not advanced as greatly as in most of the other districts. All dealers, it is said, report that the buying demand is light, conservatism is the outstanding feature with the trade, and dealers are reluctant to place orders in very large amounts for future delivery. In district No. 12 (San Francisco) all reporting lines have increased sales as compared with the month of February. As in other districts, the increase in shoe sales has been very heavy, averaging 68.4 per cent for 15 firms. Grocery sales (30 firms), dry goods (11 firms), and hardware (23 firms) increased 20.9 per cent, 28.5 per cent, and 33.9 per cent, respectively, over the preceding month. The declines as compared with a year ago were 16 per cent for shoes, 7.3 per cent for groceries, 29.1 per cent for dry goods, and 33.6 per cent for hardware. Given the decreases in wholesale prices, the declines probably do not indicate any shrinkage in the physical volume of trade in any of these reporting lines.

RETAIL TRADE.

The irregularity which has been noted in the retail trade situation for the past few months is still evident. Discrimination in favor of better quality of goods characterizes the attitude of the buying public. A representative view of the situation is stated by district No. 3 (Philadelphia): "Purchasers are exceptionally careful in their shopping and retailers have found that sales to a certain class of trade can be effected more easily by stressing the quality factor rather than the prices." There has been a seasonal increase in sales, due to the opening of spring and the pre-Easter shopping, but the increase has not been greater than a year ago. This is illustrated by the fact that the increase in net sales when compared with a year ago was less in March than in February. Thus in district No. 1 (Boston) the increase in net sales over the same month a year ago was 1.5 per cent, in district No. 3 (Philadelphia) 1.8 per cent, and in district No. 5 (Richmond) 2.7 per cent. In the middle western districts decreases in

net sales were prominent. In district No. 8 (St. Louis) there was a decrease of 0.7 per cent, in district No. 9 (Minneapolis) 11.2 per cent, and in district No. 11 (Dallas) 16 per cent. There was the usual seasonal increase in stocks but the amount on hand was considerably smaller in every district than a year ago. The rapidity of stock turnover has been increasing. The outstanding orders at the close of March remained practically constant, which indicated that the merchants are not placing orders to any great extent. District No. 3 (Philadelphia) states that "retail store managers continue to keep close watch of their buyers, limiting them to practically hand to mouth purchases."

PRICES.

Extreme unevenness as regards price reductions is one of the striking features of the present industrial situation. Prewar prices or something approaching them exist in many important lines of wholesale trade, while at the same time in other lines commodities are being sold at twice or even more than twice 1913 values. The same unevenness exists in some cases between the prices of raw materials and finished goods in the same industry. In the case of raw cotton, for instance, both Egyptian and American, the present level is lower than the average for the year 1913. Although certain grades of South American wool are below the 1913 average, wool prices as a whole appear to be still about a third higher than before the war. Finished materials in these two lines, however, have not been reduced as much as the raw materials. An average of three leading grades of cotton goods shows present prices to be at least 20 per cent higher than before the war, and a woollen cloth of a standard type is now selling at approximately twice as much as in 1913. The discrepancy between the prices of raw and manufactured goods in the hide and leather industry is even more extreme than in the cotton and wool industries. An average of leading grades of domestic and foreign skins shows the present level of prices to be approximately one-third under the prewar level. Shoe prices, on the other hand, would seem to be about twice as high as in 1913.

Except in the case of wheat and rye, prices of leading cereals closely approach prewar levels. In spite of this, however, the trend of the market has recently been continually downward. Prices of live stock and meats, on the other hand, although at a level at least 10 per cent above

prewar prices (and in some cases more), have been showing considerable strength during recent months. There has, however, recently been a downward movement in some of the meat products. Another group of commodities which are at or below prewar price levels are the leading nonferrous metals, such as copper, zinc, lead, and tin. In 1913 electrolytic copper sold at an average of 15½ cents a pound. Recent quotations are at 12 to 12½ cents a pound. Zinc and tin are also below the prewar price, and lead is at approximately the same point as in 1913. Nevertheless, this group of industries is in a highly disorganized condition and production has been heavily curtailed.

In a large group of important industries, on the other hand, prices are still from 50 to 100 per cent above prewar levels. This is true in spite of the fact that in a considerable number of cases price reductions have been made which appear sufficient to make a possible basis for trading. Most noteworthy in this group are the fuels and building materials. Bituminous coal in spite of considerable reductions now averages around 100 per cent above the prewar figure, and anthracite is at a similar ratio as compared with the 1913 level. Coke also appears to be about twice as high as before the war, while iron and steel prices (taking into consideration the United States Steel Corporation reductions) are between 50 and 75 per cent above the 1913 average. Crude petroleum and petroleum products are still more than twice the prewar price in spite of recent drastic reductions in the mid-continent fields.

In the same way lumber, brick, and cement are far above prewar levels. An average of three leading grades of lumber shows present prices at least 50 per cent higher than before the war, while brick and cement are between two and three times the 1913 level.

Although a study of the component parts of the price structure is essential to an understanding of the difficulties of the present situation, the movement of prices in general is of value also. The wide variations in the different parts of the system are thus eliminated in the average for prices as a whole. It should be remembered, however, where use is made of such an average, that it consists of widely diverse elements.

The all commodities index number, constructed by the board, shows a reduction of 3 per cent during March, while the rate of decline in January and February was 6 per cent, and that of December 9 per cent. During recent months the raw materials index number has

declined more rapidly than that for manufactured goods, the reduction since January amounting to 11 per cent in raw materials as compared with 5 per cent in consumers' goods. The all commodities index number now stands at 50 per cent above the 1913 average.

Retail prices of 43 articles of food were reduced only 1 per cent during March according to the index number of the Bureau of Labor Statistics. No statistics are available showing the reduction in the price of clothing or miscellaneous articles at retail.

SHIPPING.

More optimism regarding the outlook prevailed in shipping circles than for some months past. This was due more to the expectations aroused by a number of developments than to any change in the underlying situation. Among the events of the month was the continuance of the British coal strike, with a moderate expansion of the demand for charters of American coal-carrying ships for prompt delivery. Another encouraging feature of the freight market was the firmer tendency of rates in certain directions. The settlement of the rate war between the North Atlantic-United Kingdom Conference and the French Line, which had been waged since last fall, helped to give tone to the ocean freight market. The decision of the Shipping Board to charter its vessels in future on the bare-boat plan was regarded by operators as opening up possibilities for cheaper operation of vessels. The wage situation remains unsettled, the calling of a strike by the marine engineers at New York for the 1st of May being the outstanding development toward the end of April. The Division of Operations of the Shipping Board stated that, on April 5, 653 steel ships of 4,279,581 deadweight tons were either already idle or had been ordered withdrawn from service until conditions improve. That number constitutes 46 per cent of the Government-owned steel merchant ships. The shipbuilding situation remains unchanged, with yards merely completing orders already on hand, no new tonnage of any size having been booked by American yards so far this year. The recent cut in steel prices has not been sufficient to affect shipbuilding favorably. Of the Shipping Board's building program, 44 steel vessels of 489,150 deadweight tons remain to be delivered, all of which are now under construction. According to present plans, the last of these will be completed and delivered about April, 1922.

CHANGES IN WAGES.

The Federal Reserve Board, in connection with its usual monthly business survey, has undertaken to secure information throwing light upon wage conditions. With a view to ascertaining the extent to which the fall in general prices has been accompanied by reductions in rates of wages, the 12 Federal Reserve Banks at the request of the Board addressed inquiries to representative employers engaged in typical industries within the several districts, asking for data concerning changes in wages and employment.¹ Returns have been secured relating to the number of workers and the amounts of the weekly pay rolls on dates nearest April 1, 1920, and April 1, 1921, respectively. An endeavor has also been made to obtain reliable estimates of average percentage reductions in wage rates by industries, to find out whether such reductions have been made uniformly applicable to all employees of reporting establishments, and if not, what have been the variations in the percentages of reduction and how different groups or classes of workers have been affected. The fact that the inquiry has been conducted by each Federal Reserve Bank for its own district will also throw light on the varying extent to which workers in different sections of the country have been affected by the reductions that have been instituted.

It should be noted that the results presented in this survey are not such as can be subjected to detailed analysis or precise comparisons. It is difficult and often impossible to secure a grouping or classification of industries that will serve for all districts. In some parts of the country it is practicable and desirable to present returns by highly specialized sub-divisions of an industry, while in other sections more comprehensive groupings are necessary. Moreover, the replies concerning the amount and the extent of wage decreases do not lend themselves readily to a systematic summary, and any attempt to differentiate between skilled and unskilled labor or to define the terms in a way that would be acceptable for all industries would be a fruitless task leading to endless controversial discussion. The terms have therefore been used uncritically on the assumption that they have a fairly definite connotation when applied to specific industries. Despite these strictures, it is believed that the

¹ It should be noted that the data which have been assembled show only changes in employment in establishments which have reported; they should not be taken as indicating the general state of unemployment.

scope of the inquiry and the amount of the detailed information obtained from the questionnaires sent out present abundant evidence to support the generalizations which follow.

The inquiry covers establishments reporting 1,303,792 employees on the pay roll on date nearest April 1, 1921, with a total weekly pay roll of \$36,726,380.

The table given below shows for all reporting establishments, by districts, the number of employees covered by the inquiry and the total amounts of the weekly payroll for specified dates in 1920 and 1921, respectively. In every district the reporting establishments record decreases in numbers employed as compared with the preceding year, ranging from 6.2 per cent in district No. 12 (San Francisco) to 52.5 per cent in district No. 10 (Kansas

City). In all but three districts the shrinkage in the amount of the pay roll has been perceptually even greater than the reduction in numbers employed. In district No. 12 (San Francisco), however, the amount of the pay roll increased 5.3 per cent and in districts No. 2 (New York) and No. 11 (Dallas) the decreases have been less than the percentage drop in numbers of employees. The percentage reduction in numbers employed for the country as a whole was 25 per cent and the reduction in the amounts of the weekly pay roll was 29.8 per cent. It is fairly apparent, therefore, that very general reductions in rates of wages have occurred, although the sharper percentual drop in the amount of the pay roll would be partially accounted for by the fact that some establishments have curtailed working hours.

NUMBER OF EMPLOYEES AND AMOUNT OF PAY ROLL FOR REPRESENTATIVE ESTABLISHMENTS IN 1920 AND 1921.

Federal Reserve district.	Number of employees on pay roll, date nearest Apr. 1, 1920.	Number of employees on pay roll, date nearest Apr. 1, 1921.	Per cent of decrease in number of employees reported.	Amount of pay roll for week ending on date nearest Apr. 1, 1920.	Amount of pay roll for week ending on date nearest Apr. 1, 1921.	Per cent of decrease in total amount of pay roll.	Per cent of decrease in average pay per employee.
No. 1.—Boston.....	386,850	318,973	17.5	\$11,037,818	\$8,539,997	22.6	6.2
No. 2.—New York.....	372,416	305,152	18.1	10,824,000	8,912,400	17.7	10.5
No. 3.—Philadelphia.....	140,101	107,625	23.2	4,069,574	2,675,494	34.3	14.4
No. 4.—Cleveland.....	203,061	114,078	43.8	6,994,400	3,213,877	54.1	18.2
No. 5.—Richmond.....	61,284	47,784	22.0	1,588,993	1,019,434	35.8	17.7
No. 6.—Atlanta.....	20,075	12,907	35.7	497,472	242,913	51.2	24.1
No. 7.—Chicago.....	343,544	230,681	32.9	11,558,620	7,339,275	36.5	5.5
No. 8.—St. Louis.....	47,563	37,140	21.9	1,049,195	675,142	35.6	17.6
No. 9.—Minneapolis.....	33,917	23,846	29.7	976,971	646,981	33.8	5.8
No. 10.—Kansas City.....	31,347	14,887	52.5	641,565	279,243	56.5	8.4
No. 11.—Dallas.....	7,582	6,307	16.8	170,839	151,210	11.5	16.4
No. 12.—San Francisco.....	89,977	84,412	6.2	2,877,016	3,030,414	5.3	12.3
Total.....	1,737,717	1,303,792	25.0	52,286,463	36,726,380	29.8	6.4

¹ Increase.

NOTE.—The totals given in the table will not in all cases correspond with those published for the several Federal Reserve districts, as in some cases supplementary returns were received too late to be incorporated in the general report. In one instance, returns received directly have been added to totals obtained from the district. A certain amount of reclassification of industrial groups has also been undertaken for the purpose of securing greater uniformity in the general report.

The last column in the table indicates the percentage reduction in average weekly pay per employee for the establishments included in the study. It will be seen that in districts No. 11 (Dallas) and No. 12 (San Francisco) there has been an increase in the average compensation of employees—in the former of 6.4 per cent and in the latter of 12.3 per cent. Such increases are not inconsistent with the decreases in employment of 16.8 and 6.2 per cent, respectively, even though no increases in rates of pay may have occurred. They may

merely represent the higher average earning capacity of those retained in service. In district No. 2 (New York) also there was a slight increase in the average pay per employee. In all other districts material reductions are noted, ranging from 5.5 per cent in district No. 7 (Chicago) to 24.1 per cent in district No. 6 (Atlanta).

Another table showing the changes in employment and in amount of pay roll, by the principal industries, follows.

NUMBER OF EMPLOYEES AND AMOUNT OF PAY ROLL IN REPRESENTATIVE ESTABLISHMENTS, BY INDUSTRIES, IN APRIL, 1920 AND 1921.

Industry.	Number of employees on pay roll.			Amount of pay roll.			Per cent of decrease in average pay per employee.
	1920	1921	Per cent of decrease.	1920	1921	Per cent of decrease.	
Cotton textiles.....	108,770	88,884	18.2	\$2,699,798	\$1,819,749	32.6	17.5
Woolen textiles.....	26,727	23,784	11.0	772,745	609,972	21.1	11.3
Silk textiles.....	13,026	11,683	10.4	317,697	268,117	15.6	5.9
Clothing.....	43,208	33,417	22.6	1,462,219	975,287	33.4	13.7
Boots and shoes.....	59,103	45,950	22.3	1,644,093	1,248,072	24.1	2.4
Lumber.....	20,870	15,063	27.8	638,977	371,381	41.9	19.5
Building materials.....	21,052	14,028	33.4	697,185	416,665	40.2	10.3
Building construction.....	21,305	8,456	60.4	471,246	211,481	55.1	13.1
Paper.....	26,889	24,261	9.8	705,259	550,120	22.0	13.5
Meat packing.....	83,166	64,532	22.4	2,280,350	1,774,035	22.2	0.3
Iron and steel.....	168,751	98,785	41.5	6,019,819	2,714,773	54.9	23.0
Automobiles.....	84,845	38,027	55.2	3,085,754	1,135,616	63.2	17.9
Farm machinery.....	21,586	13,555	37.2	858,958	477,969	44.4	11.4
Electrical goods.....	50,588	37,164	26.5	1,557,510	1,062,521	31.7	7.1
Copper.....	26,980	16,640	38.3	888,378	453,047	49.0	17.3
Oil.....	22,643	23,331	3.0	803,384	975,518	21.5	17.8
Rubber.....	57,711	20,798	64.0	1,646,346	355,982	78.4	40.0
Printing.....	14,202	12,590	11.4	479,738	441,762	7.9	3.8
Chemicals.....	12,813	9,200	28.2	465,055	238,081	48.8	28.7
Shipbuilding.....	32,453	28,564	12.0	1,005,161	1,038,729	3.3	17.4
Tobacco manufacture.....	29,849	24,282	18.6	531,629	313,789	41.0	27.5
Public utilities.....	320,820	300,360	6.4	10,551,038	10,646,294	0.9	17.8

¹ Increase.

Reductions in the number on the payroll were made in all the industries included in the tabulation, except oil, the reduction being smallest (6.4 per cent) for public utilities and largest (64 per cent) for the rubber industry. Among the highest percentages of reduction in employment shown are those for the automobile industry (55.2 per cent), for building construction (60.4 per cent), and for iron and steel (41.5 per cent.) Even larger reductions are shown in the aggregate amount of pay roll for all industries, with the exception of building construction, printing, shipbuilding, meat packing, and public utilities. The percentage of decrease in average earnings per employee varies from 2.4 per cent in the boot and shoe industry to 40 per cent in the rubber industry. Iron and steel, with a 23 per cent reduction, tobacco manufacturing with a 27.5 per cent reduction, and chemicals with a 28.7 per cent reduction, are among the industries showing the largest cuts in average weekly earnings. Six industries, on the other hand, show increases in average earnings per employee, which varies from 0.3 per cent for meat packing to 17.8 per cent for oil.

The general tables given above throw no light on the extent of the rate reductions that have occurred, nor on variations in the percentages of those reductions. For this reason a more detailed presentation of the returns for certain principal industries within the 12 Federal Reserve districts is offered below. This review does not, however, cover all the material available, which will be presented with a greater

degree of elaboration in the reports of the individual Federal Reserve Banks.

DISTRICT NO. 1—BOSTON.

Data for important industries in district No. 1 (Boston) follow:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Cotton textiles	90,041	76,649	\$2,292,648	\$1,541,457	14.9	32.8
Textiles:						
Miscellaneous.....	10,940	8,208	256,018	139,909	25.0	45.4
Finishing.....	10,578	11,470	244,793	224,333	8.4	8.4
Woolen goods.....	12,707	11,857	422,647	324,715	6.7	23.2
Boots and shoes.....	23,093	15,128	634,715	445,620	34.5	29.8
Electrical goods.....	19,883	15,177	579,557	384,430	23.7	33.7
Machines and tools.....	18,581	10,979	567,686	264,125	40.9	53.5
Pulp and paper.....	15,911	14,519	395,924	305,744	8.7	22.8
Public utilities	119,305	107,253	3,935,824	3,829,763	10.1	2.7

¹ Increase; strike conditions prevailed a year ago.

In the textile industry there has been a practically uniform reduction of 22.5 per cent in wages within recent months, but in some cases this decrease had been preceded by an increase of about 15 per cent granted last June, so that for some establishments the net reduction for the year is slightly less than 11 per cent. In the boot and shoe industry there has been no change in rates of wages during the year.

With the exception of the cases already noted, it is difficult to make any generalizations concerning the character of the wage cuts which have been put into effect by the various reporting industries. There has been very little uniformity in these reductions, but it is safe to say that with few exceptions it is generally true throughout the country that the heaviest decreases in wage rates have been experienced by unskilled or "common" laborers.

DISTRICT NO. 2—NEW YORK.

In district No. 2 (New York) the following reporting industries have been selected for especial comment:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Clothing.....	11,926	10,154	\$289,700	\$248,700	14.9	14.1
Silk.....	8,906	7,989	212,600	176,200	10.3	17.1
Automobiles.....	11,519	7,694	326,100	248,700	33.2	23.7
Boots and shoes.....	30,885	26,105	864,800	678,300	15.5	21.6
Printing and publishing.....	6,592	5,997	241,000	232,800	9.0	3.4
Miscellaneous metal manufacturers.....	67,560	64,200	2,091,200	2,053,000	5.0	1.8
Shipbuilding and repairs.....	12,982	6,645	412,900	220,700	48.8	46.5
Public utilities.....	108,334	99,160	3,565,000	3,447,000	8.4	3.3

Returns were received from 137 establishments, and of this number 55 per cent had made reductions in wages since April 1, 1920, and nearly 80 per cent of those reporting said that reductions had been made on a uniform basis. When this was not the case, unskilled workers had generally been the group subjected to the greatest decrease. As in district No. 1 (Boston) no reductions have been made in the wages of the boot and shoe operatives employed by the nine reporting manufacturers. Four railroad and transportation companies similarly report no reduction in wage rates and only one of seven other public utility corporations reported reductions. In the last-named case the average decrease was about 9 per cent. But two of the 11 reporting clothing manufacturers stated that wage rates had been reduced, the average decrease being about 9 per cent. As employees within the groups just mentioned have scarcely been affected by wage reductions (while increases have occurred in wages of railway and transport workers) and as these groups constitute a very large percentage of the total number of workers covered by the inquiry in district No. 2 (New York), it is not surprising that the percentage of reduction in weekly pay rolls as

shown in the general table does not decline as sharply as numbers employed.

Thirty-seven of the 48 miscellaneous metal manufacturing concerns stated that there had been reductions in wage rates and in 22 cases these reductions were uniform. The average amount of the cut was 13 per cent for all 37 concerns. Two of the four automobile concerns reported a uniform reduction in wage rates averaging 11 per cent. Three of the seven reporting silk manufacturers had also made uniform reductions amounting to 12 per cent in rates of wages. Four of the six concerns in the group shipbuilding and repairs said that there had been uniform reductions averaging 11 per cent. In only one of the six printing and publishing firms had there been a reduction averaging about 12 per cent. In general the decreases reported appear not to have been so extreme as in other sections of the country.

DISTRICT NO. 3—PHILADELPHIA.

In district No. 3 (Philadelphia) returns have been tabulated for the following important industries:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Iron and steel.....	58,531	39,558	\$1,798,999	\$924,581	32.4	48.6
Cotton textiles.....	5,613	5,170	141,063	126,545	7.9	10.3
Woolen textiles.....	6,310	5,386	153,604	127,372	14.6	17.1
Silk textiles.....	4,120	3,694	105,097	91,917	10.3	12.5
Knit goods.....	1,858	1,067	47,703	22,506	42.6	52.8
Leather and leather goods.....	7,409	4,285	208,876	101,690	42.2	51.3
Boots and shoes.....	3,785	3,533	92,123	84,595	6.7	8.2
Printing and publishing.....	6,329	5,401	179,705	150,776	14.7	16.1
Public utilities.....	10,576	10,708	383,284	370,851	11.2	3.2

¹ Increase.

Of the 96 reporting iron and steel companies, 91 stated that there had been reductions in rates of wages. The average reduction both for skilled and unskilled workers ranged from about 5 to 25 or 26 per cent. In cotton textiles the wage reductions have affected skilled and unskilled workers in about the same degree, the per cent of reductions ranging from about 16 to 21 per cent. This was true in the case of woolen textiles also, but the reductions were somewhat less in the case of skilled workers. In silk textiles the reduction ranged from about 12 to 15 per cent and there has been slight differentiation between the treatment of the skilled and unskilled workers. Six out of eight reporting knit goods establishments

stated that there had been reductions of 15 per cent applicable to both skilled and unskilled workers. Only four of the 23 reporting shoe firms had put into effect reduced rates for unskilled workers ranging from 9 to 11 per cent. Three of these had reduced the wages of skilled workers 14 to 16 per cent. Of the 22 leather firms five reported no reduction in the wages of unskilled workers and six reported no reduction in the wages of skilled workers. In the other cases average reductions for both skilled and unskilled workers ranged from 10 to 25 per cent. The 21 printing and publishing establishments without exception reported that there had been no change in wage rates to date. Ten of the 36 reporting public utility companies had reduced the wages of unskilled labor about 18 per cent, but only three companies announced reductions in the rates paid to skilled workers.

DISTRICT NO. 4—CLEVELAND.

For district No. 4 (Cleveland) the following are the principal industries for which reports have been received:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Coal and coke.....	14,071	16,391	\$436,796	\$366,015	16.4	16.2
Iron and steel.....	31,557	13,614	1,568,007	523,773	56.9	66.6
Electrical machinery.....	27,686	20,821	868,321	647,991	24.8	25.3
Rubber.....	47,245	13,542	1,362,264	293,268	71.3	78.5
Automobiles.....	25,323	9,085	861,385	204,632	64.1	76.3
Pottery.....	5,532	5,399	148,850	161,947	2.4	18.8
Public utilities.....	12,652	13,043	362,000	391,876	13.1	18.3

¹ Increase.

There was a very general reduction in wage rates made by independent steel mills during February and March, which amounted to about 20 per cent and affected all classes of workers. The Steel Corporation, however, made no changes in wage scales in its plants. The report from district No. 4 (Cleveland) states that, among the lines covered by the survey, pay rolls in four reporting lines—namely, manufacturers of women's clothing, pottery, public utilities and construction companies—show increases in rates of pay. This is due to the fact that these industries are working under wage agreements negotiated during the spring and summer months and generally covering a period of a year. Otherwise decreases in rates of wages have been quite general, although there has been no uniformity either as regards the nature of the

business, the classes of workers affected, or localities. The only generalization that can safely be made is that "common" labor has as elsewhere had its wages reduced in greater degree than skilled labor. In the case of six rubber companies, whose records show a drop of 71.3 per cent, in number employed, general wage reductions have taken place in practically all shops, running from 7.5 to 50 per cent and averaging around 24 to 26 per cent. Practice has been by no means uniform, however, in the case of the five reporting automobile factories. Reductions of wage schedules ranging from 10 to 30 per cent have occurred in some factories, while in other cases no changes have been made. Contrary to the usual policy, the least reduction had been made in the pay of "common" labor.

The reductions in wages paid by reporting establishments in the southern districts have been decidedly more far-reaching than in other parts of the country, and the cuts in the rates paid to "common" or unskilled labor have been especially severe.

DISTRICT NO. 5—RICHMOND.

The industries selected for detailed examination in district No. 5 (Richmond) are given below:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Cotton textiles.....	6,091	5,267	\$120,816	\$68,433	13.6	43.4
Building and construction.....	4,201	1,880	77,358	32,766	55.2	57.7
Fertilizer manufacturers.....	3,035	2,212	63,301	28,776	27.1	54.6
Lumber manufacturers.....	2,002	1,755	43,035	24,056	12.3	44.1
Glass factories.....	2,270	1,818	65,092	53,146	19.9	18.4
Boots and shoes.....	1,340	1,184	52,455	39,557	11.6	24.6
Coal companies.....	4,986	4,274	253,412	215,146	14.3	15.1

The fall in rates paid by four reporting cotton mills has been general and has averaged about 37.4 per cent, rising to 45 per cent for some workers in one establishment. All but one of eight building and construction companies reported decreases ranging from 10 to 50 per cent. In two cases extreme cuts of 50 per cent were stated to apply to "common labor." The returns from the seven fertilizer manufacturers show drastic cuts in the wages of the unskilled workers who form the bulk of the employees. The reductions were approximately 41 per cent, while the wages of skilled

employees had not been reduced more than 16 to 20 per cent. Five lumber manufacturers reported that the rates of wages paid to skilled workers had been reduced 10 to 15 per cent, while the unskilled workers had dropped about 40 per cent and in extreme cases 50 per cent. Of the six glass factories three reported no reduction; one a 10 per cent reduction for unskilled labor; another, 15 per cent for young people; another, 20 per cent for unskilled and 10 per cent for skilled workers. No reductions are reported by three coal companies, and two boot and shoe manufacturers have likewise maintained the same scale of wages.

DISTRICT NO. 6—ATLANTA.

The selected list of reporting industries for district No. 6 (Atlanta) follows:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Cotton textiles.....	4,110	3,491	\$78,971	\$46,014	15.0	40.2
Lumber.....	1,197	1,279	21,026	15,544	16.9	26.1
Public utilities.....	3,622	3,535	94,877	97,920	2.4	13.2

¹ Increase.

As in district No. 5 (Richmond), reductions in wage rates by cotton mills have been extensive, amounting in one case to 34 per cent as a result of three recent reductions. In another instance, a uniform reduction of 37.5 per cent has been put into effect; in two other cases reductions of 20 per cent have been made; and in a third instance one of 25 per cent. These changes applied to all classes of help except in one mill, which stated that skilled hands had been reduced only 10 per cent. New wage schedules recently instituted by reporting lumber companies provide for reductions of 30 to 40 per cent for unskilled labor. Six street railway and electrical companies stated that there had been some reduction made in wages of trackmen and unskilled labor.

DISTRICT NO. 7—CHICAGO.

A compilation of the data relating to some of the more important industries covered by

the report from district No. 7 (Chicago) is included in the following table:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Automobiles and accessories.....	48,003	21,248	\$1,898,269	\$682,284	55.7	64.1
Chemicals, paints, and soap.....	9,934	5,499	299,095	142,855	44.6	52.2
Clothing.....	21,251	15,781	795,059	540,673	25.7	32.0
Coal mining.....	4,388	3,918	202,484	160,706	10.7	20.6
Contractors and builders.....	11,962	3,580	261,354	96,691	70.1	63.0
Iron, steel, and brass.....	18,202	9,882	722,572	355,775	45.7	50.8
Lumber and mill workers.....	10,117	7,396	328,036	196,922	26.9	40.0
Farm implements and equipment.....	19,872	12,222	814,701	449,390	38.5	44.8
Packers.....	78,874	61,516	2,172,257	1,706,298	22.0	21.5
Public utility....	30,651	29,201	1,082,340	1,201,916	4.7	16.4

¹ Increase.

In the case of the concerns manufacturing automobiles and accessories a majority of the establishments report that all grades of workers have been equally affected by percentage reductions, which range from 7 to 25 per cent, according to establishments. Sixteen of the 19 clothing concerns making reports state that there has been no decrease in the rates of wages paid. In a limited number of other instances decreases have ranged from 5 to 20 per cent. Of the 61 concerns manufacturing iron and steel and brass, 19 report no decrease in wage rates. The others record decreases ranging from 5 to 20 per cent. No generalization regarding the class of workers affected is possible, as in some cases reductions have been confined to the skilled and in other instances applied to the unskilled. Manufacturers of farm implements and equipment report no decrease in wage rates in 16 out of 84 cases. In other instances decreases range from 5 to 25 per cent. As a rule reductions have been uniform within establishments. Where differences exist, however, the reduction in the rates paid to common laborers has been greater. Three of the 17 reporting packers state that there have been no decreases in wage rates. In the other cases reductions have varied from 8 to 15 per cent. Contractors and builders report decreases for 21 out of 31 reporting firms, the decreases varying from 10 to 25 per cent. Sixteen of the 26 reporting public utility companies state that

there has been no reduction in wage rates. In the other instances decreases have varied from 17 to 30 per cent. Reductions have been largely confined to trackmen and "common" laborers.

DISTRICT NO. 8—ST. LOUIS.

A table showing changes in numbers employed and in pay roll for specified industries in district No. 8 (St. Louis) follows:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Wholesale hardware.	3,094	2,553	\$117,051	\$111,229	17.5	5.0
Stove manufacturing	2,712	1,211	88,322	24,589	55.3	72.2
Building materials.	2,350	1,208	63,421	28,886	48.6	54.5
Chemicals, paints, etc	1,695	1,154	36,293	27,522	31.9	24.2
Clothing and dry goods.	4,084	3,320	94,447	81,013	18.7	14.2
Printing.	1,524	1,181	50,338	39,422	22.5	21.7
Iron and steel products.	5,971	4,295	150,726	94,070	28.1	37.6
Public utilities.	7,417	7,590	261,611	296,222	12.3	13.2

¹ Increase.

On the whole, reductions in wages have not been so numerous nor so great in district No. 8 (St. Louis) as in the sections to the south and east, and where reductions have occurred the skilled labor has not been affected in very many instances. Only "common" labor was affected by reduction in wage rates made by six of the seven reporting concerns engaged in the production of building materials. Cuts varied from 10 to 50 per cent, covering all workers. Only one of six reporting stove manufacturing concerns reported a reduction in rates. For wholesale hardware establishments no reduction in wage rates are recorded, although one is in prospect. Of the 14 establishments engaged in the manufacture of iron and steel products nine report no changes in wage rates, while, in the case of the others, decreases range from 8 to 25 per cent. About two-thirds of the workers covered by reports from clothing and dry goods houses had had their rates of wages decreased 10 per cent. In the other cases no change had been made. Manufacturers of chemicals and paint announce no reduction except in one instance, where a 10 per cent drop was made.

DISTRICT NO. 9—MINNEAPOLIS.

Details for a group of the leading reporting industries in district No. 9 (Minneapolis) are given in the accompanying table:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Knit goods.	3,520	3,229	\$59,285	\$54,104	8.3	8.7
Mining.	14,828	8,607	501,632	229,296	41.9	54.3
Public utility.	6,058	5,864	202,115	220,198	3.2	9.0

¹ Increase.

The greatest reduction in wage rates occurred in the case of construction companies, which showed reductions of 20 to 30 per cent. Reductions varying from 15 to 20 per cent were made by mining and milling companies. Two out of three public utility companies reported increases in wage rates, in one case amounting to 10 per cent.

DISTRICT NO. 10—KANSAS CITY.

The table which follows gives returns in some detail for the principal mining industries of district No. 10 (Kansas City) and for the packing industry:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	Apr. 1, 1920.	Apr. 1, 1921.	Apr. 1, 1920.	Apr. 1, 1921.		
Lead and zinc.	8,900	2,780	\$267,000	\$58,380	68.7	78.1
Smelting.	6,413	3,591	210,827	107,458	44.0	49.0
Meat packing.	4,292	3,016	108,093	67,737	29.7	37.3

The decreases in rates of wages paid to lead and zinc miners have been especially severe, being approximately 33½ per cent to date. Wage reductions have been uniform, but where outside labor enters, as carpenters, bricklayers, and machinists, the extent of the reduction is not shown in the reports. In the Colorado metal mines, for which more specific data are not obtainable, it is estimated that only about 4,000 men are employed, as compared with a normal number of 10,000. No exact figures as to the number of men employed in the smelters are available at this time, but it is known that the smelters are running at a very much reduced capacity and a number are shut down entirely. The minimum wage per day at the mines is now as

follows: Leadville, \$4; Cripple Creek, \$3.50; Silverton, \$4.25; Telluride, \$4.

The wages for more skilled men run up to \$1 and \$1.50 more than the minimum. These figures represent a flat 50-cent reduction since the first of the year. In the smelters the minimum wage is \$3 and the maximum \$5.55. It represents a cut of 10 to 15 per cent since the first of the year. It is stated that efforts to readjust the situation in meat-packing houses at packing centers of this district have resulted in a reduction of approximately 30 per cent in the number of employees at these plants within the year. There are probably now about 35,000 employees at the larger plants in the six packing cities of Kansas City, Oklahoma City, Omaha, St. Joseph, Denver, and Wichita, compared with approximately 50,000 employees on April 1, 1920. On March 14 of this year there was inaugurated a reduction of 8 cents per hour for all hourly workers and 12½ per cent on piece work. The scale is now in force, although the employees have made an appeal to the United States Labor Department. In the bituminous coal field there has been no reduction of wages, as the contract between the United Mine Workers' Organization and the Southwest Interstate Coal Operators' Association does not expire until April 1, 1921. On April 1, 1920, the number of men employed in the four States was approximately 32,000, and it is assumed that the number on the pay rolls on April 1, 1921, closely approximates this number, although the mines are being operated at less than one-half capacity this year, whereas a year ago they were operated at more than three-fourths full capacity.

DISTRICT NO. 11—DALLAS.

Twenty-eight replies to questionnaires sent to different counties in the State of Texas making inquiry concerning changes which had been made in the wages of farm labor were received. Of these, 17 report reductions of 50 per cent in rates; 7 report a 35 per cent reduction, and 4 a reduction of 25 per cent. Twelve building contractors reported that there had been a reduction in the wages of nonunion skilled mechanics of about 10 per cent, while the wages of unskilled workers had fallen about 25 per cent. There had been no reduction in the scale of wages paid to union labor.

DISTRICT NO. 12—SAN FRANCISCO.

Returns from district No. 12 (San Francisco) are as follows for leading lines:

Industry.	Number of employees.		Weekly pay roll.		Percentage of decrease in number employed.	Percentage of decrease in pay roll.
	April 1, 1920.	April 1, 1921.	April 1, 1920.	April 1, 1921.		
Copper mining.....	12, 152	8, 033	\$386, 745	\$223, 751	33.9	42.1
Lumber.....	7, 554	4, 633	246, 880	134, 859	38.7	45.4
Oil producing and refining.....	22, 428	23, 096	784, 549	954, 826	13.0	121.7
Shipbuilding.....	19, 571	21, 919	592, 261	818, 029	112.0	138.1
Public utilities.....	22, 205	24, 006	663, 938	790, 548	18.1	119.1

¹ Increase.

In district No. 12 (San Francisco) the situation is different from that prevailing in other parts of the country. Reporting establishments were employing 6.2 per cent fewer men than a year ago, as the number on the pay roll dropped from 89,977 to 84,412, but pay roll totals increased 5.3 per cent. The public utility companies report no reduction in the wages of regular employees. On the contrary, increases in rates have occurred during the year. Two companies state that lower rates are being paid for common labor. Similarly, steamship companies state that there has been no decrease in rates of wages paid to any class or grade of employees, and one firm employing 3,800 men had made an increase of \$2.50 per man per week due to premium rates. There was likewise no reduction in rates of wages paid by oil producers and refiners. As these groups of establishments represent a very large percentage of total returns, it is not surprising that the total weekly pay rolls should show an increase.

The lumber companies have all reduced wages in varying degrees, and as a rule the cuts have been considerable, rising to 35 or 40 per cent in some cases. Seven milling concerns also report reductions effective since January varying from 10 to 12.5 per cent and applicable to all employees. A number of miscellaneous unclassified establishments also stated that there had been reductions. Reports on wage schedules for ten copper mines show decreases of from 14.8 per cent to 22.1 per cent for miners, of from 8.3 per cent to 23.1 per cent for mechanics, and of from 10.5 per cent to

27 per cent for muckers (common labor). There have been decreases in all mines and for all classes of labor, but for common labor there have been greater percentage reductions in most cases than for skilled labor.

Acceptance Market.

The Federal Reserve Banks have furnished the following reports on the condition of the acceptance market in their respective districts for the period prior to April 23:

District No. 2 (New York).—Ninety-day bills of the large New York banks held firmly at $5\frac{1}{2}$ to 6 per cent during the last 10 days of March and until after the completion of April 1 payments. At that time there was a further easing of call money rates, which was reflected in the increased demand for bills. Some dealers reduced their offering rate for the best 90-day bills to $5\frac{1}{2}$ per cent, while others quoted $5\frac{3}{4}$ or $5\frac{1}{2}$. During the first three weeks of April the ruling rate fluctuated between these figures, with a tendency toward the end of the period to center on $5\frac{3}{4}$.

Fluctuations in the volume of sales followed in the main the movements of money rates. During the second week of April, when rates were lower and there was a particularly active demand, dealers' portfolios were reduced sharply. But in later weeks sales were somewhat smaller and portfolios were built up to about the same amount as at the beginning of the month. Evidence of the further broadening of this market is found in a report by two dealers of the addition of 45 new buyers of bankers' acceptances to their lists within three weeks. This bank continues to add two or three members each week to the list of member banks for whom bills are purchased.

While bills drawn for the purpose of furnishing dollar exchange continue to predominate in the local market, there has been an increased proportion of both metal, grain, and packers' bills recently. The volume of sugar bills offered has fluctuated rather widely, but these, also, are in heavier volume now than a month ago.

The minimum buying rate of the Federal Reserve Bank has remained unchanged at $5\frac{1}{4}$ to 6 per cent, according to maturity, for indorsed prime bills.

District No. 3 (Philadelphia).—Sales of bankers' acceptances in the Third Federal Reserve District during the first few weeks of April did not keep pace with the earlier months of the year. This is due in part to the fact that many institutions preferred to invest in United

States certificates of indebtedness. As compared to last year, sales have been much larger.

The supply of bills has decreased, but is ample for the requirements of the market. Factors in reducing the supply are the disposition of business firms to liquidate acceptances covering goods in warehouses and the lessening in import and export business. Latest reports of the Department of Commerce show that March exports totaled \$387,000,000 as compared to \$820,000,000 in the previous year, and imports totaled \$252,000,000 against \$524,000,000 last year.

Commercial banking institutions are the largest purchasers of acceptances, but it is stated that industrial and business corporations have purchased considerable amounts with the funds released by curtailment of their operations. Acceptance dealers complain of the State laws restricting investments of savings banks and insurance companies, as they feel that this class of paper furnishes an investment combining security and liquidity in a high degree. The purchases of the Federal Reserve Bank of Philadelphia have averaged \$2,741,000 weekly thus far in 1921, as compared to a weekly average of \$1,469,000 in 1920 and \$270,000 in 1919.

Inquiries among accepting banking institutions in Philadelphia show that during the month ending April 10, 11 of these institutions accepted bills aggregating \$4,561,000 as compared to \$5,321,000 in the previous month, a decline of 14 per cent. The total amount of their acceptances outstanding on April 10 was \$13,150,000; on March 10 the amount was \$14,095,000. Cotton, wool, silk, leather, and oil figure largely among the commodities covered by these acceptances.

Selling rates quoted by dealers operating in the district are given below, with comparative rates a month ago and a year ago:

Maturity.	Eligible members' bills.			Eligible nonmembers' bills.		
	April, 1921.	March, 1921.	April, 1920.	April, 1921.	March, 1921.	April, 1920.
30 days.....	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ –6	$5\frac{1}{2}$ – $5\frac{3}{4}$
60 days.....	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ – $6\frac{1}{4}$	$5\frac{1}{2}$ –6
90 days.....	$5\frac{1}{2}$ – $5\frac{3}{4}$	$5\frac{1}{2}$ –6	$5\frac{1}{2}$ –6	$5\frac{1}{2}$ – $6\frac{1}{4}$	$5\frac{1}{2}$ – $6\frac{1}{4}$	$5\frac{1}{2}$ – $6\frac{1}{4}$

District No. 4 (Cleveland).—The acceptance market for the month was spotty and the rates fluctuating. Brokers were unable to maintain uniformity in rates and purchasers shopped wide for prime bills. The easing off and wide range of call money rates in New

York and the zealously of certain brokers in the open market to permanently force acceptance rates under the 6 per cent mark brought about a variance in selling rates of prime paper. Brokers differed in opinion as to whether the acceptance market should change with each indication of better money rates and conditions throughout the country and offered their bills accordingly.

A good variety of prime paper was offered in the market, in addition to the usual amount of corporation bills and other less-known paper, but was not absorbed as readily as last month. Many purchasers took less-known names as the rates for prime paper declined. The demand for corporation bills continued sluggish. Bills created against foreign transactions fell off, but there was a corresponding increase in domestic paper, due to seasonal demands. The banks remained the principal purchasers but there was also an increased demand by corporations and individuals. There was considerable increase in the turnover of paper over the previous month. The present rates for prime 90-day bills vary between $5\frac{1}{4}$ per cent and $5\frac{1}{2}$ per cent.

District No. 6 (Atlanta).—The acceptance market in the Sixth Federal Reserve District has been very inactive during the early months of this year. This is attributed to the inactive movement of commodities, particularly foreign shipments of cotton. Nowhere in the district have acceptances been executed to any great extent, except at New Orleans, which is the principal export city of the district, and there each succeeding month since December, 1920, has shown a decline.

The amount of acceptances rediscounted by the Federal Reserve Bank of Atlanta for its member banks during March was slightly less than the amount for the month of February, and only approximately 30 per cent of the sum discounted during the month of January of this year. The total amount of acceptances discounted by the Federal Reserve Bank for its member banks during the first three months of 1921 was approximately 11 per cent of the amount rediscounted during the same months of 1920.

Export movements of cotton financed by the War Finance Corporation and the Federal International Banking Co. should materially strengthen the acceptance market in this district when cotton commences to move from interior points to port cities.

Acceptances have never been used in this Federal Reserve district to any very great extent, although there is a growing tendency for their use during periods of crop movement.

District No. 7 (Chicago).—Improvement in the demand for acceptances is noted. Statistics for March over February showed increased sales. Most of this demand has been from the suburban and country banks. One of the largest dealers reported 80 per cent of the bills sold to be of 90-day maturity and the remainder divided between 30 and 60 day maturities. The acceptances sold by one bank showed 25 per cent of the acceptances drawn against grain, 25 per cent drawn against sugar, and the remainder against oil, machinery, tobacco, coffee, and cotton.

The March returns from three banks and one dealer show increase over February as follows: 26 per cent in amount of sales, 2 per cent in amount of purchases, and 9 per cent in amount held at the close of month. The figures for these percentages are given below:

	March.		February.	
Total bankers' acceptances bought during month.....	\$18,980,377		\$18,558,189	
Total bankers' acceptances sold during month.....	21,667,561		17,182,243	
Total bankers' acceptances held at close of month.....	3,704,819		3,393,617	

	March.		February.	
	High.	Low.	High.	Low.
Selling rates for prime bills:				
30-day maturity.....	$5\frac{1}{4}$	$5\frac{1}{4}$	$5\frac{1}{4}$	$5\frac{1}{4}$
60-day maturity.....	6	$5\frac{1}{4}$	$5\frac{1}{4}$	$5\frac{1}{4}$
90-day maturity.....	$6\frac{1}{2}$	$5\frac{1}{4}$	6	$5\frac{1}{4}$

The selling rates show a slight increase for March over February.

District No. 8 (St. Louis).—The demand for bankers' acceptances was more active in this district during the period from March 15 to April 15 than for some previous time. This demand came in the main from large mercantile interests who found themselves with surplus funds for investment. There has also been a spotty demand for bankers' acceptances from several of the larger banks in the principal cities of the district. Rates during this time have been more or less unsettled, and recently brokers were offering unindorsed prime bills at a flat rate of $5\frac{1}{2}$ per cent for all maturities. From reports it does not appear that this offering has been either attractive or a true measure of the market for such investments. There is evidence that some of the smaller banks in the district are using bankers' acceptances as a secondary reserve.

The high, low, and customary rates prevailing in St. Louis and Louisville, as reported by

banks in those cities, were as follows between March 15 and April 15:

	Bankers' acceptances (unindorsed), 60 to 90 days.		
	High.	Low.	Custom- ary.
St. Louis.....	6½	5½	6
Louisville.....	6	5½	6

District No. 9 (Minneapolis).—Interest rates in the Minneapolis money market on April 15 as compared with March 15 were unchanged at 7 per cent for customers' loans at banks and 8 per cent for commercial paper. There were recessions, however, of five-eighths to three-fourths per cent in bankers' acceptances, and over one-half per cent on collateral-secured loans and cattle paper. The prevailing rate on April 15 was 5½ per cent on bankers' acceptances and 8 per cent on collateral notes and cattle loans.

District No. 10 (Kansas City).—Bankers are devoting their resources and energies to the situation at home and for the present are putting little of their surplus into acceptances or other forms of investment.

District No. 11 (Dallas).—The local acceptance market has been very dull during the past 30 days, and offerings have been in limited amounts only. On March 31 this bank held acceptances aggregating \$20,906, as compared with \$1,186,210 on March 31, 1920.

A recent inquiry of 64 banks engaged in extending acceptance credits in this district elicited replies from 10, showing that those institutions had acceptances outstanding aggregating \$1,745,000, of which \$706,000 was based on import and export transactions, and \$939,000 on domestic shipments, or commodities in storage. The average maturity of the acceptances outstanding was 90 days.

No activity is anticipated in the acceptance market in this district until the financial situation materially improves. In past seasons, especially in the fall when the banks of the district were in surplus funds, acceptances and commercial paper have been sought as an investment, and have proven an attractive outlet for idle funds. For the past several months, however, there has been little demand for acceptances, and purchases by the banks in this district have been negligible. There have been no new accepting banks within the month. The attractiveness of acceptance credits as a method of finance is fully appreciated, and with the large agricultural interests of the Eleventh District a large increase in acceptance transac-

tions will result, although their general use may be slow of accomplishment.

District No. 12 (San Francisco).—Bankers' acceptances purchased in the open market declined by \$16,200,000 during the last two weeks of March and on April 8 stood at \$14,030,000, compared with a maximum holding of this class of paper of \$119,000,000 on January 30, 1920. During this same period bills discounted for member banks increased \$81,000,000, indicating that funds previously invested in outside paper were diverted to meeting the demands of member banks for funds to lend their customers in this district.

Methods Followed by City Banks in Granting Accommodation to Correspondents.

This is the third and final article giving the results of a study made by the Division of Analysis and Research of the Federal Reserve Board of the methods pursued by reserve city banks in granting accommodation to their correspondents.¹ In the two preceding articles were considered data from New York and from the West and Southwest. The present article is based upon information obtained from banks in Boston, Philadelphia, Richmond, Baltimore, and Atlanta. For comparative purposes, reference will be made at certain points to the practices relative to specific points adopted in centers previously considered, and these will be contrasted with practices in the centers to which major consideration is given herein.

To indicate more clearly the relative importance with respect to this type of business of the centers included in the present article, the following table has been prepared, showing loans, both direct and indirect, made by national banks in these cities to other banks and trust companies.

[In thousands of dollars.]

	Number of banks.	Loans.
Boston.....	11	13, 975
Philadelphia.....	29	28, 156
Richmond.....	7	5, 593
Baltimore.....	13	2, 084
Atlanta.....	5	5, 585
Total.....		55, 393
Total for all reserve cities having a population of over 50,000.....		474, 393

The figures are taken from the annual report of the Comptroller of the Currency for 1919,

¹ The two former articles appeared respectively in the FEDERAL RESERVE BULLETIN, June, 1920 issue, pp. 583-592, and in the January, 1921 issue, pp. 33-41.

volume I, pages 78-81, and relate to December 31, 1918.

The following figures, taken from pages 46 and 47, show loans by national banks in these cities to other banks and trust companies in the form of bills payable and rediscounts separate from loans on certificates of deposit, as of March 4, 1919:

[In thousands of dollars.]

	Bills payable and rediscounts.	Certificates of deposit.	Total.
Boston.....	12,693	1,502	14,195
Philadelphia.....	25,115	20	25,135
Richmond.....	6,326	.....	6,326
Baltimore.....	2,155	.....	2,155
Atlanta.....	6,854	26	6,880
Total.....	53,143	1,548	54,691
Total for all central reserve and reserve cities.....	234,050	17,310	251,360

In the report of the Comptroller of the Currency for 1920, Volume I, pages 210-213, a somewhat different classification is followed. The figures for January 31, 1920, as given there, are as follows:

[In thousands of dollars.]

	Number of banks.	Direct and indirect loans made to banks.	Rediscounts made to banks.	Bills receivable purchased from or discounted for banks.
Boston.....	12	10,225	12,460	358
Philadelphia.....	32	22,715	2,340	241
Richmond.....	7	3,201	1,310	625
Baltimore.....	13	5,101	721	.....
Atlanta.....	4	858	471	.....
Total.....	.....	42,100	17,302	1,224
Total for all cities having a population of over 50,000.....	595	268,201	147,450	164,310
Total, Dec. 31, 1918.....	609	232,455	115,015	126,924

I. SOURCES OF INFORMATION.

CONTENTS OF THE FILE.

The banks in the centers included in the present survey differ greatly with respect to the elaborateness of the files which they maintain. As indicated previously, practice varies with the relative importance placed upon maintaining the impressions on the subject bank in the mind, instead of having them recorded in writing and filed away, as well as with the size of the institution and the number of borrowing accounts. No pronounced tendencies are found in any one center. Two of the Boston banks have no special records

at all for their credit information, but, on the other hand, several banks in that center have files which are among the most highly developed of any reported by the banks included in the present survey. One bank divides its file into six sections, as follows:

(1) General information regarding institutions, memoranda on line of credit granted and terms, and memoranda on collection arrangements and terms.

(2) Correspondence.

(3) Inquiries.

(4) Interviews.

(5) Miscellaneous data.

(6) Record of banks to whom credit information was furnished on this subject.

The information from statements is recorded on cards by this bank and statements are filed elsewhere. On the other hand, some institutions merely have two sections to the folder, one for correspondence and one for statements.

Annual revision of credit information is the general policy. That is to say, there is then a complete rechecking of information, and not mere addition of data that comes to attention from time to time, and is placed in the file as it appears. The Richmond and Atlanta banks make revision at least once a year, with the exception of one Richmond bank which makes revision every six months or oftener at times, and another which makes a revision when application for loans is made, and one Atlanta bank which does it "as frequently as necessary." Three Boston banks have no regular time of revision, but, on the other hand, two other Boston banks revise at least annually. Several banks in the other centers also have no regular time of revision, but the majority of banks revise their data annually or at least annually.

EXPERIENCE OF OTHER INSTITUTIONS.

In all the centers included in the present survey, considerable stress appears to be placed upon the experience of other institutions with the subject. One Philadelphia institution states that "information as to standing of banks is derived chiefly from checkings received from other institutions." This parallels the practice of New York City banks, rather than that of the western institutions included in the previous article. Certain Boston banks, however, obtain no data of this description, and one does this only in the case of new banks, or banks hard pressed for funds. One Richmond bank states that when extending credit to a "small bank" it writes to "banks and business men in the vicinity in which the bank is located," while where an "old bank" is under consideration it

"checks it up with its correspondents and with banks and business men in its vicinity." A Boston bank distinguishes between banks located in and outside New England. In the former case, communication is generally had with mutual correspondents, while in the case of New England member banks the Federal Reserve Bank furnishes the best source of information, supplemented by reports from New York banks dealing with the subject. Occasional use is made of the Federal Reserve Bank by one Atlanta bank, which also frequently consults the State banking department. The latter is the only case reported in the entire survey of such consultation, with the exception of one New York bank. As indicated above, mutual correspondents are supplemented in certain cases by banks or more rarely individuals in the vicinity, perhaps in the community where the subject bank is located. One bank inquires at the time the account is opened of all correspondents of the subject bank which are listed in one of the standard directories. The correspondents communicated with are frequently varied from time to time. One Philadelphia institution states that telephonic inquiry to other correspondents is frequently made.

The information requested may be summarized under the heads of (1) integrity of management; (2) condition of the bank; (3) borrowing aspects; (4) past relations, including size of account and whether or not it was profitable; and (5) whether any adverse information has come to their attention. The extent to which detailed data under the third and fourth heads in particular are requested varies considerably.

STATEMENTS OF THE SUBJECT BANK.

There appears to be a more general tendency among the centers considered in the present survey to require detailed statements of the subject than was found among banks covered in either of the two preceding articles. While the majority of banks in the centers considered in the present article also regard the brief statement as satisfactory, a considerable number of institutions require detailed statements. One institution in Atlanta reports that it "files regular published statements of its banks, and from those to whom it extends credit asks for detailed statements annually."

Comparative statement forms are employed by a considerable number of the banks. The data included by certain institutions are given in the following table. Form 5 is in process of revision. This is the only one which is arranged horizontally, the remainder being arranged vertically. Forms 4 and 5 are contained on cards, while the others are on sheets.

1.	2.
Bills discounted, not due. Time loans against collateral. Demand loans against collateral. Overdrafts, secured and unsecured. U. S. bonds to secure circulation (par value), — per cent. U. S. bonds to secure U. S. deposits (par value), — per cent. Other U. S. bonds (par value), — per cent. Premiums on U. S. bonds. Stocks, securities, etc. Banking house, furniture, and fixtures. Other real estate owned. Mortgages owned. Due from banks and bankers. Due from approved reserve agents. Exchanges for clearing house. Checks and other cash items. Cash on hand. Five per cent redemption fund. Due from Treasurer U. S. Total assets. Capital stock. Surplus fund. Undivided profits, less current expenses and taxes paid. Dividends unpaid. Due to banks and bankers (not approved reserve agents). Due to approved reserve agents. Ind. deposits subject to check. Time certificates of deposit. Demand certificates of deposit. Cashier's checks outstanding. Certified checks. U. S. deposits. Circulation. Notes and bills rediscounted. Bills payable. Certificates of deposit representing money borrowed. Liabilities other than those above stated. Bonds borrowed. Reserved for ———. Total liabilities.	Cash. Due from banks. Due from Treas. U. S. and 5 per cent redem. fund. Total cash due from banks and Treas. U. S. Loans and discounts. Overdrafts. Stocks and bonds. Banking house, furniture, and fixtures. Other real estate. Customers' liability a/c acceptances. Interest earned but not collected. Other assets. Miscellaneous resources. Total assets. Capital. Surplus and undivided profits. Unearned discount. Reserved for interest and taxes. Circulation. Bank deposits. Other deposits. Total deposits. Bond account. Acceptances. Bills payable and rediscounts. Other liabilities. Total liabilities. Correspondents.
4.	3.
Loans and discounts. Cust.—Liab. a/c acceptances. Stocks and bonds. Real estate. Overdrafts. Cash and in banks. Sundries. Total assets. Capital. Surplus and profits. Deposits. Bills payable and rediscounts. Circulation. Sundries. Total liabilities. Our account loans. Balance.	Loans and discounts. Overdrafts. U. S. bonds—Cir., U. S. dep., postal savings. Stocks, bonds, securities, etc. Banking house and furniture. Other real estate. Due from other banks. Due from reserve banks. Checks, cash items, exch. for clearance. Cash in vault and with Federal Reserve Bank. Red. fund and due from U. S. Treas. Customers' liability under L/C and accept. Interest earned but not collected. Other assets. Total assets. Capital stock. Surplus. Undivided profits. National bank notes. Due to banks. Individual deposits. Bank deposits. Savings and time deposits. U. S. bonds borrowed. Bills payable. Taxes. L/C and acceptances. Miscellaneous liabilities. Total liabilities. Sales of stock.
5.	5.
Capital. Surplus and profits. Bank deposits. Individual deposits. Rediscounts and bills payable. Bonds borrowed.	Loans. Overdrafts. Stocks and bonds. Other real estate. Federal reserve stock.

Various special records analyzing the condition of the account are also kept. Among these may be mentioned an analysis card showing high, low, and average loans each month; amount of net balance and book balance and per cent of net balance to loans; income on the net balance, transit overhead cost, and net profit after deducting such cost. Another bank records on one side of a card average book balance and average amount outstanding, amount of exchange (cost and collected), amount of interest (cost and allowance), and net profit or loss; as well as volume, items handled, and their exchange, and on the other side monthly discounts in hundreds, showing maximum and minimum amounts and rate, divided into maker, indorser, United States securities, and interest. One bank keeps a book record of lines, existing loans, and collection arrangements on the loan officer's desk.

REPRESENTATIVES' VISITS AND AGENCY REPORTS.

Practice differs greatly as to the maintenance of men in the field to visit correspondents, but the use of such representatives is the exception, and most of the banks instead have correspondents visited by an officer, generally once a year. One Baltimore bank experimented several years ago with a representative, but "thought that it did not yield results," while another has had but one occasion in recent years to have a representative make a report on conditions, where a correspondent had failed to make the proper curtailment in its indebtedness. Philadelphia banks reporting have no regular representatives, while in Atlanta use is made of them by several banks, as is also the case with one bank in Richmond and one bank in Boston, the latter having several men who travel a greater portion of the time. The Richmond bank states:

Such a representative makes a detailed report covering his observations as to the character and caliber of the men running the bank, appearance of the bank, class of customers, and conversations of the officers; also impressions gained by him from inquiries made in the bank's town and neighboring towns.

Less use is apparently made of the mercantile agency reports in the centers under consideration than in either New York or in the western centers included in the previous article. None of the reporting Philadelphia banks employs them, while the same is true in Boston, with the exception of one bank which "seldom ever" does, and in Richmond, with the exception of one bank which frequently uses them. One Baltimore bank uses them; another, however, only rarely; while

a third has no occasion, as data obtained from other sources are sufficient. Two Atlanta banks obtain reports, another only on small country banks, while another seldom uses them, a fifth has found them "inadequate," and valuable only in so far as light is occasionally thrown on the connections of the officers, and a sixth does not use them.

II. RELATION OF AMOUNT OF ACCOMMODATION TO BALANCE MAINTAINED—"CLEAN-UP" REQUIREMENTS.

BALANCES.

A considerable number of institutions in the centers under consideration require a minimum average balance. In general this is 20 per cent, although in certain cases from 10 to 20 per cent, or from 15 to 20 per cent, may be specified instead. One Richmond institution has more fully explained its requirements as follows:

Our general policy is to extend credit to banks on a basis of five times their average balance for the previous six months, and under present conditions we expect them to maintain an average of not less than 20 per cent of the loan. All of our correspondents are not complying with this requirement at this time, but it will have a considerable bearing on future credit extended.

Similarly, one Atlanta bank states that after accommodation is extended, "we expect collected balances of at least 20 per cent of the loan to be maintained." Several other banks in that center apparently have similar requirements, but one bank states that it has waived its requirements during the past six months owing to the unusual conditions prevailing, and another specifically offsets balances during the off season against those during borrowing periods. A Philadelphia bank which usually grants accommodation to five times the average daily balance generally restricts credit on later applications if inadequate balances are maintained, but states that many institutions first use up their balance and then borrow to restore it. A Baltimore bank has made exception in the past in the case of institutions with which they have arrangements whereby the other banks "collected certain items free of exchange, charged direct to their accounts, with the result that the actual balances as shown on its books were considerably less than would otherwise have been the case, in addition to a saving in exchange." This then provided a satisfactory profit on the account, but the condition has been materially affected by the exchange facilities of the Federal Reserve System. A Richmond bank states that it

endeavors to make a net profit of — per cent or better on the account, and on this basis figures the average balance necessary to justify the loan. A Philadelphia institution states in this connection that "the value of proportionate balances makes itself felt more keenly at a time like the present when it is necessary to apportion accommodation according to balances. We also give consideration to collections and other services rendered us." One Richmond institution which does not require a minimum balance states that although under present conditions average balances will exceed 10 per cent, there are quite a number of bank borrowers who maintain balances of 10 per cent or less.

No minimum dollar amounts are required in any case, although one bank states that it pays no interest on average available balances less than \$1,000. Smaller banks are reported by a number of institutions to maintain proportionately smaller balances, while one Atlanta bank observes that "balances have usually been lean with country banks for the last few months." A Baltimore institution has "found the tendency to run the line of credit out of proportion to the compensating balance, to apply in the case of points where there is but a single small bank or two rather than in the case of larger banks in larger towns."

CHARACTER OF BORROWING.

The great majority of loans are for seasonal needs. Two Philadelphia banks, however, make mention that Government financing is increasing loans for other than seasonal needs. One Boston bank, however, makes seasonal loans only in the Connecticut Valley on account of the tobacco crop, while another has about one-third of its loans for nonseasonal needs. One Baltimore bank does not "encourage loans of this character" (other than for seasonal needs), as it feels that "it breeds expansion beyond the safety point." Very little borrowing of a nonseasonal character is in general reported in the southern centers.

In spite of these differences the general practice is to expect a periodical clean up, if not to require it, as the large majority of banks do. Clean up annually is the general practice. One Richmond institution states that, "as a general proposition, in this section it is not necessary to require a periodical clean up, as this is done automatically from the marketing of agricultural products." Another, however, has had to extend a great many of its loans this year, and the same is reported by several other banks, due naturally to the conditions prevailing in the cotton and tobacco sections. Most of the

borrowing banks of an Atlanta institution "are off the books longer periods than they are on, generally speaking." Speaking of the adaptation of loans to time of liquidation of commodities which the borrowing bank chiefly finances, a Philadelphia institution instances that cotton loans should liquidate not later than spring, and wool loans during the fall. Similarly, another Philadelphia bank reports that its southern accounts usually borrow in the fall and early winter and its Pennsylvania and New Jersey accounts in the early spring. In the event that conditions are not propitious for complete liquidation, reasonable curtailment is generally expected, as is noted by a Baltimore institution.

If the clean up does not occur, and it is believed that it should reasonably be made, it is in general directly requested by personal visit or by letter. The clean up may be made a condition of the loan; or the credit extended to banks that show by chronic or continuous borrowing a tendency to expansion even in normal times, may be restricted; or the plea of conservative banking may be made. A Boston bank states that "wherever we believe it is possible for a bank to reduce its loans by disposing of investments at not too great a sacrifice, we insist that this be done. Furthermore, we have had occasion to insist that the bank force its customers to reduce loans through sale of commodities." A Baltimore bank in certain cases slightly raises the rate, say, one-half per cent, on unscheduled renewals.

III. FORMS OF ACCOMMODATION.

SECURITY OF THE LOAN.

As in the case of all the other centers included in the two previous surveys, the great majority of loans are secured. In fact, in all centers except Boston every reporting bank states that it either has no unsecured loans, or that the proportion is very small. In Boston, however, one bank reports that 50 per cent, another 40 per cent, and a third 20 per cent of its accommodation is unsecured. Another Boston bank, on the other hand, has only one unsecured loan at present, while a second states that "only a small portion of loans to correspondents are made on an unsecured basis, and in such cases only to banks who have been for a long time on our books, with whose affairs we are quite conversant, and in whose officials we have entire confidence."

The relative proportions of bills receivable and of securities employed as collateral vary considerably from bank to bank. Certain significant differences, however, are found be-

tween the several centers. In both Richmond and Atlanta the great majority of loans are against bills receivable. The great majority of other securities offered consist of Liberty bonds. In the case of three Richmond banks giving estimated percentages, the figure for Liberty bonds ranged from 20 to 25 per cent, as against 80 to 75 per cent, respectively, for bills receivable. While some banks in Atlanta report only a small use of Liberty bonds (one bank reporting 90 per cent and another 89 per cent on bills receivable), several report extensive use of Liberty bonds by country banks in the past few years, and one notes that many such loans have been liquidated in the past six months. Several Baltimore banks report percentages of securities ranging from 25 per cent to 50 per cent and 67 per cent. Several banks report a large percentage of Liberty bonds, but in the case of the others it is relatively small. The five reporting Philadelphia banks are sharply divided. Two show percentages of 90 to 95 per cent against bills receivable, while the other three show 60 per cent, 75 per cent, and 75 per cent against bonds. One of the latter banks states that "Liberty bonds are not used as collateral by banks that are members of the Federal Reserve System, and only to a limited extent by banks that are not members," while one of the banks showing a high percentage of loans on bills receivable states that they are usually only used "in cases where such loans have been carried since the time of original subscription." Reference to the statements of the several Federal Reserve Banks clearly bears out the tendency in Philadelphia to rely more largely on the Federal Reserve Bank for accommodation against Government obligations. Thus, in the statement as of April 1 the Federal Reserve Bank of Philadelphia shows over 60 per cent of its total bills on hand secured by United States Government obligations. Only one other bank, namely, New York, shows over half its total bills on hand secured in this manner, and in its case the figure is slightly over 50 per cent. Practice in Boston differs somewhat among the various banks. One institution states:

Our preference for bills receivable or securities as collateral depends considerably on the individual bank. We have found that oftentimes loans in the form of rediscounts and notes secured by receivables are paid more promptly than loans collateralized by other securities where the borrowing banks are inclined to be dilatory in paying loans. Generally speaking, the larger and stronger banks borrow on bonds as collateral and retire their obligations promptly.

This bank states that Liberty bonds, although used extensively in 1918 and 1919, are now employed to a limited extent, and that

it "has even brought pressure to bear to have bonds sold where there was no prospect of the note being otherwise paid."

Certain banks prefer to lend against bills receivable; others, however, prefer securities. Liberty bonds when offered, however, in general receive preference. The latter is often coupled with a secondary preference for bills receivable. One Richmond bank remarks that it shows its preference only when the bank's assets indicate the possession of Liberty bonds. As indicated in previous articles, when there is preference for listed securities this is ascribed to greater ease in handling (as checkings and substitutions are avoided), and the possibility of liquidating more promptly and to better advantage. Hence one Baltimore bank states that "in ordinary times we would be glad to reflect our preference in a slightly lowered rate on the loan."

Considerable difference is found as to margins between Boston, Philadelphia, and Baltimore on the one hand and Richmond and Atlanta on the other hand. In particular this is true of loans with bills receivable as collateral. In the first two centers 20 per cent is most frequently specified. In some cases this applies on all classes, while in other cases 10 per cent only will be specified on Liberty bonds. One Philadelphia bank states that a margin of 20 per cent has been customary, but that recently there has been a tendency to increase it to 30 per cent, although loans secured by Liberty bonds or basic commodities carry margins smaller than 20 per cent. Margins in Baltimore vary from 15 to 30 per cent, several banks distinguishing between bills receivable and securities, and requiring in the latter case 10 or 15 to 25 per cent, as against 15 or 20 to 25 per cent on bills receivable. The majority of the Richmond and Atlanta banks refer to the maximum requirements which they make on bills receivable. While one Boston bank stated that many times it had collateral much in excess of its usual 20 per cent margin, in Richmond the ranges given are from 20 to 25 or 30 per cent to 100 per cent, with the exception of one bank, which merely gives 25 per cent as its usual margin requirement. In Atlanta one bank with little business of this character specifies 25 per cent; another up to 25 per cent; a third 20 to 100 per cent; and a fourth in normal times 25 per cent, and under present conditions 50 to 100 per cent. The latter is also specified by two other banks, one of which in recent months has increased the margin from 50 per cent to 100 per cent. Several banks in these two centers refer to lower margins on securities. One Richmond

bank requires 10 to 15 per cent of the market value against Liberty bonds and Victory notes, while an Atlanta bank requires 20 per cent, but in certain cases notes that it has varied this.

USE OF BILLS RECEIVABLE.

In scattered instances fairly high percentages of rediscounts to total accommodation extended are reported. Thus 35 per cent is reported by one Richmond bank, 30 per cent by one institution in Philadelphia, and by one in Baltimore. The percentages given in the other cases range from 8 to 15 per cent, but the majority of banks, however, merely specify that the proportion is very small. The Comptroller's figures for Boston national banks as of January 31, 1920, indicate an amount of rediscounts in excess of the amount of direct and indirect loans made, but in all the other centers the proportion is much smaller. The general practice is to rediscount only well-rated names and for strong institutions. Thus, one bank in Richmond states that it does so only "for banks in which we have the utmost confidence as to their integrity, management, and ability, and then only on paper which would stand on its own merits, in so far as collection is concerned, without the indorsement of the banks." The margin which loans against the bills receivable as collateral carry, and the fact that in event of failure the balance in the deposit account can be offset against the loan, account for the preference for collateral loans instead of rediscounts. A Baltimore bank states that it will rediscount "where the correspondents have paper of a grade equal to collateral securities," while an Atlanta bank "requests paper that is eligible for rediscount with the Federal Reserve Bank. One Philadelphia bank, however, which has by far the greater part of its loans collateralized by bonds, states that it "would prefer rediscounting well-rated commercial paper for corresponding banks instead of making loans on collateral, as same is invariably paid when due." This view is similar to that of the Boston bank noted above in considering the security of the loan.

The majority of banks, on the whole, have noted no change since 1914 in the methods whereby accommodation is extended. Certain suggestions, however, have been made in the various centers. One Boston bank states that "since 1914 borrowing has been done in the shape of time loans to a greater extent than formerly, when the usual form of borrowing on the part of New England banks was against

certificates of deposit, usually secured by bonds and occasionally by bills receivable." (This method is discussed at greater length below.) Another bank in that center also reports an increase in collateral loans. Philadelphia banks refer to changes brought about by Government financing, and one states that "borrowings have been much less since the Federal Reserve System started, practically all the banks in this district securing their accommodation from that source." A Baltimore institution states that "prior to two years ago practically all loans were made in the form of a collateral note secured by either bills receivable or securities, the rediscount custom having been to a great extent copied from the Federal Reserve Banks."

MATURITY OF LOANS.

The centers included in the present survey fall naturally into two classes with respect to the maturity of their loans to correspondents. In Richmond and Atlanta, on the one hand, loans are largely made on time for fixed periods. Thus one Richmond bank states that "it is contrary to our policy to make demand loans to banks. This is done only in the rarest cases and only when the bank assures us the money will be needed for just a few days. We endeavor to make only such loans to banks as their seasonal needs require." Another bank in that center, which, however, has practically all its loans on time, notes that it endeavors to put its demand loans on a time basis if they run longer than six months, while a third Richmond bank usually makes its loans for about 90 days, but at present is making no loans for a longer period than 30 days. In Atlanta exceptions are reported only in infrequent cases, one bank stating that they usually represent commodity loans. In the other three centers a larger proportion of demand loans is reported. One Philadelphia and one Baltimore bank state that loans on bonds are generally on demand, while loans on bills receivable are usually on time. Several Baltimore banks report that their loans are largely for fixed periods, while others report loans of both kinds. Philadelphia banks report both kinds of loans, and likewise in Boston, where one bank, however, reports that its loans are generally on demand, and another has about one-third of its loans on demand. Another Boston institution states that local or suburban banks usually borrow on demand, but loans against Liberty bonds usually run for fixed periods.

HOLDING OF COLLATERAL.

Very little holding of collateral by banks other than the lending institution is reported. One Boston bank reports an occasional exception in the case of western banks. Several institutions in Philadelphia and Richmond report an exception in a few cases for cotton paper, in order to facilitate substitution or permit removal and sale. In such cases, the paper will be returned to the borrowing bank under trust receipt, in general shortly prior to maturity. Substitution of other paper is generally permitted. This depends of course upon the acceptability of the new paper offered, and thus one bank notes that inquiry would be made if the same names were continually offered. Some banks state that they expect liquidation at harvest time, and others endeavor to investigate the necessity of the substitutions proposed.

SPECIAL FORMS OF ACCOMMODATION.

In all the centers, with the single exception of Boston, very little use of certificate of deposit borrowing is reported, the great majority of banks stating that they do not make such loans, and the others that they are "not customary" or occur "very seldom." Although several Boston institutions report little use of the method, one bank states that "New England banks are accustomed to borrow on a certificate of deposit secured by bonds when borrowing temporarily," and, as noted above, that there has been a decrease in such borrowing since 1914. That this method is still employed to some extent is indicated by the figures given at the opening of this article, showing the amount of loans in the form of bills payable and rediscounts, as compared with the amount of loans on certificates of deposit, on March 4, 1919. Boston is the only center included in the present survey which shows a substantial amount of this special form of loan, although the proportion (somewhat over one-tenth) is smaller than in either Dallas, Kansas City, Minneapolis, or San Francisco, in the last two of which the proportion for national banks was somewhat less than half the total accommodation granted.

Very few of the banks from whom data were obtained report the use of other special forms of accommodation. Securities are stated by several banks to be sometimes taken from correspondents under a repurchase agreement.

IV. SPECIAL PARTS OF THE ANALYSIS.

ANALYSIS OF BILLS RECEIVABLE OFFERED AS COLLATERAL.

Practice differs considerably as to the extent to which scrutiny is made of the receivables offered as collateral for loans. Several Boston banks report that no analysis is made. In general, however, certain features are desired. Aside from the diversification of the paper, these are indicated by one Atlanta bank in the following words: "Bills receivable are generally analyzed as to denomination of the various notes, sections in which makers are located, and a scrutiny made for notes of officers and directors, and a general examination (although no special individual outside investigation) is made." If the names of makers are unfamiliar, one Boston bank endeavors to obtain statements. A Philadelphia institution states that it analyzes "bills receivable as carefully as possible, but in many cases, where dealing with comparatively small institutions, we have to depend to some extent (as to a general assortment of names, many of which are not rated) upon the financial strength of the institution under consideration." Another Philadelphia bank obtains from the borrowing institution data relative to the financial responsibility of makers and indorsers in case the ratings are not satisfactory. Several Richmond and Atlanta banks usually accept the expression of opinion by the borrowing banks as to the net worth of makers and indorsers. One institution in the latter center advises that it "finds it useful" to have corresponding banks send in the estimated net worth of the makers "as it makes the officer making the report in a certain sense morally responsible for the rating given." The information obtained and the analysis made depends, it is stated by certain banks, upon the size of the notes. One Richmond bank thus states that while it scrutinizes the bills receivable as to technicalities and requires the borrowing bank to give it as full information as it can on each note, "on all notes of any size we make independent checking through banks and business men in the same town or vicinity of the bank, and also secure mercantile agency reports." One Philadelphia bank, similarly, while accepting agency reports on small receivables, obtains checkings on receivables in larger amounts and in most such cases requires statements. Practice also naturally differs

according to the familiarity of the officers of the lending bank with the management and status of the borrowing institution. Several institutions check names with local friends where the borrowing bank is not well known. A Baltimore bank states in this connection that if the "report in our credit file indicates that the ability and integrity of the officers in the case of a given bank are of the highest order and statements indicate good conservative management, a passing examination of the receivables offered would serve our purposes, as in such a case the direct note of the institution could be handled with a very small risk. However, in the case of banks not showing such strength we would require well-rated paper such as we handle for depositors."

THE BORROWING BANK'S STATEMENT.

The extent to which the statement of the borrowing institution is analyzed also differs considerably between the various banks. A considerable number of institutions rely more largely upon their general knowledge of the borrowing bank rather than upon statement analysis. Other institutions consider the statement merely in a general way. One Boston institution states that it only analyzes the statement in detail when the bank is in difficulty. Certain banks, however, have indicated in some detail the particular points which are ascertained in their scrutiny. In a general way the points which will be considered may be summarized as follows: (1) Relation of the deposits to the capital investment. In this connection, one Baltimore and one Atlanta bank consider the proper ratio between five and ten times, the bank otherwise being over or under capitalized; (2) growth of deposits, which will afford an indication of increase in earning power; (3) relation of surplus to capital; (4) relation of loans to deposits; (5) investment in building; (6) investment in stocks and bonds. In this connection, one Boston institution cites "the heavy depreciation of bonds during the last few years" as the reason why it does not like to have heavy bond investment; (7) relation of borrowings to deposits or to loans. In addition, one Richmond and one Atlanta bank refer to seasonal fluctuations in loans, deposits, and borrowings. An Atlanta institution also refers to excessive loans to officers, nature of security and proportion of "frozen" loans to capital, excessive loans to customers (in particular on real estate), and slow or long outstanding loans. Another Atlanta institution reports that it requires a capitalization of \$25,000 on the part of its borrowing banks.

Certain institutions limit borrowings to the capital investment, which is qualified in certain cases by the statement that this prevails under ordinary circumstances. But few institutions, however, have such a limit. The great majority have no formal rule. Similarly, almost all institutions consider each application separately, and do not attempt to fix a line of credit in advance. Thus in Boston only one institution attempts to fix a line, and this is done only on such of its borrowing banks as are located in crop sections, in particular cotton, while the New England banks' applications are considered separately. Similarly, only one Philadelphia bank reports that it fixes a definite line, and this it does only in a minority of cases. All reporting Richmond banks consider each application separately, although one institution states that it is planning in future to fix definite lines. Several of the Baltimore banks report that they fix a definite line, and one Atlanta bank usually does so, while another institution in the latter center in some instances fixes the line at the opening of the season.

The consideration of "charge-offs" requires intimate knowledge of the affairs of the borrowing institution. Thus the great majority of institutions from whom data were obtained made no comment on this point. One Boston institution, however, states that charge-offs frequently are discussed in person with officers of the borrowing banks when the latter visit it. Several institutions consider charge-offs in connection with dividends, in an endeavor to ascertain the extent to which losses are written off and the amount of net earnings which then remain for surplus or for dividends. One Philadelphia institution states that if the profits do not show a normal increase it inquires as to the proportion of earnings to dividends and charge-offs. One Baltimore bank observes that "under ordinary circumstances we are of the opinion that a bank with conservative management should earn not less than 6 per cent of its invested capital with a proper ratio of deposits, this allowing for average loss but not including the dividends."

EXPERIENCE OF OTHER INSTITUTIONS.

Several institutions included in the present survey merely have country bank accounts and borrowers therefore do not obtain accommodation from other sources. The total loans from all sources, of course, are considered in determining what the individual institution will loan. This will naturally include as far as possible consideration of the conditions under which these borrowings are made, including amount, rate, maturity, and nature of the security pledged.

RULINGS OF THE FEDERAL RESERVE BOARD.

Amendment to Regulation B authorizing open-market purchases of six months acceptances growing out of foreign transactions.

On May 6, 1921, the Federal Reserve Board transmitted to Federal Reserve Banks its Regulation B, Series of 1921, superseding Regulation B, Series of 1920. The Board's letter of transmittal and the amended regulation are set forth below:

WASHINGTON, May 6, 1921.

The Federal Reserve Board transmits herewith its Regulation B, Series of 1921, superseding Regulation B, Series of 1920, relating to open-market purchases by Federal Reserve Banks of bills of exchange, trade acceptances, and bankers' acceptances under section 14 of the Federal Reserve Act. The new regulation is issued primarily for the purpose of permitting Federal Reserve Banks until further notice to purchase in the open market bankers' acceptances with maturities not in excess of six months, which grow out of transactions involving the importation or exportation of goods. Heretofore three months has been the maximum maturity of acceptances eligible for purchase by the Federal Reserve Banks. This amendment to the Board's regulation was recommended by the Federal Advisory Council at its conference in February, 1921, and by the Governors of the Federal Reserve Banks at their conference in April, 1921.

Two considerations have led the Board to take this action: (1) The desire to widen the acceptance market by meeting the wants of savings banks and similar purchasers of bankers' acceptances who are now deterred from investing in acceptances of longer than three months' maturity, because of the lack of authority of Federal Reserve Banks to purchase longer maturities up to six months; (2) to provide more ample facilities for financing import and export trade with countries where either normal conditions or present abnormal conditions indicate the desirability of rendering assistance by making acceptances of maturities not exceeding six months eligible for purchase by Federal Reserve Banks. While the Federal Reserve Banks would, under ordinary conditions, prefer to confine their investments to paper of short maturity, that is, not exceeding three months, it is believed that the present emergency in the foreign trade situation would be relieved by a more liberal practice. Vigilant care, however, should be exercised by Federal Reserve Banks in purchasing acceptances of long maturities, in order that the liquidity of the aggregate investment in acceptances held by them should not be affected. In amending its regulation in the manner described, the Board looks to the good banking judgment and discretion of the accepting banks and of the Federal Reserve Banks to avoid any untoward results. To avoid misunderstanding, the Board desires to add that the results of this widening of the investment powers of the Federal Reserve Banks will be followed closely, with a view to such modification of its rules or amendment of its regulations as future developments may indicate to be necessary.

The Board has also taken this occasion to make another slight amendment to Regulation B so that its terms will more clearly indicate the Board's purpose in permitting Federal Reserve Banks to purchase in the open market bankers' acceptances growing out of the domestic storage of goods other than readily marketable staples.

REGULATION B, SERIES OF 1921.

(Superseding Regulation B of 1920.)

OPEN MARKET PURCHASES OF BILLS OF EXCHANGE, TRADE ACCEPTANCES, AND BANKERS' ACCEPTANCES, UNDER SECTION 14.

I. General statutory provisions.

Section 14 of the Federal Reserve Act provides that Federal Reserve Banks under rules and regulations to be prescribed by the Federal Reserve Board may purchase and sell in the open market, at home or abroad, from or to domestic or foreign banks, firms, corporations, or individuals, bankers' acceptances, and bills of exchange of the kinds and maturities made eligible by the act for rediscount, with or without the indorsement of a member bank.

II. General character of bills and acceptances eligible.

The Federal Reserve Board, exercising its statutory right to regulate the purchase of bills of exchange and acceptances, has determined that a bill of exchange or acceptance, to be eligible for purchase by Federal Reserve Banks under this provision of section 14, must have been accepted by the drawee prior to such purchase unless it is either accompanied or secured by shipping documents or by warehouse, terminal, or other similar receipt conveying security title or bears a satisfactory banking indorsement, and must conform to the relative requirements of Regulation A, except that—

(a) A banker's acceptance growing out of a transaction involving the importation or exportation of goods may be purchased if it has a maturity not in excess of six months, exclusive of days of grace, provided that it conforms in other respects to the relative requirements of Regulation A, and

(b) A banker's acceptance growing out of a transaction involving the storage within the United States of goods actually under contract for sale and not yet delivered or paid for may be purchased, provided that the acceptor is secured by the pledge of such goods; and provided further that the acceptance conforms in other respects to the relative requirements of Regulation A.

III. Statements.

A bill of exchange, unless indorsed by a member bank, is not eligible for purchase until a satisfactory statement has been furnished of the financial condition of one or more of the parties thereto.

A banker's acceptance, unless accepted or indorsed by a member bank, is not eligible for purchase until the acceptor has furnished a satisfactory statement of its financial condition in form to be approved by the Federal Reserve Bank and has agreed in writing with a Federal Reserve Bank to inform it upon request concerning the transaction underlying the acceptance.

National banks as transfer agents.

The Board has received a number of inquiries as to whether national banks may act as transfer agents under the provisions of section 11 (k) of the Federal Reserve Act. After

giving the matter careful consideration, the Board is of the opinion that the capacity of transfer agent is a fiduciary capacity within the meaning of section 11 (k), and that, therefore, any national bank which has obtained permission from the Federal Reserve Board to act "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 national bank is located" may act as transfer agent, provided that competing State corporations are permitted to act in that capacity under the laws of the State in which the national bank is located.

Demand loans on real estate.

The Federal Reserve Board has received a number of inquiries as to whether national banks may make loans on real estate payable on demand under the provisions of section 24 of the Federal Reserve Act.

Section 24 provides, in part, that—

* * * no loan made upon the security of such farm land shall be made for a longer time than five years, and no loan made upon the security of such real estate as distinguished from farm land shall be made for a longer time than one year.

It is believed that the purpose of this provision is to prohibit a national bank from tying up its funds for a longer period than five years in the case of loans upon the security of farm lands, or one year in the case of loans secured by real estate other than farm lands. Inasmuch as the bona fide holder of a demand note secured by real estate has the right at any time to demand immediate payment and to proceed against the property if such payment is not made, the Federal Reserve Board is of the opinion that under the terms of the law national banks may make demand loans secured by real estate, provided, of course, that the loans comply in other respects with the provisions of the law.

It is well to point out, however, that under some circumstances the discount or purchase of demand notes may be subject to certain practical objections. For one thing, if a demand note is indorsed, the indorser may be relieved of his secondary liability if payment is not made within a reasonable time. Furthermore, section 53 of the uniform negotiable instruments law provides that "where an instrument payable on demand is negotiated an unreasonable length of time after its issue, the holder is not deemed a holder in due course." Under this section a bank purchasing a demand note from a former holder an un-

reasonable length of time after its issue would be subject to any defenses which the maker had against the former holder.

There may be other practical considerations of importance in determining whether a demand note is a proper instrument under the circumstances of the particular case. Such practical considerations do not, however, affect the general proposition of law that a national bank may under the terms of section 24 of the Federal Reserve Act, and subject to the conditions, restrictions, and limitations therein prescribed, make real estate loans by taking direct from their customers demand notes executed by those customers, when the notes are properly secured by mortgages covering real estate and comply in other respects with the terms of the law.

Ratio of quick assets to current liabilities as bearing upon eligibility and acceptability.

The Federal Reserve Board has been asked whether its ruling, published on page 73 of the FEDERAL RESERVE BULLETIN for June, 1915, is still in effect or has been modified or reversed. The ruling referred to is to the effect that a note made by a cotton mill may be rediscounted by a Federal Reserve Bank although the statement of the mill fails to show an excess of quick assets over current liabilities, provided that the general financial condition of the mill is satisfactory and the statement of the mill shows that the plant is not mortgaged and that the deficiency between capital and plant account does not amount to more than \$5 per spindle.

It is not the present policy of the Federal Reserve Board to lay down definite tests for determining whether paper which is eligible for rediscount by Federal Reserve Banks as a matter of law should be considered acceptable for rediscount from a credit standpoint. The test prescribed in the ruling for determining the acceptability of paper of the character referred to should not, therefore, be regarded as binding upon Federal Reserve Banks.

It can not really be said, however, that the ruling has been reversed, for under the terms of the law and the regulations of the Federal Reserve Board a Federal Reserve Bank may, if it so desires, rediscount a note made by a borrower whose statement fails to show an excess of quick assets over current liabilities. Regulation A of the Board's Regulations, Series of 1920, provides that one of the prerequisites of the eligibility of a promissory note is that "It must not be a note * * * the proceeds of which have been used or are to be used for

permanent or fixed investments of any kind, such as land, buildings, or machinery, or for any other capital purpose," and the regulation further provides that compliance with this prerequisite "may be evidenced by a statement of the borrower showing a reasonable excess of quick assets over current liabilities." Such a statement is not the only evidence by which a Federal Reserve Bank may satisfy itself that the proceeds of a note have not been used and are not to be used for permanent or fixed investments. The Board has ruled that

it is a question of policy to be determined by the Federal Reserve Bank in each case whether that bank will rediscount a particular note offered to it in spite of the fact that the borrower's statement fails to show a reasonable excess of quick assets over current liabilities. Undoubtedly, as a general rule, sound banking policy requires that the borrower's statement shall show such an excess, but it is for the Federal Reserve Bank to determine whether, and under what circumstances, exceptions may properly be made to this general rule.

LAW DEPARTMENT.

Authority of national bank to guarantee letters of credit and acceptances, and to appoint correspondent bank as agent to issue letters of credit and acceptances.

It recently has been brought to the attention of the Federal Reserve Board that national banks for some time have been accustomed to guarantee letters of credit issued at their request by correspondent banks in large centers on behalf of the national bank's customers. For instance, it appears that where the customer of an interior national bank desires to obtain a letter of credit in connection with his foreign business, the national bank, instead of issuing the letter itself, will get one of its large city correspondents to issue a letter for the customer's account, which the national bank guarantees; that is, the national bank agrees that in the event the customer for whose account the letter is issued fails to put the issuing bank in funds to meet the acceptances, the guaranteeing bank will do so. The transaction does not always involve the issuance of a letter of credit, for the correspondent bank sometimes simply accepts a draft drawn upon it by the national bank's customer, and the national bank, in a collateral agreement with the correspondent bank, guarantees the customer's obligation to put the correspondent bank in funds to meet the acceptance. Under the latter arrangement, the national bank's liability is the same as the ultimate liability which arises out of guaranteeing a letter of credit, so that the two transactions will be considered as one and the same for the purposes of this discussion. It also appears that some national banks, in consideration of a fee or commission, are accustomed to indorse acceptances for the accommodation of their customers or bill brokers. In connection with such practices, the question has arisen as to whether a national bank has authority to make such guaranties or accommodation indorsements, or whether such acts are beyond the powers which national banks lawfully may exercise.

Whether or not a national bank has authority to guarantee a letter of credit or to indorse an acceptance for accommodation is a question of law which in the last analysis must be determined by the courts. So far as the Board is aware, there are no decisions directly involving this point, and in view of the importance of the matters involved, it seems advisable for the Board to state in some detail its views as to the legal aspects of the situation.

There is no express authority of law which authorizes a national bank to lend its credit by indorsing an acceptance or by guaranteeing or acting as surety on a letter of credit. The national bank act authorizes national banks to discount and negotiate notes, drafts, and bills of exchange, and to make loans on personal security, while section 13 of the Federal Reserve Act more recently has conferred upon national banks the power to accept drafts growing out of certain specified transactions. It is settled, however, that a national bank's power to discount negotiable paper and to loan money does not carry with it the power to guarantee, or act as surety upon, the obligation of another, nor is such a power incidental to the business of banking. (*Commercial National Bank v. Pirie*, 82 Fed., 799; *Bowen v. Needles National Bank*, 94 Fed., 925 (cited with approval in *Sponge Exchange Bank v. Commercial Co.*, 263 Fed., 20, 26); *Bank of Valdosta v. Baird*, 160 Fed., 642.)

In *Bowen v. Needles National Bank*, supra, p. 927, the court said in part:

"It may be stated in general that no banking corporation has the power to become a guarantor of the obligation of another, or to lend its credit to any person or corporation, unless its charter or governing statute expressly permits it. (*Farmers & Mechanics Bank v. Butchers & Drovers Bank*, 16 N. Y., 125; *Morford v. Bank*, 26 Barb., 568; *Thomp. Corp.*, sec. 5721.) Under section 5136 of the Revised Statutes, national banking associations are given the power to 'make contracts' and 'to exercise by its board of directors, or duly authorized officers or agents, subject to law, all such incidental powers as shall be necessary to carry on the business of banking; by discounting and negotiating

promissory notes, drafts, bills of exchange, and other evidences of debt; by receiving deposits; by buying and selling exchange, coin, and bullion; by loaning money on personal security; and by obtaining, issuing, and circulating notes according to the provisions of this title.' There is in these provisions no grant of power to guaranty the debt of another, nor can such guaranty be said to be incidental to the business of banking. It has been so held in *Seligman v. Bank*, 3 Hughes, 647; Fed. Cas., No. 12642; *Norton v. Bank*, 61 N. H. 589; and *Bank v. Pirie*, 27 C. C. A. 171; 82 Fed. 799."

Similarly, although the power conferred upon national banks to accept drafts carries with it the power to issue letters of credit as incidental thereto, it would seem that such powers do not carry with them the power to guarantee, or act as surety upon, acceptances or letters of credit issued by other banks.

In view of these considerations, the Federal Reserve Board is of the opinion that a national bank has no authority to guarantee or act as surety upon a letter of credit, or to indorse an acceptance for accommodation; that such acts are ultra vires; and that if the directors of a national bank enter into such contracts of guaranty or suretyship, they assume in their personal capacities the risk of any loss that may occur.

However, while a national bank can not guarantee an acceptance which it does not own, a national bank may purchase an acceptance and immediately resell it with its indorsement, since the power to indorse acceptances is incidental to the power to negotiate acceptances. (*Bowen v. Needles National Bank*, supra; *Bank of Valdosta v. Baird*, supra.) There appears to be no authority of law, however, which permits a national bank to lend its credit by indorsing an acceptance where the transaction does not involve an actual transfer of title to and from the national bank.

As to the practice of guaranteeing letters of credit, it is contended that if, as stated above, a national bank has no authority to guarantee or act as surety upon such letters, many national banks will be compelled to forego a business which is very desirable both from the standpoint of the banks themselves and from the standpoint of their customers. The result will be, it is alleged, that the customer himself must necessarily go to a large city bank and, as his financial standing perhaps is not generally known, his request for credit in many instances will be refused and he will be compelled to seek other and less desirable means for financing his business.

Realizing the practical force of these considerations, the Board desires to suggest an alternative method of financing the business heretofore financed by means of letters of credit guaranteed by the national banks at whose request the letters are issued. The

Board is of the opinion that this course, if adopted, will enable a national bank, with only slight modifications as to the manner of handling the business, to continue to carry it on without entering into an ultra vires transaction. Take the case of a national bank in an interior community, whose customer wishes to obtain a letter of credit which will be satisfactory to his foreign dealer. The national bank, having no international standing, or being without any department capable of handling foreign business, does not wish to issue the letter itself but is willing to extend its credit to its customer. Under these circumstances, it enters into an arrangement with, say, its New York correspondent, whereby the New York correspondent agrees as agent of the interior bank to issue a letter of credit for the account of the interior bank's customer, the letter to be issued in the name of the New York correspondent, but in issuing the letter the New York correspondent is to act as agent for an undisclosed principal, namely, the interior bank. The interior bank's name will not appear on the letter of credit, but its New York correspondent may look to it for reimbursement under the collateral agency agreement, not conditionally upon the failure of the customer to put the issuing bank in funds but directly and unconditionally as the real issuer of the letter. The beneficiary of the letter and the holders of the acceptances drawn thereunder will look to and rely on the credit of the New York bank, for its name alone will appear on the letter and the acceptances, but the interior bank will in fact be the real acceptor and the customer will be under obligation to put the interior bank, not the New York bank, in funds to meet the acceptances as they mature. The only change necessary in the present method is that the interior bank, instead of guaranteeing the letter of credit, will execute a separate contract appointing its New York correspondent its agent, and agreeing unconditionally to reimburse the agent as such for any moneys paid out, or, if desired, to put the agent in funds to meet the acceptances as they mature. It would seem that this procedure will meet the practical requirements of the situation and at the same time avoid the necessity of any contract of guaranty.

After careful consideration, the Board considers that national banks may properly finance the business in question in the manner suggested without exceeding their statutory powers. A national bank unquestionably may legitimately finance its customer's business by issuing a letter of credit in its own name. If a national bank may issue a letter itself, it

would seem that a national bank may issue a letter through an agent, provided that the national bank has authority to appoint an agent for that purpose. It is true that, in a ruling appearing on page 835 of the 1920 BULLETIN, the Comptroller of the Currency ruled that a national bank can not appoint an agent at a place other than its place of business to accept drafts in the name of his principal bank and to pay such drafts as they mature. This ruling was based on the construction of section 5190 of the Revised Statutes which provides in part:

The usual business of each national banking association shall be transacted at an office or banking house located in the place specified in its organization certificate.

The Comptroller said that the acceptance and payment of drafts is part of the usual business of a national bank within the meaning of this section, and therefore ruled generally that such business may be transacted only at the national bank's principal office or banking house and not in another place through an agent.

The Board is of the opinion, however, that the provisions of section 5190 do not necessarily prevent a national bank from appointing another bank or banker as its agent to issue a letter of credit in the agent's name. It is well recognized that, while a national bank may not transact any part of its "usual business" at another place through an agent, nevertheless it may appoint an agent for specific purposes or to transact particular kinds of business. Under these circumstances, it would seem that a national bank, for the purpose of financing its customer's business in the manner herein suggested, may appoint a domestic or foreign bank or banker as its agent to issue in the agent's own name a letter of credit and to accept drafts drawn thereunder, provided, that the authority conferred is specifically limited to the particular transaction involved and that a definite limitation is imposed upon the amount of each letter of credit.

In case the course suggested should be adopted, the agent bank, which issues the letter and which is primarily and unconditionally liable upon the acceptances made thereunder, must include the liability on such acceptances, as and when incurred, among its general acceptance liabilities subject to the limitations on the acceptance power prescribed by law; and, inasmuch as the interior bank is by hypothesis the real acceptor and is directly and unconditionally liable to the agent bank for any monies paid out to meet the acceptances as they mature or to put the accepting bank in funds to meet such acceptances, the principal bank also must include the amount of the

acceptances, as and when made, among its general acceptance liabilities subject to the limitations of law.

It should be remembered that the foregoing merely represents the Board's opinion as to the legality of the proposed plan, and as to the requirements which must be complied with if national banks see fit to adopt the plan. In the last analysis, the question whether a national bank legally may appoint a correspondent as its agent in particular transactions to issue a letter of credit and to accept drafts drawn thereunder, and whether in other respects a national bank legally may transact the business in the manner suggested, is a question for the determination of the courts. It seems advisable, however, for the Board to set forth its views with regard to the matter under discussion in order that its position may be clearly understood.

This opinion has been submitted to the Comptroller of the Currency and he concurs in the views expressed therein.

Qualifications of directors of national banks.

On March 1, 1921, House bill 11307, in relation to the qualifications of directors of national banks, became a law through the signature of the President. The text of the new measure is as follows:

[PUBLIC—No. 349—66TH CONGRESS.]

[H. R. 11307.]

AN ACT To amend section 5146 of the Revised Statutes of the United States in relation to the qualifications of directors of the National Banking Association.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 5146 of the Revised Statutes of the United States be so amended as to read as follows:

"SEC. 5146. Every director must, during his whole term of service, be a citizen of the United States, and at least three-fourths of the directors must have resided in the State, Territory, or District in which the association is located, or within fifty miles of the location of the office of the association, for at least one year immediately preceding their election, and must be residents of such State or within a fifty-mile territory of the location of the association during their continuance in office. Every director must own in his own right at least ten shares of the capital stock of the association of which he is a director, unless the capital of the bank shall not exceed \$25,000, in which case he must own in his own right at least five shares of such capital stock. Any director who ceases to be the owner of the required number of shares of the stock, or who becomes in any other manner disqualified, shall thereby vacate his place."

Approved, March 1, 1921.

Amendments to State banking laws.

The following recent enactments by State legislatures, which amend the State banking

laws, are published for the information of the Federal Reserve Banks and member banks:

OKLAHOMA.

House bill No. 393, recently enacted by the Oklahoma Legislature, is substantially the same as the act recommended by the Federal Reserve Board and the American Bankers' Association to bring about greater coordination in the powers of State and national banks and to promote uniformity in State and Federal banking laws. The Oklahoma act reads as follows:

Be it enacted by the people of the State of Oklahoma:

SECTION 1. The words "Federal Reserve Act" herein used shall be held to mean and to include the act of Congress of the United States approved December 23, 1913, as heretofore and hereafter amended.

The words "Federal Reserve Board" shall be held to mean the Federal Reserve Board created and described in the Federal Reserve Act.

The words "Federal Reserve Bank" shall be held to mean the Federal Reserve Banks created and organized under authority of the Federal Reserve Act.

The words "member bank" shall be held to mean any national bank, State bank, or banking and trust company which has become or which becomes a member of one of the Federal Reserve Banks created by the Federal Reserve Act.

SEC. 2. That any bank or trust company incorporated under the laws of this State shall have the power to subscribe to the capital stock and become a member of a Federal Reserve Bank.

SEC. 3. Any bank or trust company incorporated under the laws of the State of Oklahoma which is, or which becomes a member of a Federal Reserve Bank, is by this act vested with all powers conferred upon member banks of the Federal Reserve Banks by the terms of the Federal Reserve Act as fully and completely as if such powers were specifically enumerated and described herein, and all such powers shall be exercised subject to all restrictions and limitations imposed by the Federal Reserve Act, or by regulations of the Federal Reserve Board made pursuant thereto: *Provided, however,* That this section shall not limit the duties and powers of the bank commissioner and the banking board to supervise, regulate, administer all State banks and trust companies nor limit the power of the bank commissioner to declare such bank or trust company to be an insolvent institution, and to take charge thereof for the purpose of winding up its affairs as may now or hereafter be provided by law.

SEC. 4. A compliance on the part of any such bank or trust company with the reserve requirements of the Federal Reserve Act shall be held to be a full compliance with those provisions of the laws of this State which require banks or trust companies to carry or maintain reserve other than such as is required under the terms of the Federal Reserve Act.

SEC. 5. Any such bank or trust company shall be subject to the examinations required under the terms of the Federal Reserve Act, and the authorities of this State having supervision over such bank may, in their discretion, accept such examination in lieu of the examination required under the laws of this State. Such authorities, their agents and employees, may furnish to the Federal Reserve Board, the Federal Reserve Banks, or to examiners duly appointed by the Federal Reserve Board, or the Federal Reserve Banks, copies of all examinations made, and may disclose to such Federal Reserve Board,

Federal Reserve Banks, or examiner, any information with reference to the condition or affairs of State banks or trust companies organized under the laws of this State which become members of a Federal Reserve Bank, or which apply for membership in a Federal Reserve Bank.

SEC. 6. Any bank or trust company incorporated under the laws of this State which is or which becomes a member of the Federal Reserve Bank shall not be limited in its borrowing or rediscounting with the Federal Reserve Bank of which it is a member.

SEC. 7. All acts and the parts of acts inconsistent herewith are hereby repealed.

INDIANA.

House bill No. 40, recently enacted by the Indiana Legislature, amended the laws of that State relating to loan, trust, and safe deposit companies so as expressly to authorize such companies—

to purchase and hold, for the purpose of becoming a member of a Federal Reserve Bank, so much of the capital stock thereof as will qualify it for membership in such reserve bank, pursuant to an act of Congress approved December 23, 1913, entitled the "Federal Reserve Act;" to become a member of such Federal Reserve Bank, and to have and exercise all powers, not in conflict with the laws of this State, which are conferred upon any such member by the Federal Reserve Act.

Commercial Failures Reported.

The wide margin of increase in commercial failures in the United States, as compared with the exceptionally low mortality of 1920, continues in evidence, 1,043 defaults being reported to R. G. Dun & Co. during three weeks of April, as against only 337 in the corresponding period of last year. For the month of March, the latest month for which complete statistics are available, the returns disclose 1,336 insolvencies for \$67,408,909 of liabilities. These figures are not only greatly in excess of the 566 defaults for \$12,699,325 in March, 1920, but the number is the largest for that particular month since 1916, while the indebtedness is the heaviest on record for any one month whatever. Separated according to Federal Reserve districts, the March statement discloses numerical increases in all instances in comparison with that of March of last year, the differences being marked in practically all cases. The liabilities are, moreover, larger in every district, this exhibit being especially unfavorable.

Failures during March.

District.	Number.		Liabilities.	
	1921	1920	1921	1920
First.....	88	54	\$8,259,999	\$366,304
Second.....	248	139	30,836,832	6,213,228
Third.....	63	33	1,082,410	644,375
Fourth.....	88	63	2,767,384	553,082
Fifth.....	123	36	2,918,460	464,017
Sixth.....	152	34	2,397,390	382,988
Seventh.....	138	64	3,438,805	1,420,313
Eighth.....	108	31	5,273,193	524,242
Ninth.....	27	18	703,571	209,558
Tenth.....	66	11	4,189,798	42,557
Eleventh.....	98	19	2,702,583	203,445
Twelfth.....	137	64	2,838,475	1,175,216
Total.....	1,336	566	67,408,909	12,699,325

State Banks and Trust Companies Admitted.

The following list shows the State banks and trust companies which have been admitted to membership in the Federal Reserve System during the month of April, 1921.

One thousand five hundred and fifty-three State institutions are now members of the system, having a total capital of \$550,847,840, total surplus of \$526,228,748, and total resources of \$10,201,999,550.

	Capital.	Surplus.	Total resources.
<i>District No. 4.</i>			
The Midland Bank, Cleveland, Ohio.	\$2,000,000	\$400,000	\$2,400,913
East Pittsburgh Savings & Trust Co., East Pittsburgh, Pa.	125,000	175,000	3,837,606
<i>District No. 5.</i>			
Bank of Edenton, Edenton, N. C.	66,900	66,900	897,550
Carolina Bank & Trust Co., Henderson, N. C.	100,000	-----	417,276
Farmers Bank & Trust Co., Winston-Salem, N. C.	250,000	-----	1,108,876
<i>District No. 6.</i>			
Citizens Bank of Lake Wales, Lake Wales, Fla.	50,000	5,000	55,000
Douglasville Banking Co., Douglasville, Ga.	65,000	45,000	560,960
Peoples Bank, Greenville, Ga.	30,000	27,606	187,585
The Bank of Soperton, Soperton, Ga.	25,000	25,000	319,666
<i>District No. 8.</i>			
Bank of Commerce, Earle, Ark.	150,000	30,000	902,479
<i>District No. 9.</i>			
Moccasin State Bank, Moccasin, Mont.	25,000	6,000	196,684
Security Savings Bank, Rapid City, S. Dak.	50,000	15,000	524,620
<i>District No. 11.</i>			
Security State Bank of Decatur, Decatur, Tex.	60,000	-----	137,457
State Bank of Commerce, Commerce, Tex.	50,000	-----	273,111
First State Bank of Perrin, Perrin, Tex.	25,000	12,500	184,722
First State Bank of Quinlan, Quinlan, Tex.	25,000	5,000	141,361
<i>District No. 12.</i>			
Citizens Savings Bank of Pasadena, Pasadena, Calif.	300,000	32,100	2,867,161
E. G. Young & Company Bank, Oakland, Oreg.	50,000	15,000	753,002
The Bank of Stanfield, Stanfield, Oreg.	25,000	10,000	203,738
Eastern Oregon Banking Co., Shaniko, Oreg.	50,000	10,000	299,265

WITHDRAWALS.

Kilgore State Bank, Kilgore, Nebr.
The Farmers State Bank, Allen, Nebr.

LIQUIDATIONS.

Union Trust & Savings Bank, Sioux City, Iowa.
Farmers Guaranty State Bank, Jacksonville, Tex.
First State Bank of Henderson, Henderson, Tex.
Mountainair State Bank, Mountainair, N. Mex.
Marine Bank of Norfolk, Norfolk, Va.

CONVERSION.

The Commercial Exchange Bank, New York, N. Y., has converted into the Commercial Exchange National Bank.

CHANGE OF NAME.

Long Beach Savings Bank & Trust Co., Long Beach, Calif., to Long Beach Trust & Savings Bank.

Fiduciary Powers Granted to National Banks.

The applications of the following banks for permission to act under section 11(k) of the Federal Reserve Act have been approved by the Board during the month of April, 1921:

DISTRICT No. 2.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The National Bank of Cohoes, Cohoes, N. Y.

DISTRICT No. 4.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
First National Bank of New Kensington, New Kensington, Pa.

DISTRICT No. 5.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The Planters National Bank of Fredericksburg, Va.

DISTRICT No. 7.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
Merchants & Illinois National Bank of Peoria, Ill.

DISTRICT No. 9.

Trustee, executor, administrator, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The First National Bank of Eveleth, Eveleth, Minn.
Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:
The Northern National Bank of Duluth, Duluth, Minn.

Acceptances to 100 Per Cent.

Since the issuance of the April BULLETIN the following banks have been authorized by the Federal Reserve Board to accept drafts and bills of exchange up to 100 per cent of their capital and surplus:

The Riddell National Bank of Brazil, Ind.
The First National Bank of Ittabena, Ittabena, Miss.

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 March 26 to April 29, 1921, inclusive:

	Banks.	Amount.
New charters issued to.....	18	-----
With capital of.....	-----	\$1,650,000
Increase of capital approved for.....	27	-----
With new capital of.....	-----	5,700,000
Aggregate number of new charters and banks increasing capital.....	45	-----
With aggregate of new capital authorized.....	-----	7,350,000
Number of banks liquidating.....	14	-----
Capital of same banks.....	-----	960,000
Number of banks reducing capital.....	0	-----
Reduction of capital.....	-----	0
Total number of banks going into voluntary or involuntary liquidation or reducing capital.....	14	-----
Aggregate capital reduction.....	-----	960,000
Consolidation of national banks under the act of Nov. 7, 1918.....	1	-----
Capital.....	-----	100,000
The foregoing statement shows the aggregate of increased capital for the period of the banks embraced in statement.....	-----	7,350,000
Against this there was a reduction of capital owing to liquidations, etc.....	-----	960,000
Net increase.....	-----	6,390,000

BUSINESS AND FINANCIAL CONDITIONS ABROAD.

ENGLAND.¹

The strike of something like a million miners in England on April 1 has been the fact of outstanding importance there during the month. This strike did not come as an unexpected or unnatural development, but rather is the latest incident in a long series of unfortunate circumstances which have disorganized the industry during recent years. In the last issue of the BULLETIN reference was made to the present condition of the industry and a brief description given of recent developments such as the abnormal profits obtained from export coal during the first part of 1920, the application of these profits to the subsidizing of the domestic price, the decline in export demand with the resultant deficit in industrial revenues in the last quarter of 1920, and finally decontrol or the removal of Government support from the industry on April 1. According to the coal mines emergency act, decontrol was not to occur until August 31, 1921; the Government, therefore, in removing its support of the industry on April 1, or five months earlier than the date set, laid itself open to attack from both miners and owners, since the latter groups were guaranteed a fixed rate of wages and profits under Government control. This precipitated, fixed the date, and furnished one of the ostensible causes for the strike, although the underlying reasons for it must be sought elsewhere.

The conditions of coal mining in England are such that the rate of return both as to production and profits varies greatly from district to district. The high-cost mines, however, have been in operation during the war and during the period of heavy foreign post-war demand. The miners in demanding a national wage agreement and a national pool of profits to make possible the payment of uniform wages, raised the question whether these high-cost mines are to continue in operation, and if so, whether wages paid for work in them are to be subsidized from surplus returns from the more valuable mines, from Government subsidy, or by some other means. Fundamental economic conditions in England make the question of operation of high-cost mines a more pertinent one than it would be in a country like the United States. In the first place, coal is a so-called key or indispensable industry. By its export England provides cargo for outgoing vessels which otherwise

would have to charge excessive freight rates on incoming foodstuffs and raw materials. In addition, a country engaged in industry on the scale that Great Britain is needs large quantities of fuel easily available. The contention of the miners is that these high-cost mines should not be operated at the expense of labor but that instead some method should be found for equalizing wage rates throughout the industry.

Before the strike was called the miners, mine owners, and Government had been in consultation over the question of the readjustment that was to occur in the industry with the removal of control. The owners had made the following offer:

(1) That the wages prevailing in July, 1914, in each colliery be the point below which wages should not be automatically reduced; that wages be computed on the basis of percentage increases, not flat rate advances from the base wage.

(2) That owners' profit in each district be 17 per cent of the aggregate wages paid.

(3) That in case of surplus profits, the workmen receive 80 per cent and the operators 20 per cent.

These propositions obviously were not in harmony with the proposals of the miners for a national wage agreement, providing as they do for a solution of the problem along district lines. They were, however, referred by the executives of the Miners' Federation to the different producing districts for a ballot; with a result entirely unfavorable to the proposals. The reason for the unwillingness of the miners to meet the owners on these or later proposals was apparently due in the main to a determination on the part of the miners to obtain a permanent settlement of the coal-mining problem without further delay. The result was a strike order, effective April 1, followed about a week later by the threat of a sympathetic strike on the part of the other members of the triple alliance, namely, the railway men and the transport workers.

During the course of April and early May negotiations have continued between the miners, owners, and the Government, with the result that concessions have been made on all sides. Although at the time of writing no definite agreement has been reached, the Government has offered a temporary subsidy to prevent wages from declining below a certain point, and the mine owners have suggested that wage agreements be made on the basis of

¹ British price, trade, and financial statistics will be found on pp. 601, 602, 605, 606, 608 of this issue of the BULLETIN

the "area"—a larger unit than the so-called "district," but not on a national basis.

Meanwhile the statistics which have been published in the course of the negotiations further emphasize the difficulties in the way of obtaining a satisfactory adjustment of the industry along conventional lines. The wages offered by the mine owners on April 1 show extreme variations from district to district for the same work, the reductions amounting to from 40 to 50 per cent in the case of the South Wales district and to not much more than 15 per cent in Yorkshire. The reductions would seem, however, to average closer to 30 than to 20 per cent. With the decrease in the cost of living not more than 20 per cent, according to official figures, it is not surprising that a strong organization like the Miners' Federation will not submit to wage reductions of these dimensions. On the other hand, the latest figures showing the deficits in the finances of the coal industry make clear the problem of the owners and the Government. The deficit for January and February amounted to £9,426,000, or about £1,178,000 a week, while the deficit for March was £5,259,000. These deficits are not entirely due to the decline in the price of coal but are also due in part to a diminished output per man.

The problem presented by the present condition of the coal industry is somewhat more extreme than that existing in most industries, but in essentials it is not different from one of the most pressing general economic problems of the present time—namely, the adjustment of wages to the downward trend of prices. In England, a fairly large number of wage agreements are based upon the adjustment of wages to the cost of living. In these cases reductions have already been made in accordance with the lower level of retail prices. Among the largest groups to be affected in this fashion are railway workers, woolen and worsted operatives and workers in the hosiery trades. Others who have suffered reductions either under sliding scale agreements or outright are certain classes of workers in the iron and steel industry and silk operatives. In May, 500,000 cotton operatives will be affected by revisions in wages in that industry.

Meanwhile wholesale and retail prices have continued to decline, although at a somewhat slower rate than earlier in the year. The Statist index shows a reduction of 3 per cent in the price level as a whole for the month of March while the Board of Trade shows a reduction of 7 per cent. The greatest reductions occurred in the mineral and textile groups according to both index numbers. In spite of

a reduction of 33 per cent in the Statist index since last April when it reached its peak, prices are still approximately 108 per cent above prewar. The index number of the cost of living constructed by the Ministry of Labor shows a reduction of 6 per cent during March.

Unemployment has continued to increase during the month. The figures published by the Ministry of Labor show 10 per cent of trade-union members unemployed at the end of March, while those out of work who are insured against unemployment reached the high total of 1,355,206.

Per cent of trade-union members unemployed (membership 1,528,001 at end of March).¹

1920.	
End of—	
March.....	1.1
April.....	.9
May.....	1.1
June.....	1.2
July.....	1.4
August.....	1.6
September.....	2.2
October.....	5.3
November.....	3.7
December.....	6.0
1921.	
End of—	
January.....	6.9
February.....	8.5
March.....	10.0

¹ Short time and broken time are not reflected in the figures. In the mining and textile industries a contraction in the demand for labor is generally met by short-time working.

A study of the movement of prices of individual commodities shows that in England, as in the United States, the reductions in commodity prices have been very uneven, both comparing them from industry to industry and from one branch of a given industry to another. On the whole the prices of the group of commodities which feed into the clothing trades and nonferrous metals appear to be nearer prewar levels than any other groups. For instance, certain grades of wool and hides are below prewar levels, while cotton is only slightly above it. Typical grades of worsted yarn and finished shoes, on the other hand, are still 100 per cent above the 1913 level, and cotton yarn and cloth are at least 50 per cent higher than before the war. At the same time coal prices—both bituminous and anthracite—in March were twice as high as in 1913, and typical grades of pig iron and finished and semi-finished steel products about three times the prewar level. In the same way cereals and meats are still far higher than before the war. It is such maladjustments as these, as well as the maladjustment between prices at various stages of the distributive process, that is retarding business operations at the present time.

The following figures show the changes which have occurred during recent months in the volume of production in certain leading industries:

	Production (metric tons).			Ship tonnage under construction (gross tons).
	Coal.	Pig iron.	Steel ingots and castings. ¹	
Monthly average, 1913.....	000's. 24,336	000's. 869	000's. 649	2 2,002,699
1920.				
March.....	19,505	710	840	3,394,425
April.....	17,131	655	794	.....
May.....	² 22,131	738	846	.....
June.....	19,048	726	845	3,578,000
July.....	³ 22,926	750	790	.....
August.....	16,970	752	709	.....
September.....	18,885	741	885	3,731,000
October.....	⁴ 14,044	533	544	.....
November.....	15,920	404	505	.....
December.....	20,230	675	747	3,709,000
1921.				
January.....	⁵ 21,805	642	493	.....
February.....	17,369	463	484	.....
March.....	16,437	⁴ 386	⁴ 358	⁵ 3,799,000

¹ Revised figures.

² Average of 4 quarterly estimates.

³ 5 weeks.

⁴ Provisional.

⁵ Work suspended on all but 2,952,300 tons.

Announcement was made on April 28 of a reduction in the discount rate at the Bank of England from 7 to 6½ per cent. This is the first change in the rate since April, 1920, the 7 per cent rate having been effective for the unprecedentedly long period of a year and two weeks. Prior to this change in the rate at the Bank of England, the rate of interest on treasury bills was reduced for the second time within a period of six weeks. Treasury bills had been offered at 6½ per cent since April, 1920, when the rate was reduced to 6 per cent on March 11. On April 27 the rate was further reduced to 5¾ per cent. Meanwhile on April 11 the chancellor of the exchequer announced that the method of selling treasury bills would be changed from the continuous day to day "over the counter" system to the method of sale by tender, which was customary before the war. Government control has been exercised over the money market by the continuous unlimited sale of treasury bills, with only temporary interruptions, since April, 1915. With the return to the prewar method of sale of a fixed quantity of bills at a specified date, this continuous control is lifted.

Receipts and expenditures for the fiscal year closing March 31, balanced remarkably well so far as the national accounts were concerned. The net surplus for the year 1920-21 had been estimated at £234,000,000, and the actual surplus reached £230,000,000, or only £4,000,000

less than the estimate. The new budget for the year 1921-22 was introduced on April 25, and provides for expenditures of £1,040,000,000 and revenue of £1,216,500,000. As had been announced at an earlier date, the excess profits duty was not retained in the budget and no substitute for it was suggested. Certain indirect taxes were likewise reduced. At the same time that the budget was introduced the chancellor of the exchequer proposed a new scheme for handling the floating and semifloating debt. Holders of 5 per cent national war bonds maturing before 1925 are to be offered the opportunity to convert their holdings into 3½ per cent bonds maturing in 1961. This offer is apparently preliminary to some further funding operations in connection with the floating debt.

Foreign trade during the month of March showed a further decline in value. Imports were valued at £93,742,000, as compared with £96,974,000 in February, exports at £66,809,000, as compared with £68,222,000 and reexports at £8,888,000, as compared with £8,004,000. The commodities in the export group which suffered the greatest decline were iron and steel manufactures, cotton yarns and cloth, and wearing apparel. Imports of foodstuffs remained approximately the same as last month, but imports of raw materials, such as cotton, wool, and nonferrous metals, were considerably reduced.

Two bills came up for consideration during the month which may have a material effect upon England's import trade. The German reparations recovery act, which was made effective March 31, provides that importers of German goods are to pay to the customs officials up to 50 per cent of the total value of the goods imported. The bill also provides that goods partially manufactured outside of Germany but 75 per cent of whose value is due to German production are likewise subject to tax. This measure is a device for obtaining reparations payments from Germany, and it is possible that if reparations are otherwise provided for the bill may be repealed. Its execution will undoubtedly hamper free movement of commodities, not only between Germany and Great Britain, but also between Great Britain and other European countries. The second measure referred to above is the so-called antidumping bill, providing for the protection of certain key industries and for the imposition of a duty of 33½ per cent on any articles which are being offered for sale in England under the following conditions:

- (a) At prices below the cost of production thereof; or
- (b) at prices which, by reason of depreciation in the value in relation to sterling of the currency of the country in which the goods are manufactured, are below the prices

at which similar goods can be profitably manufactured in the United Kingdom; and that by reason thereof employment in any industry in the United Kingdom is being or is likely to be seriously affected * * *

If this bill is actually applied, it will serve as a very material barrier against foreign importations.

Developments in the foreign exchange market during the month have been largely dependent upon the labor situation. Sterling exchange on the New York market advanced until the end of March, reaching at that time the highest point since last July. At the commencement of the coal strike there was a reaction which was not again overcome until the strike order of the triple alliance was rescinded. The New York rate stood at \$3.935 on April 23.

FRANCE.¹

On March 19 M. Henry Cheron, the new reporter general of the French Senate's commission on finance, presented his report on the budget for 1921. In the course of his review of French finances, M. Cheron emphasized the necessity for reducing the Government's floating debt, and particularly that part of the debt which consists of advances from the Bank of France. France's total debt as of March 1, 1921, is, according to this latest report, made up of the following items:

FRENCH PUBLIC DEBT, MAR. 1, 1921.

[In millions of francs.]

Interior debt, perpetual and term.....	133, 000
Floating debt.....	60, 890
Advances of the Bank of France.....	25, 600
Foreign debt ¹	83, 245
Total.....	302, 735

¹ Calculated at the exchange rates of Feb. 28, 1921.

M. Cheron added that claims for war pensions, soon to be presented, will necessitate a great increase in the debt.

Despite the request of the finance minister and the pressure of public opinion, the Senate's examination of the budget was not concluded by the end of the month, and it was necessary to pass a provisional credit for April. When the 1921 budget was presented to the Chamber of Deputies last October it was generally considered so much like the budget for 1920 as to insure its quick enactment into law. The Chamber was desirous, however, of making current receipts balance all current expenditures, except those for which Germany is eventually responsible. A great deal of time was consumed in attempting to reduce the estimates for ex-

penditure submitted by the various departments, and the Chamber did not finish its work on the budget until well into 1921. By that time it had become evident that the new taxes enacted last June were not producing as much revenue as had been expected of them. Receipts from the tax on total business turnover, in particular, have been disappointing, having fallen 1,906,000,000 francs below budget estimates. The following table shows receipts from this tax by months since its enactment, as compared with the receipts expected:

RECEIPTS FROM THE TAX ON TOTAL BUSINESS TURNOVER SINCE ITS ENACTMENT.

[In thousands of francs.]

	Receipts.	Compared with budget estimates.
1920.		
July.....	2, 608	+ 1, 608
August.....	3, 687	+ 2, 687
September.....	292, 792	-407, 209
October.....	234, 434	-225, 566
November.....	205, 492	-234, 508
December.....	203, 175	-259, 158
1921.		
January.....	133, 633	-231, 934
February.....	151, 571	-264, 096
March.....	147, 628	-268, 039
Total.....	1, 425, 070	-1, 906, 265

This disappointing result is evidently due to the fact that the revenue from the tax was estimated on the basis of the high price level which prevailed in France last spring (1920), no allowance being made for the decline in prices which has occurred since that time. In April, 1920, the wholesale price index of the Bureau de la Statistique Générale stood at 588 (using 1913 prices as 100), while in March, 1921, it had fallen to 356, or almost 40 per cent.

In 1920 some of the other indirect taxes yielded more revenue than had been expected of them, so that total receipts from indirect taxes and Government monopolies for the year exceeded budget estimates. In the first three months of 1921, however, there has been a deficit not only in receipts from the total business turnover tax but also in total receipts from indirect taxes and Government monopolies, which amounts to about 671,000,000 francs. In March the difference was the result of deficits in the customs, post-office, and sugar tax receipts, as well as in the tax on business turnover.

The great change which has been taking place in French industrial life during the last six months is illustrated by foreign-trade figures recently published for the first quarter of 1921.

¹ French price, trade, and financial statistics will be found on pp. 601, 603, 605, 607, 608 of this issue of the BULLETIN.

Instead of the usual excess of imports (an excess which amounted to 35,799,000,000 francs in 1919 and 12,970,000,000 francs in 1920), there was an excess of exports for the first quarter of 1921 which amounted to 129,000,000 francs. However, as the following table indicates, this surplus was all achieved in one month of the quarter, and during the other two months (January and March) there was a small excess of imports.

FRENCH FOREIGN TRADE.¹

[In millions of francs.]

	Imports.	Exports.	Excess of imports (+), exports (-).
1921.			
January.....	1,982	1,883	+ 99
February.....	1,614	1,890	-285
March.....	1,743	1,686	+ 57
Total.....	5,339	5,468	-129

¹ Calculated in 1919 values.

The surplus of exports during February and the very small surplus of imports during January and March is due as much to the decline of imports of food and raw materials into France as to the increase in French exports. Exports for the first quarter of 1921 are larger than those for the same period in 1920 by about 1,000,000,000 francs, but exports for March, 1921, are smaller than those for August, 1920 (when last year's peak was reached according to all the figures now available), by about 700,000,000 francs. The decline in imports is even more marked. Total imports for March, 1921, are valued at 1,988,000,000 francs less than imports for March, 1920, which marked the high point in the import trade of last year.

This decline in imports is partly due to the fact that France is now more nearly able to support herself than she was during and immediately after the war, but it is also due to the slackening of industrial production which has taken place in France as in the rest of the world in the last six or eight months.

Before this slowing down began, however, France had given convincing evidence of the extent to which her industries had readjusted themselves to peace-time conditions. An examination of detailed foreign trade figures for 1920 shows how prosperous the export trade in certain commodities became during that year. The amount of wines, semifinished iron and

steel products, broad silks, clothes of all kinds, leather and leather manufactures, machinery and machines, other metal manufactures, automobiles, and rubber manufactures, exported during 1920, exceeded, in some cases, by a wide margin, the amount exported in 1913. The following table gives a brief survey of the quantity and value of France's chief exports in 1920:

EXPORTS FROM FRANCE, CALENDAR YEAR 1920.

	In thousands of quintals.			In millions of francs.		
	1913	1919	1920	1913	1919	1920 ¹
Wines.....	1,908	1,357	2,136	203	365	531
Raw wool.....	807	100	418	310	241	964
Pig iron, iron, and steel...	10,083	3,666	13,594	87	181	710
Chemical products (except nitrate of soda).....	11,126	4,019	9,193	211	326	1,119
Yarns.....	505	148	246	212	269	559
Cotton cloth.....	554	350	469	385	782	1,262
Woolen cloth.....	234	55	143	220	249	629
Broad silk.....	67	62	77	429	1,472	1,867
Clothes of all kinds.....	78	32	100	253	809	1,657
Leather.....	154	101	188	145	323	517
Leather manufactures.....	46	36	101	89	304	662
Machinery and machines...	823	541	905	123	270	529
Metal manufactures.....	1,492	356	1,527	137	153	548
Automobiles.....	258	59	502	227	125	1,188
Rubber manufactures.....	69	112	188	100	274	462

¹ Expressed in 1919 value units.

The distribution of France's foreign trade during the year 1920 furnishes an interesting commentary on the condition of her exchanges. The countries from which she imported most are the United States, England, Germany, Belgium, and Argentina. (Imports from Germany include imports of coal and coke, valued at 1,365,000,000 francs, and of other materials imported on reparations account, which have, of course, no effect on the exchange situation.) France exported most during 1920 to Belgium, England, Algeria, the United States, Switzerland, and Germany. The excess of her imports over her exports (although it was smaller than it had been since before the war) amounted to 12,970,000,000 francs, of which 5,291,000,000 francs represent the excess of imports from the United States over exports to the United States. England, Belgium, and Argentina are the other countries with which the trade figures show this same inequality, and they partly explain the unfavorable state of French exchanges during the year.

The following table sets forth French foreign trade by countries in 1920 as it has been recently published by the ministry of finance:

FOREIGN TRADE OF FRANCE,¹ CALENDAR YEAR 1920.

[In millions of francs.]

	Imports.	Exports.	Excess of imports (+); exports (-).
England.....	6,747	3,512	+ 3,235
Germany.....	2,658	1,180	+ 1,478
Belgium.....	2,569	3,914	- 1,345
Switzerland.....	803	1,442	- 639
Spain.....	849	884	- 35
Italy.....	892	1,062	- 170
United States.....	7,062	1,771	+ 5,291
Brazil.....	653	304	+ 349
Argentina.....	2,054	379	+ 1,675
Other foreign countries.....	7,893	4,602	+ 3,291
Algeria.....	960	1,926	- 966
Tunis.....	219	318	- 99
Morocco.....	152	491	- 342
Other French colonies and protectorates.....	1,894	647	+ 1,247
Total.....	35,405	22,435	+12,970

¹ Expressed in 1919 value units.

There have been several slight changes in the situation of the Bank of France in March. The increase in the amount of gold reserve held in France amounted to about 1,000,000 francs during the month and the increase in the silver reserve to about 3,000,000 francs. The note circulation also increased, the difference between the notes in circulation in the last week of February and in the last week in March being about 627,000,000 francs. Deposits, however, declined to the extent of about 189,000,000 francs.

The wholesale price index of the Bureau de la Statistique Générale declined 20 points, or 5 per cent, during March, as compared with a decline of 31 points, or almost 8 per cent, in February. All the group indexes except those for vegetable foods and for sugar, coffee, and cocoa declined, the greatest decrease occurring in the indexes for animal foods and for sundries.

The nonferrous metal market displayed greater firmness during March than in the month previous. Aluminum prices declined, but lead and zinc rose slightly, and tin prices fluctuated, closing the month not far from their end of February level.

The price of metallurgical coke (which is still regulated by the Government) was again reduced and fixed at 125 francs as of March 20, 1921. The effect of this decrease upon steel prices is not yet clear, as other factors have

also contributed to the continued decline of prices in that industry.

Textile prices were irregular during March. Japanese raw silk rose in price because of a shortage at the end of month; Canton, Italian, and French raw silk prices remained practically unchanged. Contract prices for cotton at Havre were also firmer, but Buenos Aires fine wool in the same market fell sharply.

French retail prices also declined in March. According to the Paris index number of the Bureau de la Statistique Générale the decline amounted to about 6 per cent. As a result of the decline in retail prices the mechanical industries of the Paris region have decreased the cost of living bonuses which they have been granting to their employees.

The Bureau de la Statistique Générale has recently made public its retail price indexes for the various regions of France. These figures show that at present, as before the war, retail prices in the west are lower than in any other part of France, while prices in the north are higher than in any other section. The following table summarizes the figures given out on this subject:

RETAIL PRICES IN FRANCE¹ BY DISTRICTS.

	France.	North.	East.	South-east.	Center.	West.	Alsace-Lorraine.
1913, 1st quarter...	1,020	1,043	989	1,036	1,038	985	.....
1914, 3d quarter...	1,004	1,089	988	1,018	988	942	1,084
1920:							
1st quarter...	3,204	3,299	3,155	3,228	3,223	3,085	3,092
2d quarter...	3,802	3,959	3,800	3,876	3,744	3,533	3,853
3d quarter...	3,898	4,117	3,859	3,884	3,777	3,648	3,992
4th quarter...	4,519	4,693	4,456	4,522	4,423	4,345	4,530
1921, 1st quarter...	4,303	4,450	4,218	4,266	4,203	4,180	4,424

¹ Based on the prices of eleven foods, kerosene, and alcohol.ITALY.¹

Italian foreign trade figures for the entire year 1920 are now available, valued on the basis of 1919 prices. Comparison can therefore be made of the volume of trade in the two years. The table below contains the figures showing the situation in 1919 and 1920 on a monthly basis.

¹ Italian price, trade, and financial statistics will be found on pp. 601, 603, 607, 609 of this issue of the Bulletin.

ITALY'S FOREIGN TRADE IN 1919 AND IN 1920.

[Precious metals not included. In millions of lire, based on 1919 value units.]

	Imports.			Exports.			Excess of imports over exports at end of month—i. e., cumulative.		
	1919	1920	Difference.	1919	1920	Difference.	1919	1920	Difference.
January.....	1,061	1,002	-59	260	497	+237	801	505	-296
February.....	1,368	1,141	-227	301	616	+315	1,868	1,030	-838
March.....	1,656	1,431	-225	367	683	+316	3,157	1,778	-1,379
April.....	1,651	1,363	-288	350	679	+329	4,458	2,462	-1,996
May.....	1,364	1,401	+37	358	662	+304	5,464	3,201	-2,263
June.....	1,431	2,076	+645	484	752	+268	6,411	4,525	-1,886
July.....	1,555	1,040	-515	432	521	+89	7,534	5,044	-2,490
August.....	872	1,249	+377	548	532	-16	7,858	5,761	-2,097
September.....	1,529	1,202	-327	662	571	-92	8,725	6,392	-2,333
October.....	1,190	1,126	-65	755	707	-48	9,160	6,811	-2,349
November.....	1,283	1,240	-43	717	731	+14	9,726	7,320	-2,406
December.....	1,663	1,591	-72	832	853	+21	10,557	8,058	-2,499
Total.....	16,623	15,862	-761	6,066	7,804	+1,738	10,557	8,058	-2,499

Italian imports during 1920, as shown by customhouse statistics, had a value of 15,862,000,000 lire, as compared with 1919 imports valued at 16,623,000,000 lire, thus showing a decrease of 761,000,000 lire for the year. This shows a decrease in actual volume of imports, since in both cases the figures are based upon 1919 prices. Exports in 1920, valued on the same basis, totaled 7,804,000,000 lire, exceeding those of 1919 by 1,738,000,000 lire. Although the excess of imports over exports remains very large, aggregating 8,058,000,000 lire, it is considerably lower than the excess of imports in 1919, which was valued at 10,557,000,000 lire. This improvement of nearly 2,500,000,000 lire shows the relative increase in the physical volume of aggregate exports as compared with aggregate imports during the year. In the following table the ratios of exports to imports in recent years are presented:

RATIO OF THE VALUE OF EXPORTS TO IMPORTS, 1900-1920.

Average 1900-1913.....	72.8
1914.....	75.6
1915.....	53.9
1916.....	36.8
1917.....	21.6
1918.....	20.9
1919.....	36.5
1920.....	49.2

It is apparent from the first table above that neither the decrease of imports nor the increase of exports were uniform throughout the year. During the first four months of 1920 the imports showed a decrease of 799,000,000 lire as compared with the same period in 1919. This decrease is greater than the total for the entire year. In May and June, however, an increase of imports set in, which was mainly due to the heavy demand for foreign grains, cotton, woollens, alcohols, and

oils. In August there was another large increase in imports, which may be accounted for by the heavy importation of metals and metal goods.

Exports during the first six months of 1920, on the other hand, exceeded those of the corresponding period of 1919 by 1,769,000,000 lire, which again is more than the total increase in exports for the year. In the second half of the year the export trade slackened as a result of industrial depression in foreign countries, and figures for August, September, and October are lower than those for the corresponding months in 1919. The export trade in cotton goods and silk were particularly seriously affected. In fact, 1920 exports of silk up to the end of November were valued at 90,000,000 lire less than those of a similar period in the preceding year, while at the end of June they had exceeded those of the first six months of 1919 by 459,000,000 lire.

It would seem that the reduction in imports occurred in those commodities which are usually imported in the greatest quantity; in other words, raw food materials and metals. Thus during the first 11 months of 1920, the latest period for which detailed figures are available, imports of animals and animal products amounted to 780,000,000 lire as compared with 1,855,000,000 lire in the same period of 1919; imports of cereals, fruits, and vegetables showed for the same period a decrease of about 360,000,000 lire; while imports of metals and minerals and their products decreased similarly. These and other decreases were compensated to a certain extent by the increase in imports of other classes of goods of which cotton, wool, bristles and furs and their products, silk, timber, alcohol and oils, paints and dyes are the most important.

The commodities in which the greatest improvement was shown in the export trade between the years 1919 and 1920 are chemical goods, including medical and toilet supplies, hemp, flax and their products, cotton and cotton goods, vehicles, and vegetable foods. The export trade in silk decreased during the year.

The chief source from which Italy draws her imports is the United States. During 1920 she imported cotton to the value of 1,097,000,000 lire, grain to the value of 981,000,000 lire, mineral oils valued at 345,000,000 lire, and coal at 307,000,000 lire. Great Britain ranks second as the source from which she obtains her imports. Coal constitutes almost one-third of the value of her total imports from there. Argentina, France, and Germany rank next in order of importance as sources of Italian importation.

France, Switzerland, Great Britain, and United States are the chief countries to which Italy sends her commodities. In the case of France and Switzerland silk constitutes the largest proportion of the exports.

GERMANY.¹

Because of the Government's decision to allow an increase in coal and coke prices in Germany, the downward movement of the wholesale price index of the Frankfurter Zeitung was arrested during March. The "all commodities index," published by that newspaper, which had declined 14 per cent from December 1, 1920, to March 5, 1921, decreased only eight-tenths of 1 per cent from March 5 to April 2. Although the increase in coal prices was the determining factor in retarding the decline of the index number, the prices of cement, zinc, lead, nickel, and hides also increased during the month. Among the foodstuffs, the price of milk increased greatly in March, but other important foods, including eggs, corn, condensed milk, rice, wine, cocoa, coffee, peas, and beans, declined in price. There were also sharp price decreases among the textiles, but raw cotton rose slightly.

As the wholesale price index number of the Frankfurter Zeitung now stands, it contains the prices of 77 important commodities. The original computation is based upon prices in January, 1920, equal to 100, and on this basis 9.10 is the index number for the middle of 1914 and 130 for April 2, 1921. It is evident that if the index is recomputed, using 1914 as 100, the index number for January 1, 1920, will be 1,099 and for April 2, 1921, 1,429.

It seems clear from the various indexes prepared on the subject of retail prices in Germany

that there has been, since the first of the year, a slight decline in the prices paid by the consumer. Beside its general wholesale price index, the Frankfurter Zeitung compiles a wholesale and a retail price index for 10 foods in Frankfurt, using January, 1920, as 100. On March 1 the wholesale price index registered 105 and the retail price index 122. During the month both indexes declined, the decrease being almost 8 per cent in the case of the wholesale prices and almost 6 per cent in the case of retail prices. This index does not include any meat prices, however.

The most recent figures on the cost of subsistence prepared by the Berlin statistical office also show a slight decline in retail prices. The minimum cost of food for a growing person was estimated by that office to be 58.09 marks in February as compared with 61.23 marks in January, a decline of about 5 per cent.

The index number of total living costs in Germany, prepared by Dr. Elsas and published at intervals in the Frankfurter Zeitung, uses April, 1919, as 100, and stands at 297 on the first of March, 1921, a decline of 14 points, or 4.5 per cent, from the January 1 figure. On this basis the cost of living index on January 1, 1914, was 26.5. The following table shows the distribution of the different elements which go to make up Dr. Elsas's index:

COST OF LIVING IN FRANKFURT AM MAIN.

	Apr. 1, 1919.	Nov. 1, 1920.	Jan. 1, 1921.	Mar. 1, 1921.
Food.....	60	230.33	225.65	212.92
Clothing.....	17	27.97	26.21	24.59
Rent.....	8	9.60	9.60	10.00
Heat and light.....	5	17.95	18.10	18.10
Miscellaneous.....	10	29.86	31.35	31.35
Total.....	100	315.71	310.91	296.96

The comparative stability of rent costs shown in the above table is due to the fact that rents are regulated by the Government. The increase recorded from January 1 to March 1 is the result of a new regulation which requires tenants to make all necessary repairs.

Along with the decline in wholesale prices in Germany since December there has been an increase in the number of bankruptcies. During the war period, when the Government so largely controlled industry and prices were continually rising, the number of commercial failures was reduced almost to a minimum. During 1920 there was a slight increase in their number, but the increase in the first quarter of 1921 is much more marked, although it is still far below the prewar average. The number of bankruptcies from January to March, 1921,

¹ German price, trade, and financial statistics will be found on pp. 601, 603, 605, 609 of this issue of the BULLETIN.

was 728, as compared with 207 in the first quarter of 1920, and 2,428 in the first quarter of 1914.

What seems to be another consequence of the shift in the trend of business conditions is the comparatively small number of corporations which increased their capital stock during March. During 1920 and January and February, 1921, there was a general movement among German corporations to increase the amount of their capital issues in order to bring them more into accord with the present price level. However, the amount of the capital issues placed upon the German market in March was much smaller than in the first two months of the year. The increases in capital during the month amounted to only 531,000,000 marks, as compared with increases of 1,373,000,000 marks in February and 1,092,000,000 marks in January.

There seems to have been little change in the labor situation in Germany from February 1 to March 1 (the latest date for which figures are available). The German trade-unions report that of their membership of over 6,000,000 on the last of February, 4.7 per cent were out of employment as compared with 4.5 per cent the last of January and 4.1 per cent the last of December. On the other hand, the Government announces that the number of people receiving State aid on account of unemployment fell from 433,204 on February 1 to 428,033 on March 1, a decrease of a little more than 1 per cent, and the public employment agencies note a similar improvement. During January there were 210 applicants for every 100 positions available at these agencies, while during February there were only 206 applicants for every 100 positions open.

The public employment agencies tabulate applicants for positions and positions available by industries and thus furnish an interesting index as to the activity of the various industries in the country. During February there were more applicants for positions in relation to positions open in the textile industry than in any other, but the leather industry, the metal and machine trades, commerce, and the building trades also furnished a great many unemployed. It is interesting to note that the number of women applicants for every 100 positions open amounted to only 133 during February, while the number of men for every 100 positions reached 251. In the case of a few industries, inquiries for workers exceeded applicants for positions. In mining there were only 92 men applying for each 100 positions; in agriculture only 46 women applying for each 100 openings; and in domestic service only 83 women responded to each 100 inquiries. The

States where the greatest amount of unemployment occurred during February were Saxony, Hamburg, and Lubeck, although unemployment was also very great in Prussia. The following table gives a survey of the work of the public employment agencies during February:

ACTIVITY OF PUBLIC EMPLOYMENT AGENCIES IN GERMANY, FEBRUARY, 1921.

By industries.	Men.			Women.		
	Number seeking work.	Number of positions open.	Number of applicants for each 100 positions open.	Number seeking work.	Number of positions open.	Number of applicants for each 100 positions open.
Agriculture.....	47,713	30,594	156	8,843	19,164	46
Mining, etc.....	15,084	16,344	92	110	24	
Stone and earth industry.....	6,960	3,273	213			
Metal and machine industry.....	101,649	28,491	357	13,031	4,239	307
Chemical industry.....	2,255	1,184	190	1,111	475	234
Textile industry.....	10,758	2,133	503	18,466	4,958	372
Paper industry.....	3,168	950	333	3,921	2,192	179
Leather industry.....	8,189	1,685	486	1,141	598	191
Woodworking.....	22,274	7,929	281	1,122	506	222
Food industries.....	27,842	8,366	333	5,846	3,537	165
Clothing and cleaning trades.....	22,385	8,671	258	18,101	9,621	188
Building.....	64,849	19,105	339			
Transformation industries.....	9,224	4,512	204	1,732	1,481	117
Industries involving artistic work.....	1,446	192				
Machinists, etc., industries not specified.....	65,655	18,855	348	46,939	9,991	470
Commerce.....	24,195	6,148	394	12,660	5,625	225
Entertainment.....	39,314	28,042	140	16,660	16,420	101
Miscellaneous wage work and household service.....	237,018	79,868	297	87,669	105,471	83
Casual labor.....	41,507	26,558	156	4,748	2,431	195
Apprentices in all industries.....	20,627	14,597	141	11,092	4,271	260
Without professional groupings.....	824	31		1,171	502	
Total.....	772,936	307,533	251	254,303	191,506	133
Men and women together.....	1,027,239	499,039	206			

It is quite generally admitted that one reason unemployment in Germany is not more widespread at the present time is that the Government continues to carry so large a number of employees on its pay rolls. The Reichstag commissioner, who was appointed to eliminate extravagance in Government departments, has resigned his position, and a new method for reducing the number of people employed by the Government has now been inaugurated. However, it remains to be seen how the new scheme will work, and the new budget contemplates an increase rather than a decrease in so-called "ordinary expenditure."

The budget for the year ending March 31, 1922, is now in the hands of the Reichstag. It compares as follows with the estimated

expenditures for the year ending March 31, 1921:

ESTIMATED GERMAN GOVERNMENT EXPENDITURES.

[In millions of marks.]

	Fiscal year 1920.	Fiscal year 1921.
Ordinary budget.....	41,600	47,000
Extraordinary budget.....	62,300	40,500
Railway deficit.....	19,200	11,700
Postal deficit.....		2,000
Total.....	123,000	101,200

It is expected that taxes already in force will produce 43,800,000,000 marks this year and that new taxes will be enacted and old taxes increased to meet the remaining 3,200,000,000 marks of the ordinary budget. Theoretically the budget will balance before the year is over. Of the 40,500,000,000 marks to be spent on the extraordinary budget 10,600,000,000 marks will be met by revenue (including 7,800,000,000 marks from the Reichsnotopfer, which was originally designed to reduce the outstanding debt) and 29,900,000,000 marks by loans. Assuming that the "ordinary budget" receipts and expenditures will balance before the year is over, the estimated deficit for the fiscal year 1921 amounts to 43,600,000,000 marks, which is smaller than the deficit for the fiscal year 1920 by about 38,000,000,000 marks.

The Leipzig spring fair opened on March 16, and by the 7th the attendance was placed at 90,000, including buyers from England, America, Sweden, Czecho-Slovakia, Bulgaria, and Roumania. The textile display and the exhibits of mechanical apparatus and electrical machines attracted the greatest number of visitors. In general, however, German foreign trade was in a chaotic condition during March. The imposition of the 50 per cent import duty on German goods by England, France, and Belgium caused the cancellation of contracts with individuals in those countries by German merchants and further contracts were withheld until the reparations question should be settled.

It is impossible to form any very definite ideas in regard to German foreign trade in 1920. A recent number of the *Frankfurter Zeitung* quotes figures of the German Government's statistical office on the total value of German exports, January through September, 1920. This total value amounts to 47,170,000,000 marks, of which 20.9 per cent went to the Netherlands, 9 per cent to Switzerland, 5.7 per cent to Great Britain, 3.1 per

cent to France, 3.1 per cent to Belgium, and 2.9 per cent to Italy. The article in question does not quote figures on imports for this same period, nor does it state whether exports shipped on reparations account are included in the export figures just quoted. For this reason it is impossible to draw any conclusion as to Germany's balance of trade from this statement.

The March 31 statement of the Reichsbank shows an increase of 1,990,000,000 marks in the note circulation of the bank as compared with the end of February, and a decrease of 587,000,000 marks in the Darlehenskassenscheine in circulation. There was practically no change in the gold reserve held by the bank.

SWEDEN.¹

Reports from Sweden indicate that depression in industry there is as serious as in other countries whose development is more exclusively industrial. Production of manufactured commodities in all lines has been heavily reduced, unemployment is growing, prices are on the decline, and the export trade has fallen to one-third of its value six months ago.

Although there was a slight slackening of the rapidity of recession, wholesale prices continued to decline in March. The all commodities index number of the *Svensk Handelstidning*, computed on the basis of prices in 1913=100, dropped from 250 in February to 237 in March, a decrease of 5 per cent as compared with a decrease of 6 per cent in the preceding month. Practically no change occurred in the wood-pulp index, which stands at the high figure of 510 and still far exceeds the index numbers for other commodity groups. Appreciable declines were registered in the index numbers for building materials, coal, and oils. A notable feature was the drop in the price of hides and leather to 15 per cent below the prewar level. The retail price index, computed on the basis of prices in July, 1914=100, declined from 262 in February to 253 in March, a fall of approximately 3 per cent.

The paper-pulp industry, second only to lumber in importance in Sweden's national economy, is affected by the worst depression in its history. In February only 6,300 dry-weight tons of pulp were exported as compared with 210,000 tons in 1913. The pulp market continues absolutely stagnant. To prevent accumulation of stocks, the Norwegian Mechanical Wood Pulp Association approached the Swedish producers with a proposal for a joint stoppage of all mills for a period of five

¹Swedish price, trade, and financial statistics will be found on pp. 601, 603, 605, 607, 610 of this issue of the BULLETIN.

weeks, to be followed by a 50 per cent curtailment in production, until the paper factories again enter the market. Although the Norwegian grinding mills have already decided upon a complete shutdown from April 9 to May 15, no similar action has yet been taken by the Swedish producers.

The strike in the chemical wood-pulp industry, which began early in February, was officially settled at the end of March by the workers accepting a 15 per cent reduction in wages. It is estimated by *Affärsvärlden* that the reduction in pulp output up to April 6, on account of the strike and the voluntary closing of seven other plants lacking orders, amounted to 77,000 tons of sulphite and 23,000 tons of sulphate pulp, or together 100,000 tons.

A survey of 79 representative industrial enterprises just completed by the Skandinaviska Kreditaktiebolaget discloses the fact that only about one-fourth of the reporting establishments are operating at full capacity or at a capacity reduced by 25 per cent or less. Among those continuing full operations are special enterprises whose products are protected entirely or in part by State monopoly. One-fourth of the total returns show a reduction in operations of between 25 and 50 per cent. Of the reporting mills, 28 per cent have retrenched between 50 and 75 per cent of normal capacity, while the operations of the remaining 24 per cent of the mills have been reduced more than 75 per cent. In addition there is a general paucity of orders among the reporting industries. Only about 23 per cent have their order lists filled for three months in advance, while 40 per cent are on a hand-to-mouth basis of operation, with orders booked ahead for a maximum of only two weeks. Moreover, 40 per cent of the mills covered in the inquiry report a reduction of working schedule to six-hour shifts and less.

According to the labor department the Orebro shoe factories are running only 30 to 35 hours a week, while the mechanical and electrical shops have shortened their schedules 12 per cent.

Unemployment, as a result of the unprecedented industrial depression, has become critical. An official labor census taken in February by the Swedish labor exchange registers between 55,000 and 60,000 unemployed. For labor as a whole there were 301 applications per 100 vacancies, as compared with 133 in February, 1913. The increase over the number for January of this year was approximately 22 per cent. Only in domestic service, agriculture, and the special municipal and State enterprises of an emergency nature was the labor demand greater or nearly equal

to the supply. In industrial lines the depression was greatest in the metal and mechanical trades, which had no less than 6,998 applicants for every 100 occupational openings. In the garment trades the unemployed numbered 1,426 per 100 vacancies. The building trade was the only industrial line showing any appreciable labor demand, the ratio being about 250 applicants per 100 openings.

Among the organized trade-unions reporting a total enrollment of 154,707 members, 20.2 per cent were unemployed on January 31, 1921.

The gravity of the unemployment problem led the Government labor commission to submit a bill to the Riksdag in March for an additional grant of 11,000,000 kronor, to be increased eventually to 28,000,000 kronor. The object of this subvention is to provide special emergency employment on State railroads and public works and to alleviate suffering by means of rent allowances and per diem subsidies to the unemployed. It is expected that 10,000 of the unemployed will be engaged for work on State and municipal enterprises from April 1 to the end of the year.

The depression is reflected in a falling off of both railroad and maritime freight traffic. According to a recent report of the State railways, freight traffic in January declined to 608,000 tons, which compares with a monthly freight average in 1913 of 830,000 tons. Idle ocean tonnage increased over 178 per cent in January. On December 31, 1920, there were 63 idle Swedish vessels, aggregating a total of 56,000 gross tons. At the end of January 151 vessels, with a combined gross tonnage of 156,000 tons, were laid up.

Exports in February were valued at 88,700,000 kronor and imports at 116,200,000 kronor, a decline from the preceding month of about 3 and 5 per cent, respectively. Compared with the precipitous fall in January of 47 per cent for exports and 38 per cent for imports, the February percentage of decline shows a slowing up in the rate of recession.

The volume of wood-pulp exports declined in February almost 50 per cent and that of unplanned boards, planks, etc., about 37 per cent. Iron ore showed a quantitative gain of about 18 per cent.

Imports of coal, mineral oils, cotton, and wheat still continue far below the amount imported in the corresponding month in 1913.

In March, the note circulation of the Riksbank reached approximately 717,000,000 kronor, an increase of 29,300,000 kronor, or slightly more than 4 per cent compared with the February figure. Gold holdings amounted to 281,700,000 kronor, showing only a nominal decline from the figures for the two preceding

months. As the special parliamentary enactment allowing the Riksbank a temporary suspension of its gold redeeming obligation expired on March 31, a new proposition was introduced into the Riksdag for a continuation of the measure until March 1, 1922. The bill proposed (1) a suspension for a fixed period of the Riksbank's obligation to purchase gold in bulk; (2) a temporary discontinuation of the obligation of the mint to pay gold coin for gold bars tendered; (3) formal authorization for the Riksbank to issue notes to an amount of 125,000,000 kronor above the amount stipulated by the State banking laws.

BRITISH FINANCE DURING THE WAR.¹

In the following article an effort has been made to present statistically some of the salient facts regarding British war finance; the methods used by the treasury in raising money; the effect of these methods upon the Bank of England and the joint-stock banks; and the present financial situation of the Government. The basis for the study is the statistics published by the treasury each quarter regarding Government receipts and expenditures, those of the Bank of England published each week showing the condition of the bank, and similar statements of the joint-stock banks published semiannually. The figures compiled by the *Economist* each week showing the outstanding debt have also been used. The literature on the subject has been covered, but the conclusions reached are based in the main upon the statistical showing of the different items.

PRESENT CONDITIONS.

Before tracing in some detail financial conditions in England during the war, it may be worth while to give a brief summary of present conditions as regards public debt. By the end of 1920, England had made very considerable strides away from war-time conditions. The foreign debt had been reduced by £193,000,000, leaving, however, £1,164,000,000 in foreign obligations still outstanding. These obligations are held for the most part in the United States, approximately 75 per cent by the United States Government. Of importance in this same connection is the fact that British foreign trade position has improved in a remarkable fashion, the board of trade estimating the favorable balance (taking into account invisible exports) as £165,000,000 for the year

1920 as compared with an unfavorable balance of £149,000,000 during the preceding year.

With regard to short-term indebtedness, on the other hand, conditions appear to be less favorable than a year ago or two years ago. Treasury bills outstanding at the end of 1920 were slightly less than at the end of 1919, but the total floating debt was some £59,000,000 greater. This increase is in the form of temporary advances from the Bank of England and from public departments, and as these advances result in an increase in the balances of the joint stock banks at the Bank of England, they may be used as the basis for further credit expansion on the part of the private banks. Comparing the situation at the end of 1920 and the end of 1919, statistically, we find that the foreign debt has been decreased £193,000,000, treasury bills outstanding £5,000,000, and the total debt £247,000,000. Temporary advances have increased £63,000,000.

Most of this article is concerned with the borrowing methods of the British treasury, and the effect of these measures upon the Bank of England and the discount market. The taxation policy of the Government is of primary importance in this connection not only as forming the basis upon which estimates of borrowing are made, but also because receipts from revenue are an important item in money-market considerations, influencing treasury-bill sales especially. For that reason a brief résumé is given of the more important taxation provisions of the war period and since.

REVENUE FROM TAXATION.

Revenue from taxation has been constantly increasing since the beginning of the war, partly because of increasingly heavy rates in the case of both direct and indirect taxes and partly because of increases in the size of the taxable bases. In the fall of 1914 income tax rates were increased and in 1915 practically doubled. At the same time the duty on excess-profits was imposed at the rate of 50 per cent. In 1916 both of these taxes were again increased and indirect tax rates also became much heavier. In 1917 the income tax was not changed, but the duty on excess war profits became 80 per cent. No further increase was made in the excess-profits duty during the war, and in 1919 it was cut to 40 per cent. In 1920 it was again increased, however, this time to 60 per cent, but it is to be entirely eliminated in the next fiscal year. Revenue from these two types of taxes are presented in the following table in their ratio to total revenue.

¹ Prepared under the direction of K. H. Snodgrass, Division of Analysis and Research.

Revenue from property and income tax and from excess profits duty.

[Expressed in millions of pounds sterling.]

Year ending—	Property and income tax (including super tax).	Per cent of total.	Excess profits, duty, etc.	Per cent of total.	Total revenue.
Mar. 31:					
1915.....	69	30	.....	.....	227
1916.....	128	38	.....	.....	337
1917.....	205	36	140	24	573
1918.....	240	34	220	31	707
1919.....	291	33	285	32	889
1920.....	359	27	290	22	1,340
9 months ending Dec. 31, 1920.....	157	18	156	18	889

FINANCING IMPORTS.

Between July, 1914, and the spring of 1917, when the United States entered the war, the two leading problems in British finance were (1) the financing of imports and (2) the raising of domestic funds in the form of long and short term obligations. As is well known, a large proportion of war supplies, munitions, food, and clothing were procured from the United States and other foreign countries. The problem of arranging for the payment of these goods was, therefore, a matter of primary importance, especially in the case of England because upon her devolved the responsibility of providing credits for the other Allies as well. Payment theoretically could be effected by means of four main channels—(1) export of goods, (2) export of gold, (3) sale of foreign securities, (4) foreign loans—and as a matter of fact all four of these channels were used. During this period the British domestic industrial plant was so completely occupied with war orders that there was very little capacity for production of goods for export. For this reason exports were materially reduced from prewar levels, and this method of paying for imports had to be very largely supplemented by other means. The shipment of gold was not feasible as an exclusive method of supplementing exports of goods, partly because the reserve held in England would have been insufficient for this purpose, partly because it was needed as a banking reserve, and also because of the dangers of transportation arising from submarine attacks. It was therefore necessary to make payments also by the sale abroad of foreign securities or properties held by British investors, and by direct loans from foreigners, collateralized by foreign securities or else uncollateralized.

It was not necessary to resort to the sale of foreign securities immediately upon the dec-

laration of war, as unusually large balances were held abroad by British houses at that time. In fact, throughout the latter half of 1914 the American exchange was favorable to England, and it was not until 1915 that sterling began seriously to depreciate. Payments were then made in the United States by the transfer of gold held in Canada (approximately £18,000,000 were paid to the United States by England during 1915), but purchases were of such magnitude that this source soon became insufficient, and by the end of 1915 it became necessary for the British treasury definitely to "peg" the rate of exchange. As early as July, 1915, the Bank of England had begun to purchase American securities and sell them in New York with a view to supporting the exchanges, and in December the treasury began to purchase and borrow securities for the same purpose. In the meantime the Anglo-French loan had been floated in the fall of 1915 with a view to providing funds in the United States for American purchases and transfers of gold continued to be made. Throughout the first half of 1916 the sterling rate was kept very steady at about \$4.76 by the sale of securities, but by the middle of the year the supply of foreign securities held by the treasury had been heavily drawn upon. In order, therefore, to force all those who held American securities to place them at the disposal of the treasury, a special tax was placed on such securities, with the result that a considerable number of them which formerly had been withheld came into the possession of the Government. By the end of 1916 foreign securities to the value of £466,000,000 had been obtained by the British treasury, £118,000,000 by purchase and £348,000,000 on deposit. In order that payments might be made in foreign countries other than the United States, similar operations were undertaken with other foreign securities, but not on the same scale as in the case of the United States. The latter half of 1916 was a period of distinct strain, the effort to keep the pound at approximately \$4.76 necessitating direct loans in the United States uncollateralized by American securities as well as collateralized loans. With the entrance of the United States into the war this phase of the problem was somewhat relieved, since direct loans were made by the United States Treasury to the British Government.

With the end of the war Government purchases abroad ceased for the most part, and consequently support of the exchanges was discontinued in March, 1919. By this time holdings of American securities by private investors had been heavily depleted (the treasury had purchased securities to the value of £178,-

000,000 for re-sale in New York); gold was needed for the domestic reserve and its export therefore prohibited; exports of merchandise were still far below normal; and American shipping had curtailed the demand here for British tonnage. As a natural result of these factors, with the removal of the support furnished the exchanges by Government loans, sterling depreciated heavily in the New York market. Although the rate of exchange on New York is far more favorable to England at the present time than it has been during a large part of 1920, it still shows (in April, 1921) a depreciation of about 20 per cent from par.

As has been pointed out already, after the entry of the United States into the war, purchases here of munitions and other supplies were paid for by advances of the United States Government to the various foreign Governments. In the case of England receipts from foreign loans reached very large totals, especially in 1917, 1918, and 1919. Receipts from "other debt," the item in the treasury statement referring to foreign loans, amounted to the following between 1916 and 1920. Expenditures for the repayment of "other debt" are also included.

"Other" or foreign debt.

Fiscal year ending—	Created during year.	Reduced during year.
Mar. 31:		
1916.....	£9,000,000	
1917.....	328,000,000	£21,000,000
1918.....	709,000,000	82,000,000
1919.....	539,000,000	242,000,000
1920.....	196,000,000	256,000,000

Source: Finance Accounts—Great Britain.

During the same time, as was mentioned above, England was making large advances both to her allies and to the dominions. By 1918 the dominions had begun to pay these back, but in the case of the Allies the amount repaid up to the present time is practically negligible.

Advances to allies and dominions.

	Allies.	Dominions.
August, 1914-Mar. 31, 1916.....	£288,000,000	£88,000,000
Fiscal year 1916-17.....	539,000,000	59,000,000
Fiscal year 1917-18.....	505,000,000	47,000,000
Fiscal year 1918-19.....	236,000,000	¹ —23,000,000
Fiscal year 1919-20.....	163,000,000	¹ —52,000,000

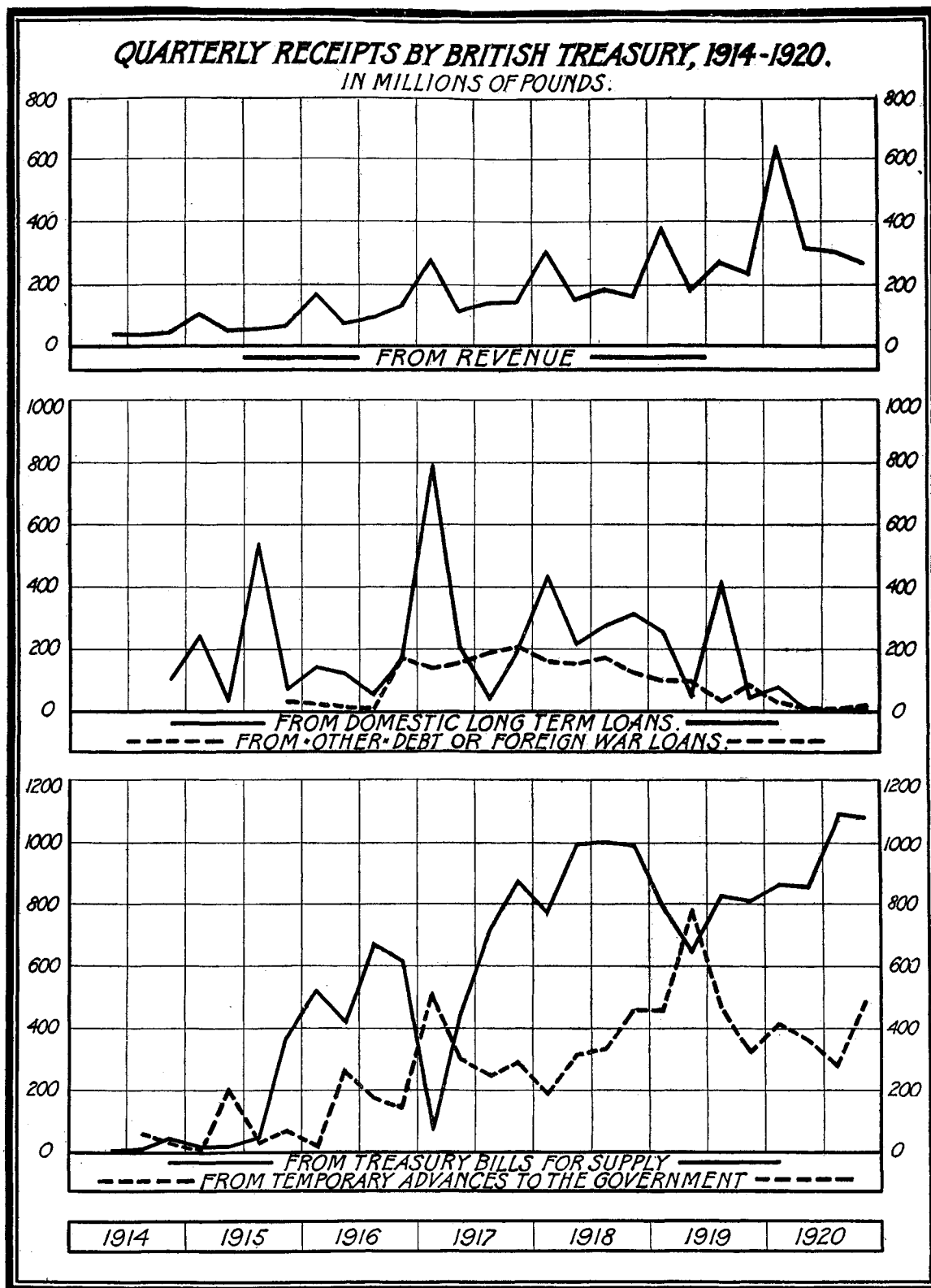
¹ Repayments.

LONG-TERM BORROWING.

Prior to the war Government funds had been borrowed by three methods—the funded debt, the fairly short-term exchequer bond, and the treasury bill. The funded debt carried with it no obligation for repayment—was in fact a permanent annuity; the exchequer bond was usually of 5 years' duration, and treasury bills ran from 3 to 12 months and were used to provide for temporary Government deficiencies. Since 1914 the first form of borrowing mentioned above has been entirely eliminated; the exchequer bond (both 3 and 5 year) has been used and supplemented by the national war bond of 5, 7, and 10 years' duration. Treasury bills have assumed a rôle of enormous importance, those outstanding at one time frequently exceeding the billion pound mark, while before the war they seldom exceeded £20,000,000.

Prior to the entrance of the United States into the war three large war loans were placed, the 3½ per cent loan of November, 1914, the 4½ per cent of June, 1915, and the 4 per cent and 5 per cent of January, 1917. The last three of these were long-term bonds running up to 25 and 30 years, the first ran from 11 to 14 years. In the intervals between the placing of these long-term loans, relatively short-term exchequer bonds were offered to the public first in March, 1915, with the offering of 3 per cent bonds maturing in 1920, then in December of the same year when they were put on continuous day-to-day sale until December, 1916, when they were withdrawn to make room for the placing of the big loan of January, 1917. After this drive was over exchequer bonds were again placed on the market but were soon superseded by the national war bond.

After the entrance of the United States into the war, and since then, the British Government has continued to place its long-term war bonds in the hands of private investors; but returns to the Government from this source have been in a diminishing proportion to total receipts. At the same time the raising of funds by the sale of the short-term treasury bills and by advances on ways and means has increased markedly. In October, 1917, a new form of borrowing was introduced with the day-to-day unlimited sale of the first series of national war bonds. Four series of these were placed between October, 1917, and June, 1919, running for 5, 7, and 10 years. Great care was taken to make these bonds attractive to the investor; they might be used in payment for excess profits duties, death duties, etc.; and provisions were made



for their conversion into earlier issues. These bonds were on sale continuously from day to day and altogether brought into the treasury £1,669,000,000. In June, 1919, seven months after the war was over, the funding and victory loans were offered to the public on very attractive terms. The returns from these loans were disappointing, however, totaling only £476,000,000.

Receipts from the sale of long-term, exchequer, and national war bonds during the entire war period, and since, are summarized in the following table, according to issues:

Receipts from loans.¹

Issue.	Date of issue.	Cash credited to the exchequer.
3½ per cent war loan, 1925-1928...	Nov., 1914.....	£332,000,000
3 per cent exchequer bonds, 1920...	Mar., 1915.....	48,000,000
4½ per cent war loan, 1925-1945...	June-July, 1915.....	592,000,000
5 per cent exchequer bonds, 1920...	Dec., 1915-June, 1916...	238,000,000
5 per cent exchequer bonds, 1919...	June, 1916-Sept., 1916...	34,000,000
5 per cent exchequer bonds, 1921...	June, 1916-Oct., 1916...	62,000,000
6 per cent exchequer bonds, 1920...	Oct., 1916-Dec., 1916...	161,000,000
5½ per cent exchequer bonds, 1925...	Mar., 1920.....	67,000,000
5 per cent war loan, 1929-1947...	Jan.-Feb., 1917.....	941,000,000
4 per cent war loan, 1929-1942...	.....do.....	82,000,000
5 per cent exchequer bonds, 1922...	Apr.-Sept., 1917.....	616,000,000
National war bonds:		
First series.....	Oct., 1917-Mar., 1918...	483,000,000
Second series.....	Apr.-Sept., 1918.....	494,000,000
Third series.....	Oct., 1918-Jan., 1919...	76,000,000
Fourth series.....	Feb.-May, 1919.....	231,000,000
4 per cent funding loan, 1960-1990	June-July, 1919.....	245,000,000
4 per cent victory bonds.....	.....do.....	18,000,000
5 per cent treasury bonds, 1935...	June, 1920.....	

SHORT-TERM BORROWING.

Temporary borrowing was of some importance in the early years of the war, but was not utilized on anything like the same scale at that time as in more recent years. The total funds obtained from long-term borrowing prior to the spring of 1917 were only a little less than those obtained since. The reverse is the case with the short-term Government paper, of which there was issued between four and five times as much after the entry of the United States into the war as before. Short-term borrowing in England takes two forms—(1) the sale of treasury bills and (2) direct advances to the treasury on so-called "ways and means." Advances are made either by the Bank of England or by other departments. These latter advances are reported unofficially as probably drawn largely from the currency notes fund. Treasury bills are mainly of 3 months' duration, although they have been issued for 6, 9, and 12 months also. During the greater part of the war they were on continuous sale "over the counter;" prior to April, 1915, and for brief

periods later they were sold in fixed amounts at specified dates.

An examination of the charts will make clear the function of the treasury bill in war-time finance. When funds were being used for the payment of taxes or in the purchase of long-term bonds, sales of treasury bills were apt to fall off. If temporary funds were needed at such periods in addition to those received from taxes and bonds the Government was forced to borrow from the bank or other departments. Thus in the first quarter of 1917 £782,000,000 were received by the treasury by the sale of war bonds. At this time a large portion of the treasury bills outstanding were converted into long-term bonds, and the day-to-day sale of the bills was suspended, resulting in a great reduction in this item. In order to obtain temporary funds it was necessary, therefore, to borrow heavily on ways and means. This in spite of the fact that revenue from taxes was coming in more rapidly than at any other time of the year.

Due to the fact that the funding and victory loans of June, 1919, provided only £476,000,000 cash and that no alternative funding operation has been put forward by the Government, the quantity of treasury bills outstanding has not been materially reduced at any time during the last 18 months.²

DISCOUNT RATES.

The placing of the various types of long and short term loans had a very important effect upon discount rates and banking conditions in general. In fact, the rate on treasury bills may be said to have been the controlling factor in the money market after April, 1915. The Bank of England rate was kept in harmony with the treasury bill rate.

The first long-term loan was placed in November, 1914, at 3½ per cent (issue price 95), when the plethora of money resulting from the rediscounting of premortgage bills at the Bank of England began to be felt. The Bank of England discount rate at that time was 5 per cent, but for loans collateralized by these war bonds it was 1 per cent lower. Banks are reported to have subscribed for approximately £100,000,000 of the bonds. The second big loan, that of June, 1915, was placed at par, interest 4½ per cent, subject to tax. This loan was placed just after a period of very low rates, when effort was being made to obtain control of the market by the fixing of the treasury bill rate at a high enough point to attract funds; 4½ per cent furnished, therefore, a very good offer.

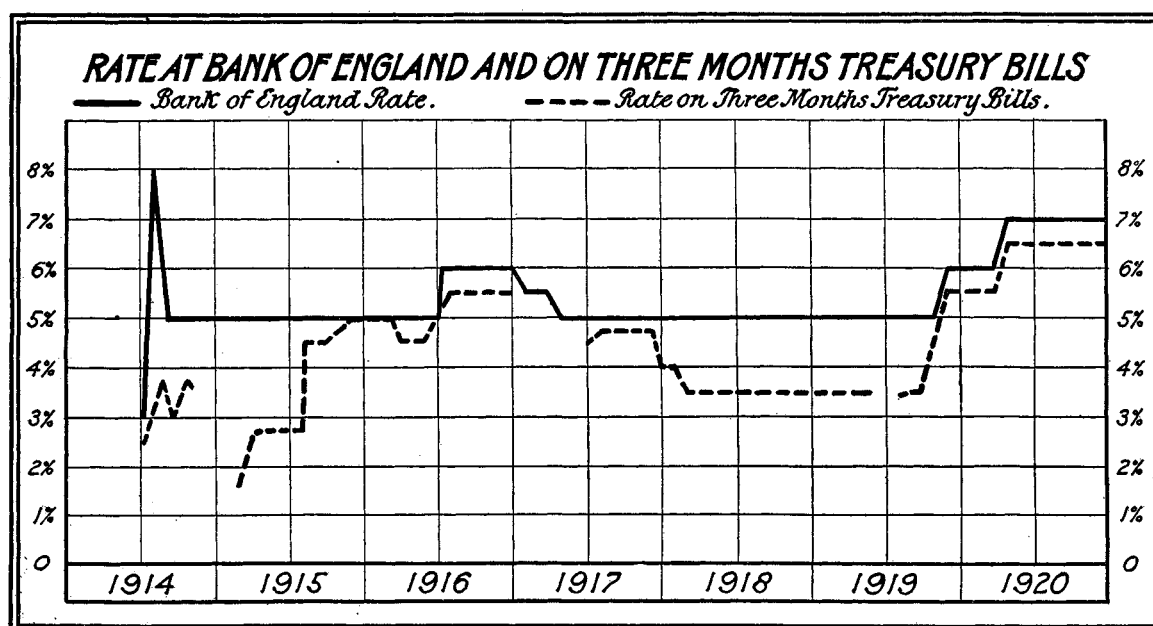
¹ Based on report of chief cashier's office, Bank of England, Dec. 15, 1919, and quarterly treasury statements since then.

² See p. 554 for Government's offer of Apr. 25, for funding national war bonds.

Bank of England rate for loans collateralized by this issue was one-half per cent below the official rate. Of the £592,000,000 raised by this loan £150,000,000-£200,000,000 are reported to have been taken by the banks. At about the time when the third big loan was placed in January, 1917, the bank rate was lowered from 6 to 5½ per cent and the joint stock banks made loans to subscribers at 5 per cent.

There were five changes in the rate of discount at the Bank of England in the course of a few weeks at the time of the outbreak of war, three changes between that time and the entrance of the United States into the war, but no changes whatever between April, 1917, and November 1919. The traditional policy of

August 4, and in September was authorized to provide funds for acceptors to meet their bills when they fell due. This privilege of rediscount was very generally utilized by the accepting houses, but the funds so obtained were not reinvested in bills. At the same time the immediate effect of the outbreak of war was to slacken trade, and payment for transactions between the Allies did not take the form of commercial bills. Taken together, these factors made for a surplus of funds and a dearth of bills, with the result that rates on 3 months' bank bills were as low as 1½ per cent in February, 1915, while the rate at the Bank of England, as mentioned above, was 5 per cent. In March,



the Bank of England of raising discount rates to attract foreign funds was followed in the earlier years of the war. For the same purpose, beginning in late 1917, a higher rate was paid by the Bank of England for foreign balances than for domestic. During July, 1914, the bank rate rose from 3 to 4 to 8 per cent. On August 1 it was raised to 10 per cent, but was quickly reduced to 6 and then to 5 per cent, at which point it remained until July, 1916. Especially during the early months of 1915 this rate was entirely ineffective for the control of domestic credits and it was not until treasury bills were sold day to day that the period of abnormal ease was terminated. In August, 1914, the Bank of England had been authorized to discount all domestic and foreign bills accepted before

1915, in an effort to correct this condition, the Bank of England began borrowing funds from the joint-stock banks (thus limiting their supply for other use) and the treasury issued more bills than it actually needed (in order to furnish a form of investment for surplus funds).

Thus, rates were again pretty well under control. The next change in the bank's discount rate was in July, 1916, when the rate was raised to 6 per cent. At the same time rates on treasury bills were advanced and the Bank of England offered 5 per cent to the clearing banks for their surplus balances. The latter policy is of importance as it marks a departure from custom, and by this means large additional funds were obtained for the use of the Government. The rate at the Bank of

England was then lowered to $5\frac{1}{2}$ per cent, coincident with the placing of the third big war loan (and the sale of treasury bills was suspended), and upon the entry of the United States into the war was again lowered to 5 per cent, at which point it remained until November, 1919. During this period every effort was made to keep rates low in order that domestic funds might be raised as cheaply as possible. Treasury bills were placed at $4\frac{1}{2}$ per cent during part of this period and later at $3\frac{1}{2}$ per cent, and the rate on bank deposits was lowered to 3 per cent. Meanwhile (end of 1917) a preferential rate had been placed on foreign balances deposited with the Bank of England.

In November, 1919, following an increase in the rate on treasury bills from $3\frac{1}{2}$ to $4\frac{1}{2}$ per cent in the preceding month, the bank rate was raised to 6 per cent and treasury bills to $5\frac{1}{2}$ per cent. At about the same time the preferential rate on foreign balances was removed. This may be said to mark the close of the period of preferential rates to the Government. Since then bank rate has been raised once and the treasury bill rate twice, so that they now stand at 7 per cent and $6\frac{1}{2}$ per cent, respectively.¹

EFFECT OF WAR FINANCE ON THE BANK OF ENGLAND.

Discussion up to the present point has been for the most part concerned with the operations of the treasury. These operations are, however, inextricably bound up with the operations of the Bank of England, which in turn are closely related to those of the joint-stock banks. Since the policy of the treasury was, however, the decisive factor in the situation during the war, and in a large measure continues to be so, there is logic in giving a fairly complete résumé of treasury activities before approaching those of the bank.

In ordinary times the direct concern of the Bank of England is the protection of its gold reserve, since this fund serves as a reserve for the entire English banking system. In 1914 it was not difficult to attract gold from abroad, because England was still the creditor of most of the nations of the world, but in 1915 the problem of protecting the gold reserve became more and more difficult because of the depreciation in exchange which accompanied the large purchases of war materials in foreign countries. In the one year the Bank of England lost £18,000,000 in coin and bullion. During 1916 and 1917 the movement

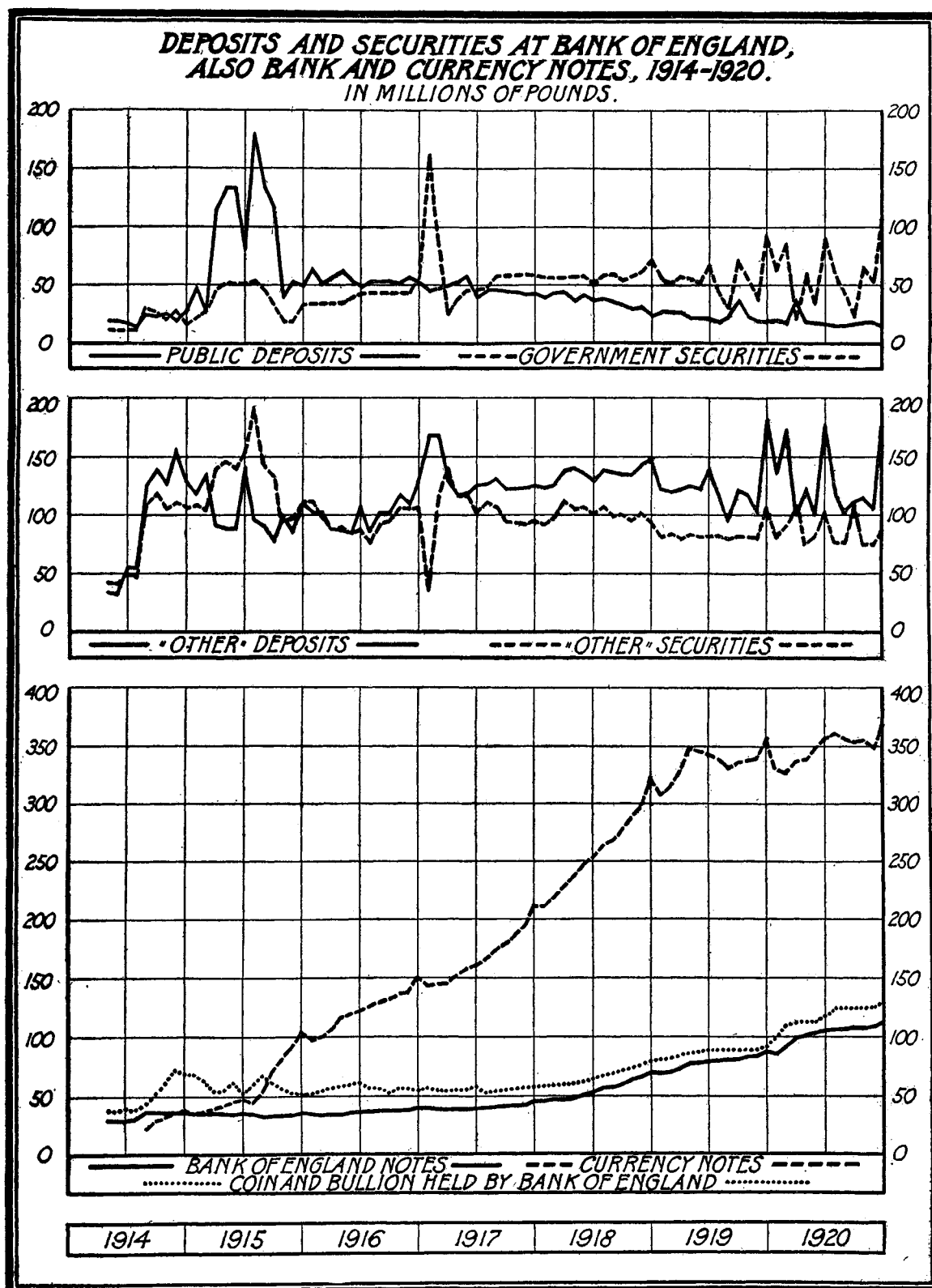
of gold was not considerable, and in the middle of 1918, the bank began to accumulate gold, first, from the Cape, later from the joint-stock banks and the Scottish banks and recently in small measure from abroad.

In spite of the fact that the present gold reserve of the bank is over three times as large as that of July, 1914, the ratio of reserves to liabilities is far less. This is due to the very great expansion which has occurred in the private deposits with the bank. The chart on page 570 shows in some detail the movement of "other deposits" and "other securities" of the Bank of England since July, 1914, as well as the fluctuations in "Government securities" and "public deposits."

"Other deposits" are perhaps the best indication of the size of the balances carried by the joint-stock banks at the Bank of England. In normal times an increase in this item indicates ease in the money market, but in times of crisis it is more apt to mean that the joint-stock banks have called in their outside loans and thus built up their balances at the Bank of England. The item "other securities" should move in more or less the same fashion as "other deposits." The regular periodic fluctuations which are to be expected in these items are in the main an increase at the end of each quarter when Government dividends are disbursed, a decrease during the first three months of the year when Government receipts are heaviest, an increase at the end of the year and the half-year providing for settlements at these dates.

During the war these normal fluctuations were to some extent concealed by other more potent factors, but as a rule their influence can be traced. In general, also, the two items ("other deposits" and "other securities") fluctuate similarly, although the reverse was strikingly the case in March, 1915, and again in January, 1917. The abnormal amount of "other securities" in 1914 and the first half of 1915 is accounted for by the fact, already mentioned, that the Bank of England was forced to absorb enormous quantities of bills which could not otherwise be liquidated immediately following the outbreak of war. At the same time "other deposits" were being lowered from the high level of the second half of 1914 as the financial strain of the period was relieved and ordinary business requirements were being met. During the second half of 1915 the abnormal supply of bills was eliminated; and, judging from the chart, approximately normal war conditions obtained by the first of 1916. In January, 1917, however, all financial arrangements were again set askew by the floating of a great war loan. Sales of

¹ On March 11 the rate on treasury bills was lowered to 6 per cent and on April 27 to $5\frac{1}{2}$ per cent. The discount rate at the Bank of England was lowered from 7 to $6\frac{1}{2}$ per cent on April 28.



treasury bills were suspended at that time, thus releasing the funds normally invested there for investment in the war loan and commercial bills. Deposits of the joint-stock banks at the Bank of England were greatly increased but "other securities" were reduced.¹ Between 1917 and 1919 there were no extreme fluctuations in these items, but in 1920 the month-to-month changes have been very large, end-of-year and half-year payments apparently causing more than usual dislocation.

"Public securities" presumably include the bank's holdings of Government bonds, treasury bills, and advances on ways and means, while the "public deposits" account, as the name implies, is the current account of the treasury. In normal times the latter account may be expected to fluctuate inversely to the private deposit account, since when funds are disbursed by the Government they eventually reach the banks and are thus reflected in the private deposit account. During the war, however, this relationship is not always apparent. The increase in "Government securities" held by the bank in 1915 was due apparently to the placing of treasury bills there. These must have been repaid by the fall of the year and since then, it would seem, have not been placed there in large blocks. The phenomenal increase in this item in January, 1917, was probably due to temporary borrowing by the treasury on ways and means. As was the case with "other securities," between that time and until well into 1919 there were no excessive fluctuations in this item. In the last 18 months, however, the fluctuations have been very great, probably because of temporary borrowing on ways and means. During 1915 the Government had large surplus funds on deposit at the bank, but since that time the deposits have been steadily on the decline and at present are not much larger than before the war.

Information regarding the operations of the joint-stock banks is too scanty to furnish a basis for a thoroughgoing study of the effect of war finance upon them. It is clear, however, from the semiannual statements issued by them, that their holdings of Government securities increased far more rapidly between 1914 and 1916 and again in 1919 and 1920 than in the intervening years. During the early years of the war the banks apparently took large blocks of long-term war bonds, while

lately their Government holdings seem to have been mainly in the form of treasury bills. In the intervening years because of the interest paid on deposits the banks were encouraged to place their surplus balances with the Bank of England and to give considerable aid to private investors rather than to subscribe themselves to large blocks of Government securities.

The deposit accounts of the joint-stock banks increased most between 1916 and 1919; the rate of increase during the earlier years of the war and in 1920 was far less rapid.

Five great joint-stock banks.

[In thousands of pounds sterling.]

End of—	Cash in hand and with the Bank of England.	British Government securities.	Current, deposit, and other accounts.
1914.....	137,750	52,544	626,378
1915.....	136,049	184,475	686,473
1916.....	195,484	198,376	819,883
1917.....	183,159	216,606	967,981
1918.....	237,500	236,042	1,304,811
1919.....	285,481	291,669	1,548,813
1920.....	274,137	261,732	1,628,375

NOTE.—For table showing all items, see FEDERAL RESERVE BULLETIN, March, 1921, p. 235.

INCREASE IN NOTE CIRCULATION DURING AND SINCE THE WAR.

The increase in the note circulation which war conditions demanded was provided for in a unique fashion in England. Instead of increasing the circulation of bank notes, as was done in most countries, a new form of currency was issued by the treasury. These are known as currency notes, or more popularly as "Bradbury's," and were authorized by an act of August, 1914, to provide for the exceptional demands occasioned by the outbreak of the war. According to the regulations under the act, they were not to exceed in the case of any bank 20 per cent of its deposit and current accounts. As the war progressed and deposits of the joint-stock banks were rapidly enlarged, the issue of currency notes likewise increased. According to the report of the Cunliffe Committee the banks originally received the notes as advances from the Government on which they paid interest, but later they obtained them by transferring portions of their balances at the Bank of England to the currency notes account. These balances were then in turn borrowed by the Government and Government securities substituted for them.

This method was used to provide the necessary additional currency in preference to the

¹ The London Economist comments on this divergent movement of "other deposits" and "other securities" in the following fashion: " * * * it may be possible to trace in this movement the effect of the Bank of England's borrowing from other bankers, though it was more usual in old times for the bank to pledge Government securities when it borrowed."

amendment of the bank act of 1844, which provided that notes issued by the Bank of England must be guaranteed pound for pound by gold. With the increase in the gold holdings of the bank, it has been possible to enlarge the bank-note issue appreciably, but not at the rate at which currency notes have been increased. With the close of the war it was generally conceded that the currency note issue should be reduced as rapidly as conditions would allow. Accordingly, the committee on currency and the foreign exchanges in its interim report, published toward the end of 1918, recommended that during the years following the war the maximum fiduciary issue of currency notes in any year should become the legal maximum

issue for the following year. This recommendation was not put into effect as regards the issue of 1919, but was applied in 1920, the maximum issue of 1919 of £320,600,000 becoming the legal maximum for 1920. During the latter year the maximum issue reached £317,600,000, which thus became the legal maximum for 1921.

At the end of December, 1920, the currency notes redemption account consisted of £28,500,000 gold, £19,450,000 bank notes, and the rest, £356,504,000, Government securities. During 1920 there has been a uniform policy of transferring bank notes to the currency notes account when the latter were approaching dangerously close to the legal limit.

RECENT ECONOMIC DEVELOPMENTS IN SOUTH AMERICA.

PRICE DECLINES.

South America suffered severely in 1920 from the decline in the prices of raw materials and from the decreased demand for these materials. As has been explained in special studies of economic and financial conditions in the leading South American countries, each one of them is dependent to a large extent on the export of a few commodities to the production of which the country is particularly well adapted.¹ These countries are in the stage of economic development when they depend on imports of foreign capital for the expansion of domestic industry, and on the excess of exports over imports for interest and amortization payments on these foreign investments.

It is therefore highly important for these countries to have a favorable balance of merchandise trade. When the war broke out, the inflow of foreign capital ceased, and the South American countries were obliged to adjust their economic life to this new condition. This adjustment was made easier by the fact that the demand for their leading products after the first shock of war became unprecedentedly large and prices, except for coffee, were high. It was possible, therefore, for these countries to have large favorable trade balances and to take steps in the direction of building up more diversified industries and more modern systems of taxation. These developments suffered a severe setback during the past year. A table inserted at this point shows prices of leading commodities exported from each of the three principal South American countries in 1919 and 1920:

¹ For Argentina, see Federal Reserve Bulletin, 1920, pp. 592-600; for Brazil, pp. 813-824; for Chile, pp. 1052-1061.

WHOLESALE PRICES IN THE UNITED STATES OF PRINCIPAL COMMODITIES PROMINENT IN THE EXPORT TRADE OF ARGENTINA, BRAZIL AND CHILE, 1919-1920.¹

	Argentina.					Brazil.		Chile		
	Corn, No. 3, Chicago.	Wheat, No. 2, red winter, Chicago.	Wool, Ohio, 1-3 grades, scoured, in eastern markets.	Beef, carcass, good native steers, Chicago.	Hides, packers, heavy native steers, Chicago.	Coffee, Rio, No. 7, New York.	Rubber, Para Island, fine.	Nitrates.		Copper, ingot, electrolytic, New York.
								Low.	High.	
1919.										
January.....	\$1.3750	\$2.3788	\$1.1200	\$0.2450	\$0.2800	\$0.1547	\$0.5250	\$4.425	\$4.45	\$0.2038
February.....	1.2763	2.3450	1.0909	.2450	.2800	.1544	.4913	4.425	4.45	.1731
March.....	1.4588	2.3575	1.2000	.2450	.2763	.1602	.4819	4.075	4.45	.1509
April.....	1.5955	2.6300	1.0909	.2450	.2950	.1695	.4775	4.075	4.075	.1530
May.....	1.7613	2.7800	1.0727	.2430	.3513	.1931	.4738	4.075	4.075	.1600
June.....	1.7563	2.3613	1.1818	.2025	.4075	.2114	.4744	4.075	4.075	.1756
July.....	1.9075	2.2580	1.2364	.2075	.4860	.2303	.4750	2.90	4.075	.2150
August.....	1.9213	2.2394	1.2364	.2350	.5200	.2150	.4750	2.90	2.90	.2281
September.....	1.5410	2.2385	1.2182	.2275	.4638	.1663	.4795	2.90	2.90	.2220
October.....	1.3888	2.2394	1.2634	.2290	.4820	.1650	.4825	2.90	2.90	.2172
November.....	1.4875	2.2881	1.2545	.2350	.4688	.1697	.4825	2.90	2.90	.2038
December.....	1.4485	2.4490	1.2545	.2350	.4100	.1518	.4785	2.90	3.00	.1873
1920.										
January.....	1.4750	2.6338	1.2364	.2320	.4000	.1628	.4625	3.00	3.05	.1931
February.....	1.4125	2.4900	1.2364	.2125	.4025	.1478	.4322	3.40	3.70	.1906
March.....	1.5515	2.5000	1.2364	.2050	.3640	.1500	.4120	3.70	3.85	.1858
April.....	1.6913	2.7725	1.2000	.2090	.3613	.1514	.4113	3.85	3.85	.1919
May.....	1.9825	2.9750	1.1636	.1950	.3538	.1559	.4038	3.85	3.85	.1906
June.....	1.8390	2.8950	1.0000	.2225	.3410	.1498	.3850	3.85	3.85	.1900
July.....	1.5388	2.8050	.9091	.2550	.2944	.1306	.3534	3.85	3.85	.1900
August.....	1.5310	2.4735	.8727	.2550	.2850	.0936	.3030	3.85	3.85	.1900
September.....	1.2938	2.4919	.8364	.2600	.2840	.0819	.2531	3.65	3.85	.1869
October.....	.8778	2.2047	.7273	.2520	.2550	.0759	.2169	3.15	3.26	.1675
November.....	.8003	2.0570	.6909	.2400	.2325	.0746	.1920	2.90	3.26	.1455
December.....	.7341	2.0125	.5455	.2220	.1900	.0656	.1800	2.75	3.00	.1369
1921.										
January.....	.6553	1.9613	.5455	.1738	.1675	.0669	.1731	2.70	2.85	.1288
February.....	.6350	1.9194	.5455	.1600	.1362	.0672	.1681	2.80	2.85	.1288
March.....	.6180	1.6798	.5273	.1625	.1150	.0639	.1800	2.60	2.85	.1223

¹ The figures in the above table for all commodities except nitrates are furnished by the Bureau of Labor Statistics and are average prices for the month. The nitrate figures were furnished by the Chilean Nitrate Commission.

For the commodities constituting the bulk of Argentina's exports, the following price reductions may be noted. Wheat fell from a maximum price of \$2.975 per bushel in May, 1920, to \$1.6798 in March, 1921; wool from a maximum of \$1.2634 per pound in October, 1919, to \$0.5273 in March, 1921. For Brazil, a similar trend of prices may be seen. Coffee reached its maximum of \$0.2303 in July, 1919, and its minimum of \$0.0639 in March, 1921. Rubber fell from \$0.525 in January, 1919, to \$0.1681 in February, 1921. In the case of Chile, nitrates held a maximum of \$4.45 during the first three months of 1919, and a minimum of \$2.60 in March, 1921.

FOREIGN TRADE AND FOREIGN EXCHANGE.

Not only did the prices of these articles suffer severe drops, but it became difficult to dispose of many of them at any price. The purchasing power of European countries, which had been the principal takers of South American exports, was low, and in many cases goods that had formerly gone to the European markets were sent to the United States, where a large accumulation of raw materials and a consequent demoralization of the markets occurred. A table is here introduced showing the imports into and exports from Argentina, Brazil, and Chile for the years 1913 to 1920.

TOTAL IMPORTS AND EXPORTS OF ARGENTINA, BRAZIL, AND CHILE FOR THE YEARS 1913-1920.

	Argentina.			Brazil.			Chile.		
	Imports.	Exports.	Balance of exports over imports.	Imports.	Exports.	Balance of exports over imports.	Imports.	Exports.	Balance of exports over imports.
	<i>In thousands of gold pesos.</i>			<i>In thousands of paper milreis.</i>			<i>In thousands of gold pesos.</i>		
1913.....	496,227	519,156	22,929	1,007,495	972,731	- 34,764	329,518	396,310	66,792
1914.....	322,530	403,132	80,602	561,853	750,980	189,127	269,757	299,675	29,918
1915.....	305,489	582,179	276,690	582,996	1,022,634	439,633	153,212	327,479	174,267
1916.....	366,131	573,000	206,869	810,759	1,136,888	326,129	222,521	513,585	291,064
1917.....	380,321	550,170	169,849	837,738	1,192,175	354,437	355,077	712,289	357,212
1918.....	500,603	801,466	300,863	989,405	1,137,100	147,695	436,074	799,625	363,551
1919.....	655,772	1,030,965	375,193	1,334,258	2,178,719	844,461	401,324	316,977	- 84,347
1920.....	854,100	1,006,800	152,700	2,078,046	1,752,247	-325,799	350,000	765,000	415,000
January.....	64,600	90,600	26,000	89,338	167,706	78,368	.....	.....	.....
February.....	53,400	96,500	43,100	118,087	145,353	27,266	.....	.....	.....
March.....	73,200	121,100	47,900	101,671	191,703	90,032	.....	.....	.....
April.....	73,500	109,700	36,200	114,550	157,615	43,065	.....	.....	.....
May.....	63,600	99,000	35,400	162,963	146,978	- 15,985	.....	.....	.....
June.....	72,200	82,100	9,900	141,733	146,468	4,735	.....	.....	.....
July.....	80,900	100,500	19,600	173,815	121,673	- 52,142	.....	.....	.....
August.....	77,000	78,400	1,400	220,408	133,679	- 86,729	.....	.....	.....
September.....	88,100	56,900	-31,200	223,746	140,173	- 83,573	.....	.....	.....
October.....	67,000	63,600	- 3,400	273,497	149,051	-124,446	.....	.....	.....
November.....	70,400	48,600	-21,800	227,214	136,515	- 90,699	.....	.....	.....
December.....	70,200	59,800	-10,400	231,024	115,333	-115,691	.....	.....	.....

It will be noted that the favorable balance for Argentina was much smaller in 1920 than in 1919, and that the last four months of 1920 showed excess imports; for Brazil a substantial excess of imports for the entire year is reported, while in the case of Chile the figures for the year show a comparatively large favorable balance. This is due partly to the

decrease in Chile's imports, and still more to the fact that the value of the exports of nitrate for the entire year 1920 was practically double that for 1919. Our trade with South and Central America is shown by months in the table below. It brings out the fact that these countries have all materially increased their imports from the United States.

UNITED STATES IMPORTS FROM AND EXPORTS TO PRINCIPAL SOUTH AMERICAN COUNTRIES.

[In thousands of dollars.]

	Argentina.		Brazil.		Chile.		All other countries of South America.		Total South America.		Central American countries.		Total Central and South American countries.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
1919.														
January.....	8,772	22,253	6,699	11,798	10,491	5,680	10,057	12,296	36,019	52,027	3,417	4,085	39,436	56,112
February.....	6,398	11,367	8,059	14,439	5,942	6,817	12,263	9,861	32,662	42,484	4,416	4,989	37,078	47,473
March.....	4,448	11,837	23,198	9,919	12,518	4,173	14,033	8,051	54,197	33,980	4,498	3,429	58,695	37,409
April.....	2,163	5,286	17,598	9,254	4,263	7,972	15,566	9,437	39,590	31,949	3,338	4,996	42,928	36,945
May.....	17,012	5,674	16,590	12,140	4,714	4,416	12,868	10,207	51,184	32,437	4,217	4,303	55,401	36,740
June.....	19,779	20,430	10,426	8,967	4,542	4,877	17,415	9,522	52,162	43,796	4,413	4,973	56,575	48,769
July.....	12,271	9,907	23,346	7,055	4,388	2,335	16,298	7,562	56,303	26,859	5,681	3,720	61,984	30,579
August.....	22,861	17,283	23,190	9,995	4,336	4,066	14,823	10,460	65,210	41,804	3,319	3,835	68,529	45,639
September.....	38,479	13,715	31,676	5,572	7,729	3,166	16,202	9,712	94,086	32,165	2,937	5,663	97,023	37,828
October.....	23,773	13,874	24,172	12,279	5,794	3,449	14,524	9,685	68,263	39,287	3,093	4,624	71,356	43,911
November.....	26,189	13,281	30,706	7,499	10,549	3,351	14,472	9,928	81,916	34,059	1,627	4,808	83,543	38,867
December.....	17,014	10,993	17,911	5,780	7,202	3,071	13,807	11,308	55,934	31,152	2,194	6,316	58,128	37,468
Total.....	199,159	155,900	223,571	114,697	82,468	53,373	172,328	118,029	687,526	441,999	43,150	55,741	730,676	497,740
1920.														
January.....	21,344	14,008	25,069	10,583	6,705	2,610	24,821	12,426	77,939	39,627	4,029	7,310	81,968	46,937
February.....	15,104	11,612	17,328	10,462	12,678	3,708	22,797	14,678	67,907	40,460	4,771	6,809	72,678	47,269
March.....	19,190	16,927	22,778	12,506	11,530	4,725	19,512	19,836	73,010	53,994	8,891	7,421	81,901	61,415
April.....	21,581	14,869	28,857	10,080	7,983	4,832	17,593	17,282	76,014	47,063	7,891	7,816	83,905	54,879
May.....	23,104	17,094	10,490	13,545	14,860	4,240	14,950	23,341	63,404	58,220	7,310	7,395	70,714	65,615
June.....	16,853	13,587	25,719	9,683	19,083	4,774	19,512	18,261	81,167	46,305	7,449	7,504	88,616	53,809
July.....	18,502	15,923	23,123	8,741	7,524	5,235	23,572	14,970	72,721	44,869	8,769	6,403	81,490	51,272
August.....	16,734	16,817	22,013	14,520	8,430	3,305	16,124	12,001	63,301	46,643	7,766	6,042	71,067	52,685
September.....	22,883	21,782	15,637	15,017	9,405	3,878	14,575	13,770	62,500	54,447	3,368	7,237	65,868	61,684
October.....	14,971	21,858	14,498	15,144	7,807	4,868	10,093	17,958	47,369	59,828	2,443	6,974	49,812	66,802
November.....	8,098	26,045	12,673	17,278	6,777	5,808	12,558	16,155	40,106	65,286	2,442	7,805	42,548	73,091
December.....	9,454	23,207	9,539	19,233	7,330	7,363	9,116	17,492	35,939	67,295	1,810	7,775	37,749	75,070
Total.....	207,818	213,729	227,724	156,792	120,612	55,346	205,223	198,170	761,377	624,037	66,939	86,491	828,316	710,528
1921.														
January.....	5,730	24,231	9,713	14,128	8,042	6,885	7,263	16,190	30,748	61,434	1,667	8,733	32,415	70,167
February.....	5,316	16,441	9,289	6,240	4,903	4,552	7,001	11,571	26,509	38,804	2,353	6,927	28,862	45,731
March.....	8,413	12,168	9,463	6,133	3,739	2,954	11,070	7,368	32,685	28,623	3,679	4,644	36,364	33,267

The United States dollar, which in Argentina was worth only 1.016 pesos as late as February, 1920, rose to 1.305 pesos in March, 1921, as against 1.0365 par value. (See table below.) At the beginning of 1920 the Argentine Government had with the Federal Reserve Banks a credit of about 79,000,000 pesos, established during the war when the gold embargo prevented gold exports from the United States, and for a considerable time this credit was used to pay for Argentina's obligations in the United States. The method of operation was that Argentine importers who wished to pay for goods in New York, deposited gold or its equivalent with the conversion office in Buenos Aires, and equivalent amounts were released for payment to American creditors in New York. So long as this fund held out, Argen-

tine exchange suffered no great decline, but when the fund was exhausted the peso began to drop very rapidly in New York, and the dollar rose correspondingly in Buenos Aires. Thus, during the first five months of 1920, while the fund was in use, the dollar rose only from 1.018 pesos to 1.038 pesos. Between May 31 and October 31, however, the gold in the fund held with the Federal Reserve Banks was used up. Thereupon the dollar rose rapidly to the end of the year, when it stood at 1.305 pesos, the highest point being reached on January 3, 1921, when it stood at 1.32 pesos. At the same time, the stock of gold held by the banks in Buenos Aires was reduced from \$114,014,000 to \$46,179,000, while the gold in the Caja de Conversion increased correspondingly from \$399,421,000 to \$466,477,000.

MONTHLY RANGE OF EXCHANGE RATES ON ENGLAND AND THE UNITED STATES AT BUENOS AIRES, RIO DE JANEIRO AND VALPARAISO.

	Buenos Aires.				Rio de Janeiro.				Valparaiso.			
	England. ¹		United States. ²		England.		United States.		England.		United States.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
1920.	<i>Pence for 1 peso.</i>		<i>Pesos for 1 dollar.</i>		<i>Pence for 1 milreis.</i>		<i>Reis for 1 dollar.</i>		<i>Pence for 1 peso.</i>		<i>Chilean pesos for 1 dollar.</i>	
January.....	62½	65½	1.018	1.016	17½	17½	3.780	3.637	12½	14½	5.27½	4.73½
February.....	69½	70½	1.016	1.009	17½	18½	3.978	3.909	14½	15½	4.94	4.73
March.....	61.00	69½	1.017	1.014	16½	18½	3.915	3.740	13½	14½	4.94½	4.66½
April.....	58½	60½	1.035	1.015	16½	16½	3.900	3.790	11½	13½	5.29½	4.63½
May.....	59½	60½	1.038	1.036	16½	18.00	4.000	3.860	11½	11½	5.50½	5.25
June.....	56½	59.00	1.052	1.039	14½	15½	4.300	4.030	11½	12½	5.56½	4.99½
July.....	55½	57½	1.130	1.052	13½	14½	4.680	4.343	10½	12½	5.94	4.89½
August.....	57.00	57½	1.175	1.130	13½	14½	5.073	4.610	11.00	12½	5.88½	5.63½
September.....	57.00	58.00	1.180	1.155	12½	13½	5.725	5.160	10½	11½	6.42	5.73½
October.....	54.71	57.00	1.265	1.185	11½	12½	6.040	5.016	10½	10½	6.76½	6.55½
November.....	51.72	55.31	1.340	1.283	10½	12½	6.504	5.829	9½	10½	7.37½	7.12
December.....	52½	55.13	1.305	1.245	9½	11½	7.140	6.360	9½	9½	7.53½	7.12
1921.												
January.....	50.00	51½	1.320	1.246	9½	9½	7.200	6.688	8½	8½	7.44	7.16½
February.....	49½	51½	1.260	1.195	8½	10½	6.780	6.300	8½	8½	7.44½	6.95½
March.....	47.00	48½	1.305	1.260	8½	9½	6.900	6.386	8½	9.00	7.05½	6.82½

¹ Exchange at par, 47.58.

² Exchange at par, 103.648.

The table above shows fluctuations of exchange rates on England and on the United States for the three South American countries.

In Brazil, as a consequence of the unfavorable trade balance, the dollar rose from a low of 3.637 milreis in January, 1920, to a high of 6.9 milreis in March, 1921. In Chile the dollar rose from 4.63½ pesos in April, 1920, to 7.53½ pesos in December of the same year. In Chile the exchange situation is peculiar. There is a large gold reserve with which to redeem the notes in circulation, but the date for thus redeeming them has been again and again postponed.² Thus they are in theory redeemable in gold; in fact, irredeemable. Because

of this, the currency is subject to violent fluctuations, which may vary 2 or 3 per cent from day to day and from 5 to 15 per cent in the course of a single month. These fluctuations in value give rise to extensive speculation, which in turn tends to aggravate still further the exchange situation. The nitrate situation, which is the principal factor in Chile's foreign trade and in the exchange market, looked very bright during the first half of 1920, before the world-wide depression began. It seemed probable that after five years of reduced food production all countries, especially those of Europe, would demand large quantities of fertilizer. The nitrate consumption bade fair to equal that of 1913; large quantities were being sold forward, and the best nitrate author-

² For a discussion of this matter see FEDERAL RESERVE BULLETIN, October, 1920, p. 1053.

ities were urging increased production. In August, however, came the reaction, due chiefly to the fact that Europe was having ever greater difficulty in paying for her imports. Also the decrease in the demand for nitrates in the manufacture of ammunition, together with the development of the production of ammonia from the air by Germany, continued, as in 1919, to exert a further depressing influence on the nitrate trade. The nitrate market declined rapidly; the price fell below the level at which the Nitrate Association found it profitable to sell; production fell off, resulting in widespread unemployment, and toward the end of the year the country was in a grave financial crisis.

Fluctuations in the value of the pound sterling in the South American countries were similar to those in the dollar, though owing to the depreciation of the pound its rise in terms of South American currency was not so great as the rise of the dollar. Other exchange quotations reflect the movement of these two leading currencies, the variations being due to causes on which South American conditions exerted but little influence.

A serious phase of the situation was that large orders for imports of manufactured goods, mostly from the United States, were placed by South American concerns when times were prosperous and before the decline in prices occurred. Some of these goods were late in delivery, because of the insufficient output and the scarcity of shipping space, and thus arrived after the selling price had fallen below the contract buying price. There were some farsighted merchants who deferred placing their orders until after the fall in prices and yet received their goods as soon as, or even sooner than, did the merchants who had placed their contracts at the higher prices. The latter, realizing that their sales would thus result in great loss, canceled their orders, refused to receive the goods, or asked for repeated extensions of time on their payments. As a result of this, goods accumulated at all the ports of entry. In some cases the merchandise was piled up on docks, piers, or in sheds, municipal theaters, and other public buildings. Thus the delays in delivery, the fall in prices, the increasingly unfavorable rate of exchange, and the competition of those merchants who contracted at lower prices created great overstocking of goods and financial difficulties. Widespread discussion of moratoria resulted from these conditions, and in some of the smaller countries legal or extralegal moratoria were actually declared, although no such action was taken in Argentina, Brazil, or Chile.

CREDITS GRANTED AND RECEIVED.

In order to encourage the export trade South American countries removed many of the restrictions on exports which had been imposed at the time when excessive exports of raw materials resulted in undue advances in prices in the home markets. Furthermore, several of the countries arranged to grant credits to some of the European countries for the purpose of encouraging exports. Thus Italy was granted a credit of 100,000,000 pesos by Argentina, while Belgium was granted a credit of 25,000,000 milreis by Brazil and one of 25,000,000 pesos by Chile. All of these credits were to be utilized for payment of goods purchased in the creditor countries.

On the other hand, some of the South American countries obtained foreign credits for the purpose of improving their exchange position. Brazil, or rather the State of Sao Paulo, succeeded in floating a £5,000,000 loan, of which £2,000,000 were taken up in New York, £2,000,000 in London, and £1,000,000 in the Netherlands. The London bond issue matures in 30 years, the New York and Amsterdam issues in 15 years. The bonds are secured by the proceeds of a special surtax on the export of coffee grown or produced in the State of Sao Paulo. A \$24,000,000 loan to Chile was recently (Feb. 16) floated in New York, and has had a steadying effect on Chilean exchange. Argentina had a \$50,000,000 loan maturing in New York last fall, and not being able to renew it there on satisfactory terms, made arrangements by which England paid the American loan and received credit for it on her 100,000,000-peso loan contracted in 1918 and due on January 15 of this year. This British loan has since been liquidated.

REMEDIAL MEASURES.

Various methods of remedying the situation by legislative or administrative enactment were undertaken by the South American countries. In Argentina the establishment of a central bank of issue and rediscount has been advocated. No final action, however, has been taken up to date.

The question of releasing from the Argentine conversion office the gold which has been impounded there since the beginning of the war, was seriously agitated, the argument being that it would improve the exchange rate and that the flow of gold would discontinue as soon as the exchange rate was rectified, while so long as the gold embargo continued the peso was bound to remain at a discount. The

Argentine authorities, however, were fearful that the exports of gold would result in a complete exhaustion of the gold reserves and a consequent more serious depreciation of the currency. Their argument was that, so long as they were not able to receive cash payment for their exports to Europe, they would not be able to use European credits for payment of American obligations and the unfavorable balance as regards the United States would result in serious inroads on their gold. Up to the present time the gold embargo in Argentina has been maintained, although recent dispatches indicate that efforts to release 100,000,000 gold pesos to stabilize exchange are being made.

Ernesto Tornquist, the leading private banker of Argentina, whose father was instrumental in the establishment of the conversion office and in the stabilization of the peso at 44 centavos gold, in a recent interview discussed the Argentine situation and proposed certain remedies. He believes that the financial system of Argentina, as much as world conditions, is responsible for the prevailing business depression. He suggests that the Banco de la Nacion shall reduce its interest rate on time deposits, limit its foreign exchange activities, and reorganize its discount business somewhat on the model of the Federal Reserve System in the United States. He further recommends the establishment of a central bank of issue and rediscount, and the gradual conversion of the Banco de la Nacion into an agricultural and live-stock bank to extend long-term loans to these industries. He would have the Government extend loans to foreign buyers of national products like wool, hides, meats, and cereals. He also advises authorizing the withdrawal of gold from the Caja de Conversion to a limited amount, settled in advance, and its export, this exported gold to be used for the payment of interest and amortization of the foreign debt and for settling unfavorable merchandise trade balances. As another remedial measure he proposes to have the Banco de la Nacion undertake rediscounting, especially for seasonal needs, such as crop moving or other emergencies. Unless some such measures are taken, he fears that Argentina may lose the commercial gains which she has made during the past five years.

In Brazil a bill for the establishment of a bank of issue and rediscount was introduced, and in the meantime a division of the Bank of

Brazil was established by executive decree, with authority to rediscount commercial bills and to issue Government paper money secured by such bills. The main provisions of the decree may be briefly summarized. The new department is to be in charge of a director nominated by the President of the Republic. Its operation will be limited to 100,000,000 milreis, which can be exceeded only under special conditions by order of the President of the Republic. The department will discount bills of exchange and drafts drawn in terms of Brazilian currency, guaranteed by at least two commercial banks in good standing. The banks with which this department will do business must be registered with it, and for such registration a minimum paid-in capital of 5,000,000 milreis is required. The period of rediscount will be four months at most; the paper accepted will be agricultural or live-stock paper. Against this paper the Bank of Brazil will issue Government notes, strictly limited to the amount of the rediscount operations.

Brazil also inaugurated a governmental control of foreign exchanges by regulating and supervising all banks and banking houses to prevent their speculating in exchange. The Government is also authorized to establish a special fund in New York and London, of which it may apply 50,000,000 milreis to buying and selling bills of exchange, both to assist legitimate commerce and to stabilize exchange.

In Chile, although the plan for the establishment of a central bank of issue and rediscount continues to be agitated, no definite action has yet been taken. The nitrate producers of the country have strengthened their organization so that they control about 98 per cent of the industry and are in a position to refuse to sell at prices below a figure which they consider profitable. Practically no sales have taken place in the spring of 1921, and are not expected before June. It is thought, however, that with the wider use of nitrogen for agricultural purposes in America and with the improvement of the exchange situation in Germany, the nitrate market will improve, as under normal exchange conditions the sale price of natural nitrates in Germany would probably be lower than the cost of production of artificial nitrates.

Tables showing the condition of the Banco de la Nacion, the Banco do Brazil, and of the Banco de Chile, at the close of the last two years, follow.

**ASSETS AND LIABILITIES OF THE BANCO DE LA NACION,
ARGENTINA, ON DEC. 31, 1919 AND 1920.**

[In thousands of pesos.]

	1919	1920
ASSETS.		
Due from foreign correspondents.....	25,286	4,194
Advances in current accounts and on securities.....	314,905	312,680
Bills receivable.....	2,139	2,107
Accounts for collection.....	22,026	15,241
Bills discounted and rediscounted.....	361,099	491,167
Doubtful debts.....	2,055	2,388
Real estate.....	25,586	23,213
National bonds, series A.....	43,296	42,738
Other Federal securities.....		
Mobilization of conversion fund, law 9479.....	46,144	45,455
Furniture and stationery.....		468
Interest earned but not received.....		
Due from the treasury, law 10251.....	72,000	72,000
Conversion account.....	342,970	265,538
Due from branches.....		
Cash on hand.....	356,506	461,926
Due, according to the agreement with England and France.....	289,496	266,436
Total.....	1,903,508	2,005,551
LIABILITIES.		
Capital.....	138,551	144,925
Surplus.....	43,652	50,028
Conversion fund, law 3871.....	68,182	68,182
Conversion account.....	342,970	265,538
Mobilization of the conversion fund.....	45,455	45,455
Deposits, time and demand.....	1,249,730	1,412,351
Discounts, interests unearned but collected.....	4,118	7,149
Due to branches.....	10,850	11,923
Total.....	1,903,508	2,005,551

**ASSETS AND LIABILITIES OF THE BANCO DE CHILE ON
DEC. 31, 1919, AND 1920.**

[In thousands of pesos.]

	1919		1920	
	Currency.	Gold.	Currency.	Gold.
ASSETS.				
Cash.....	32,521	12,913	48,844	9,469
Due from banks and bankers.....	20,490	3,334	11,019	1,593
Short-term bills, foreign.....		3,000		
Securities owned.....	9,912	5,581	9,233	5,465
Real estate.....	12,049	1,200	12,214	
Furniture and furnishings.....	1,082	2	1,246	
Loans and advances.....	300,982	32,546	353,398	30,445
Treasury certificates.....	16,580		10,000	
Due from agencies.....	3,293		9,164	5,750
Interest and discounts.....	1,648	126	2,878	
Other assets.....	12,280	18,744	3,725	18,863
Total.....	411,287	77,446	461,721	71,585
LIABILITIES.				
Deposits in current accounts:				
Demand and time.....	253,840	31,364	240,536	32,467
In London.....		10,360		
Due to banks and bankers.....	2,178	90	2,515	170
Savings deposits.....	1,857		716	
Interest and discounts.....				39
Capital paid in.....	60,000		100,000	
Surplus.....	34,000	5,000	58,000	13,333
Due to stockholders.....	3,111		3,606	
Dividends.....	138		179	
Profit and loss.....	5,478		9,002	
Other liabilities.....	50,685	30,632	47,167	25,576
Total.....	411,287	77,446	461,721	71,585

ASSETS AND LIABILITIES OF THE BANCO DO BRAZIL ON DEC. 31, 1919 AND 1920.

[In thousands of milreis.]

	1919	1920		1919	1920
ASSETS.			LIABILITIES.		
Government securities in guaranty of reserve fund.....	8,266	9,694	Capital paid in.....	45,000	45,000
Loans in current accounts.....	123,146	138,375	Surplus.....	8,865	10,632
Bills discounted.....	113,779	139,158	Deposits, not interest bearing.....	23,788	121,553
Bills receivable.....	96,550	281,371	Deposits, interest bearing.....	119,222	127,146
Foreign and domestic credits.....	86,701		Deposits, time.....	17,922	36,156
Due from agents in Brazil and in Europe.....	125,446	155,608	Current accounts.....	1,519	
Bank stock.....	10,490	11,888	Due to agents in Brazil and in Europe.....	38,420	21,114
Other stock.....	2,704	10,346	Bills payable, interest bearing.....	18,115	
Stock in liquidation.....	5,463	2,505	Government deposits, judicial.....	1,513	3,843
Various accounts.....	182,526	223,129	Government exchange account.....	8,889	8,889
Cash in vault.....	69,152	106,526	Dividends payable.....	796	850
Bank buildings and furnishings.....	2,307	2,872	Dividends, undivided.....	2,250	2,250
Total.....	826,530	1,081,472	Various accounts.....	523,823	688,121
			Pension fund.....	8,427	9,627
			Profit and loss.....	7,980	8,291
			Total.....	826,530	1,081,472

PRICE MOVEMENT AND VOLUME OF TRADE.

WHOLESALE PRICES IN THE UNITED STATES.

Wholesale prices declined 3 per cent in March as compared with 6 per cent in February and 9 per cent in December, according to the index numbers compiled by the Federal Reserve Board and the Bureau of Labor Statistics. Although both indexes agree as to the monthly rate of decline, they differ somewhat as to the present level of prices as compared with the prewar level. According to the compilation of the Federal Reserve Board (based upon 88 commodities), wholesale prices in March were 50 per cent above the prewar level, while according to that of the Bureau of Labor Statistics (based upon approximately 325 commodities) they were 62 per cent higher. In other words, the value of the dollar at wholesale might be estimated at 67 cents according to the Federal Reserve Board index and at 62 cents according to that of the Bureau of Labor Statistics.

The more rapid decline in the prices of raw materials than of manufactured goods, which has been characteristic of the price situation in recent months, is clearly indicated by the change in the Federal Reserve Board index numbers for raw materials and producers' and consumers' goods. The two latter groups consist of commodities in a manufactured or semimanufactured condition, while the first one consists exclusively of raw materials. In January the index of raw materials stood at 164, in March at 146, a drop of 11 per cent. The index of consumers' goods, on the other hand, has declined only 5 per cent during the same period and producers' goods 8 per cent. The reclassification of the index number of the Bureau of Labor Statistics to show the relative fluctuations in raw materials and manufactured goods gives similar results, showing a decline in the prices of raw materials between January and March of 10 per cent; in producers' and consumers' goods 8 per cent.

The unusual stability which was noted last month in the prices of goods imported continued in March. This index number is nearer the prewar level than any other computed by the Board, showing a 54 per cent fall from the peak of last May and now standing at 114 as compared with 100 in 1913. Prices of exports continued to decline in March, the index shifting from 135 in February to 125 in March.

For detailed information regarding the make-up of the Federal Reserve Board index num-

ber, reference may be made to the *FEDERAL RESERVE BULLETIN* for May, 1920, pages 499-503. The commodities included in the different groups are listed there with exact specifications and markets indicated. The "weights" assigned to the different commodities in constructing the index numbers are also given in detail.

The index of "goods produced" consists of average prices of 72 commodities (30 raw materials, 24 producers' and 18 consumers' goods). These include agricultural products (such as grains, live stock, and textiles), minerals, and lumber, among the raw materials; yarns, leather, semifinished steel products, refined oils, chemicals, building materials, etc., among the producers' goods; and vegetables, meats, flour, dairy products, cotton and woolen cloth, boots and shoes, and kerosene among the consumers' goods.

The index of "goods imported" consists of the prices of 18 commodities (9 raw materials, 7 producers' and 2 consumers' goods). It includes Egyptian cotton, Australian and South American raw wool, Japanese and Chinese silk, South American hides, Straits tin, and Canadian lumber among the raw materials; plantation and Para rubber, Chilean nitrate, cane sugar, burlap, sisal, etc., among producers' goods; and tea and coffee for consumers' goods.

Leading American exports are included in the index of prices of goods exported, which is made up of 39 commodity prices (17 raw materials, 12 producers', and 10 consumers' goods). Grains, tobacco, cotton, copper, coal, pig iron, petroleum, and lumber make up the list of raw materials; vegetable oils, leather, semifinished metal products, refined oils, and chemicals the producers' goods; and wheat flour, refined sugar, pork products, coffee, cotton cloth, boots and shoes and kerosene the consumers' goods.

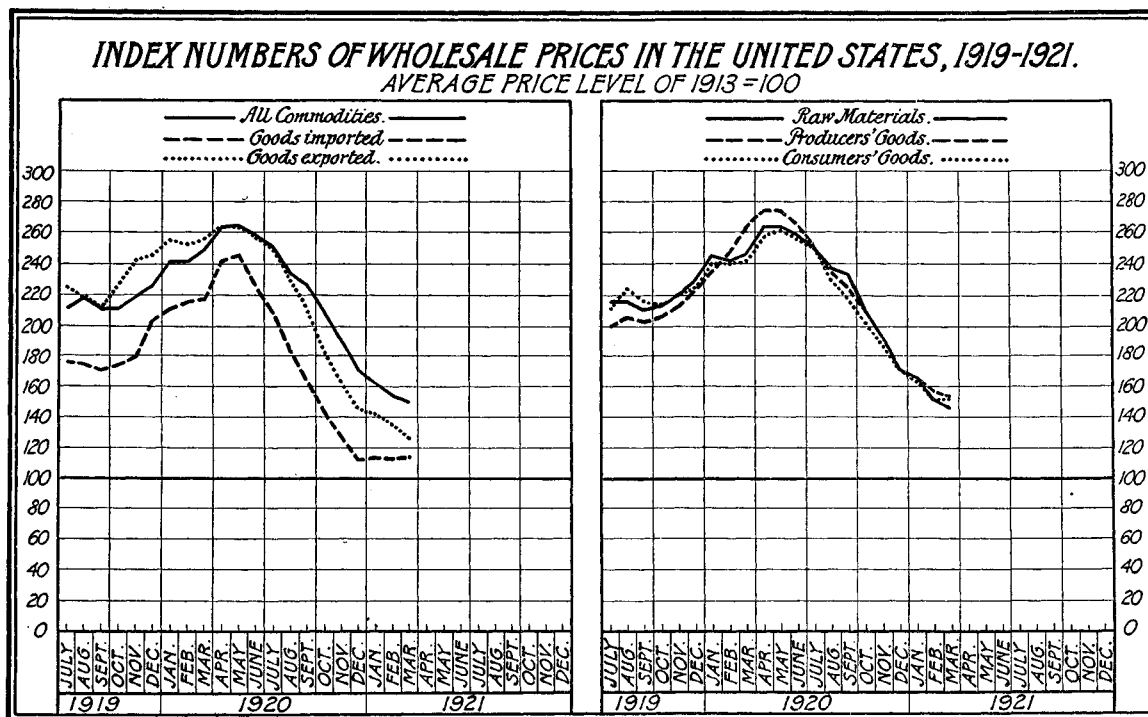
The index numbers of "raw materials," "producers' goods" and "consumers' goods" consist of the commodities mentioned above which fall into these classes, whether they are of domestic or foreign origin. The raw materials group includes 39 commodities, the producers' goods 29 commodities, and consumers' goods 20 commodities.

The "all commodities" index is obtained by combining the group indexes of domestic and foreign goods. It consists of 88 different commodities.

INDEX NUMBERS OF WHOLESALE PRICES IN UNITED STATES—CONSTRUCTED BY THE FEDERAL RESERVE BOARD FOR THE PURPOSE OF INTERNATIONAL COMPARISON.

[Average price for 1913=100.]

Date.	Goods produced.	Goods imported.	Goods exported.	Goods consumed.	Raw materials.	Producers' goods.	Consumers' goods.	All commodities.
1913.								
Average for the year.....	100	100	100	100	100	100	100	100
1919.								
Average for the year.....	209	174	214	206	209	198	207	206
1920.								
Average for the year.....	236	191	227	234	235	237	229	233
March.....	250	218	256	247	246	262	211	248
April.....	265	242	264	263	263	274	257	263
May.....	266	246	262	264	263	274	261	264
June.....	260	226	256	257	258	265	255	258
July.....	252	208	248	249	249	251	250	250
August.....	238	182	229	234	237	235	229	234
September.....	231	164	211	227	233	225	218	226
October.....	213	142	181	211	211	209	203	208
November.....	195	127	163	193	192	190	187	190
December.....	178	112	146	176	176	171	171	173
1921.								
January.....	166	114	142	165	164	166	159	162
February.....	156	113	135	155	152	158	152	154
March.....	152	114	125	145	146	153	151	150



**INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES FOR PRINCIPAL CLASSES OF COMMODITIES—
BUREAU OF LABOR STATISTICS.**

[Average price for 1913=100.]

Year and month.	Raw materials.					Producers' goods.	Consumers' goods.	All commodities. (Bureau of Labor Statistics index number).
	Agricultural products.	Animal products.	Forest products.	Mineral products.	Total raw materials.			
1913.								
Average for the year	100	100	100	100	100	100	100	100
1920.								
March	288	200	348	197	247	246	263	253
April	304	196	367	224	260	263	280	265
May	314	179	367	234	260	271	285	272
June	301	186	363	245	261	262	279	269
July	287	184	359	256	258	251	272	262
August	259	181	351	265	251	238	250	250
September	232	186	344	277	248	224	240	242
October	191	172	339	272	230	209	224	225
November	170	159	289	246	205	193	214	207
December	155	132	278	224	186	175	196	189
1921.								
January	155	110	245	220	175	169	182	178
February	145	114	227	207	165	161	171	167
March	136	116	213	197	158	155	168	162

In order to give a more concrete illustration of actual price movements, there are also presented in the following table monthly actual and relative figures for certain commodities of a basic character. The prices shown in the table have been obtained from the records of the United States Bureau of Labor Statistics, except in the case of bituminous coal, prices for which have been obtained from the Coal Age.

AVERAGE MONTHLY WHOLESALE PRICES OF COMMODITIES.

[Average price for 1913=100.]

Year and month.	Corn, No. 3, Chicago.		Cotton, middlings 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.	
	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.
1913.....	\$0.6155	100	\$0.1270	100	\$0.8735	100	\$0.9863	100	\$8.5072	100	\$0.1839	100
1919.....	1.5800	257	.3185	251	2.5660	294	2.5370	239	17.4957	206	.3931	214
1920												
March	1.5515	252	.4060	320	2.7550	315	2.5000	253	14.4000	169	.3640	198
April	1.6913	275	.4144	326	3.0063	344	2.7725	281	13.9063	163	.3613	196
May	1.9825	322	.4038	318	3.0750	352	2.9750	302	12.6000	148	.3538	192
June	1.8390	299	.4030	317	2.9000	332	2.8950	294	15.0313	177	.3410	185
July	1.5388	250	.3950	311	2.8313	324	2.8050	284	15.3813	181	.2944	160
August	1.5310	249	.3380	266	2.5500	292	2.4735	251	15.3500	180	.2850	155
September	1.2938	210	.2706	213	2.4903	285	2.4919	253	15.2500	179	.2840	154
October .....	.8778	143	.2088	164	2.1063	241	2.2047	224	14.6875	173	.2550	139
November .....	.8003	130	.1780	140	1.7528	201	2.0570	209	14.5750	171	.2325	126
December .....	.7341	119	.1444	114	1.6809	192	2.0125	204	12.0938	142	.1900	103
1921												
January .....	.6553	106	.1450	114	1.7884	205	1.9613	199	9.8400	116	.1675	91
February .....	.6350	103	.1322	104	1.6713	191	1.9194	195	9.3125	109	.1363	74
March .....	.6180	100	.1105	87	1.6135	185	1.6798	170	9.5625	112	.1150	63

AVERAGE MONTHLY WHOLESALE PRICES OF COMMODITIES—Continued.

[Average price for 1913=100.]

Year and month.	Hogs, light, Chicago.		Wool, Ohio, 1-3 grades, scoured.		Hemlock, New York.		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.	
	Average price per 100 pounds.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per M feet.	Rela- tive price.	Average price per M feet.	Rela- tive price.	Average price per short ton.	Rela- tive price.	Average price per short ton.	Rela- tive price.
1913.....	\$8.4541	100	\$0.4710	100	\$24.2273	100	\$44.5909	100	\$1.3200	100	\$1.5710	100
1919.....	18.3260	217	1.1894	248	39.7500	164	78.8333	177				
1920.												
March.....	15.5000	183	1.2364	263	57.0000	235	139.0000	312	2.3500	178	2.3500	150
April.....	15.7125	186	1.2000	255	57.0000	235	160.0000	359	3.5900	272	4.0700	259
May.....	14.7550	175	1.1636	247	57.0000	235	160.0000	359	4.4200	335	6.4700	412
June.....	15.3500	182	1.0000	212	57.0000	235	160.0000	359	8.6700	657	7.0000	446
July.....	15.8875	188	.9091	193	57.0000	235	160.0000	359	10.0000	758	7.9000	503
August.....	15.7350	186	.8727	185	57.0000	235	157.0000	352	10.6300	805	8.6300	549
September.....	17.0688	202	.8364	178	57.0000	235	157.0000	352	10.4700	793	8.6600	551
October.....	14.7875	175	.7273	154	57.0000	235	152.0000	341	8.7500	663	8.3100	529
November.....	12.1400	144	.6909	147	57.0000	235	124.5000	279	5.1900	393	7.3800	470
December.....	9.6625	114	.5455	116	57.0000	235	124.5000	279	3.7500	284	5.2000	331
1921.												
January.....	9.6700	114	.5455	116	48.0000	198	110.0000	247	2.5300	192	4.2500	271
February.....	9.7063	115	.5455	116	48.0000	198	95.0000	213	2.4200	183	3.7300	237
March.....	10.3063	122	.5273	112	48.0000	198	95.0000	213	2.2900	173	3.4000	215

Year and month.	Coal, anthracite, stove, New York, tidewater.		Coke, Connells- ville.		Copper, ingot, electrolytic, New York.		Lead, pig, desilverized, New York.		Petroleum, crude, Pennsylvania, at wells.		Pig iron, basic.	
	Average price per long ton.	Rela- tive price.	Average price per short ton.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per barrel.	Rela- tive price.	Average price per long ton.	Rela- tive price.
1913.....	\$5.0613	100	\$2.4396	100	\$0.1573	100	\$0.0440	100	\$2.4500	100	\$14.7058	100
1919.....	8.1639	161	4.7375	194	.1911	122	.0578	131	4.1346	169	27.6971	188
1920.												
March.....	8.4109	166	6.0000	246	.1858	118	.0923	210	6.1000	249	41.6000	283
April.....	8.4368	167	10.5000	430	.1919	122	.0896	204	6.1000	249	42.5000	289
May.....	8.9964	178	12.0000	492	.1906	121	.0856	195	6.1000	249	43.2500	294
June.....	9.3672	185	14.3000	586	.1900	121	.0848	193	6.1000	249	44.0000	299
July.....	9.4580	187	14.3750	589	.1900	121	.0860	195	6.1000	249	45.7500	311
August.....	9.6087	190	15.5500	637	.1900	121	.0898	204	6.1000	249	48.1000	327
September.....	10.4363	206	15.3125	628	.1869	119	.0816	185	6.1000	249	48.5000	330
October.....	10.4732	207	14.3125	587	.1675	106	.0731	166	6.1000	249	43.7500	298
November.....	10.5417	208	8.8500	363	.1455	92	.0628	143	6.1000	249	36.5000	248
December.....	10.5479	208	6.2375	256	.1369	87	.0478	109	6.1000	249	33.0000	224
1921.												
January.....	10.6373	210	5.5313	227	.1288	82	.0497	113	5.7750	236	30.0000	204
February.....	10.6382	210	5.1875	213	.1288	82	.0468	106	4.1875	171	27.5000	187
March.....	10.6382	210	5.0000	205	.1223	78	.0405	92	3.0000	122	24.2000	165

¹ On Toledo market, average for last six months of 1913.

AVERAGE MONTHLY WHOLESALE PRICES OF COMMODITIES—Continued.

[Average prices of 1913=100.]

Year and month.	Cotton yarns, northern cones, 10/1.		Leather, sole, hemlock, No. 1.		Steel billets, Bessemer, Pittsburgh.		Steel plates, tank, Pitts- burgh.		Steel rails, open hearth, Pittsburgh.		Worsted yarns, 2-32's cross- bred.	
	Average price per pound.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per long ton.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per long ton.	Rela- tive price.	Average price per pound.	Rela- tive price.
1913.....	\$0.2213	100	\$0.2821	100	\$25.7892	100	\$0.0148	100	\$30.0000	100	\$0.7767	100
1919.....	.5340	241	.5283	187	40.5385	157	.0271	183	49.2642	164	1.6274	210
1920.												
March.....	.7549	341	.5700	202	60.0000	233	.0365	247	54.5000	182	2.2000	283
April.....	.7784	352	.5700	202	60.0000	233	.0375	253	54.5000	182	2.2000	283
May.....	.7672	347	.5700	202	60.0000	233	.0375	253	54.5000	182	2.0000	258
June.....	.7299	330	.5700	202	60.0000	233	.0355	240	54.5000	182	2.0000	258
July.....	.7009	317	.5700	202	62.5000	242	.0338	228	54.5000	182	1.7500	225
August.....	.6310	285	.5500	195	61.0000	237	.0325	220	54.5000	182	1.7500	225
September.....	.5429	245	.5100	181	58.7500	228	.0325	220	54.5000	182	1.6000	206
October.....	.4343	196	.4900	174	55.0000	213	.0309	209	54.5000	182	1.5000	193
November.....	.3695	167	.4700	167	49.7000	193	.0281	190	54.5000	182	1.3000	167
December.....	.3108	140	.4100	145	43.5000	169	.0265	179	50.5000	168	1.1000	142
1921.												
January.....	.2878	130	.4000	142	43.5000	169	.0265	179	47.0000	157	1.1500	148
February.....	.2775	125	.3800	135	42.2500	164	.0233	157	47.0000	157	1.1500	148
March.....	.2447	111	.3700	131	38.4000	149	.0204	138	47.0000	157	1.2000	155

Year and month.	Beef, carcass, good native steers, Chicago.		Coffee, Rio, No. 7.		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.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per barrel.	Rela- tive price.	Average price per pound.	Rela- tive price.	Average price per gallon.	Rela- tive price.	Average price per pound.	Rela- tive price.
1913.....	\$0.1295	100	\$0.1113	100	\$4.5837	100	\$0.1662	100	\$0.1233	100	\$0.0427	100
1919.....	.2333	180	.1785	160	11.9982	262	.3433	207	.2004	163	.0894	209
1920.												
March.....	.2050	158	.1500	135	13.1650	287	.3155	190	.2500	203	.1372	321
April.....	.2090	161	.1514	136	14.2813	312	.3313	199	.2800	211	.1919	449
May.....	.1950	151	.1559	140	15.0313	328	.3556	214	.2800	211	.2247	526
June.....	.2225	172	.1498	135	14.1900	309	.3650	220	.2800	211	.2120	497
July.....	.2550	197	.1306	117	13.6688	298	.3769	227	.2800	211	.1910	447
August.....	.2550	197	.0936	84	12.2350	267	.3725	224	.2800	211	.1490	349
September.....	.2600	201	.0819	74	12.5938	275	.3634	219	.2750	223	.1426	344
October.....	.2520	195	.0759	68	11.2063	244	.3575	215	.2900	235	.1078	252
November.....	.2400	185	.0746	67	9.2950	203	.3065	184	.2900	235	.0962	225
December.....	.2220	171	.0656	59	8.9438	195	.2575	155	.2900	235	.0809	189
1921.												
January.....	.1738	134	.0669	60	9.6250	210	.2488	150	.2900	235	.0757	177
February.....	.1600	124	.0672	60	9.1813	200	.2600	156	.2750	223	.0709	166
March.....	.1625	125	.0639	57	8.7300	190	.2725	164	.2625	213	.0784	184

FOREIGN TRADE INDEX.

There is presented below a series of indexes designed to reflect movements in foreign trade of the United States, with fluctuations due to price changes eliminated. The commodities chosen for these indexes are those for which prices are compiled by the Federal Reserve Board in the preparation of its international price index. The list includes 25 of the most important imports, the value of which in 1913 formed 47.7 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. A classification of the 11 additional commodities of imports was given in the October, 1920, BULLETIN.

Total exports continued their decline during March, while imports again showed a considerable increase. The decline in exports took place in both raw materials and producers' goods, but there was a slight increase in the exports of consumers' goods. The decrease in the exports of raw materials was most noticeable in the case of wheat, cotton, and refined copper, while in the case of producers' goods a decline was noted in the export of

every commodity. The most noticeable increase in the exports of consumers' goods was in the case of wheat flour. There was a considerable increase in every class of imports. The outstanding increase in raw materials was

in the case of wool, and in producers' goods it was most noticeable in the case of cane sugar and India rubber, while in consumers' goods there was a considerable increase in imports of every commodity.

VALUE OF EXPORTS AND IMPORTS OF SELECTED COMMODITIES AT 1913 PRICES.

[In thousands of dollars; i. e., 000 omitted.]

[Monthly average values, 1913=100.]

	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 (3 commodities).		Total (25 commodities).	
	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.	Value.	Index number.
1913.																
January....	100,027	116.8	11,762	101.4	30,715	100.9	142,504	111.6	61,347	121.9	40,107	108.3	14,219	108.0	115,673	115.1
February....	71,074	83.0	12,266	105.8	30,790	101.2	114,130	89.4	55,332	110.0	41,060	110.9	14,335	108.9	110,727	110.1
March.....	61,681	72.0	11,836	102.1	28,698	94.3	102,215	80.1	55,555	110.4	45,753	123.6	13,378	101.6	114,686	114.1
April.....	71,446	83.0	14,128	121.8	28,708	94.3	114,282	89.5	52,271	103.9	42,346	114.4	10,896	82.7	105,513	104.9
May.....	68,856	80.4	11,661	100.6	29,923	98.3	110,440	86.5	50,089	99.5	38,409	103.7	7,718	58.6	96,216	95.7
June.....	46,963	54.8	11,612	100.1	28,242	92.8	86,817	68.0	40,822	81.1	38,606	104.3	8,382	63.7	87,810	87.3
July.....	51,325	59.9	11,109	95.8	27,686	91.0	90,120	70.6	40,298	80.1	35,999	97.2	9,698	73.6	85,986	85.4
August.....	74,869	87.4	11,547	99.5	29,370	96.5	115,786	90.7	42,470	84.4	37,385	101.0	11,078	84.1	90,933	90.4
September..	103,614	120.9	10,622	91.6	32,190	105.8	146,426	114.7	52,659	104.6	41,184	111.2	15,883	120.6	109,726	109.2
October....	137,772	160.9	12,608	108.7	34,612	113.8	184,992	144.9	44,407	88.2	22,721	61.4	15,929	121.0	83,057	82.6
November..	126,836	148.1	9,987	86.1	31,246	102.7	168,069	131.6	48,107	95.6	28,788	77.8	15,059	114.4	91,954	91.5
December..	113,326	132.3	10,053	86.7	33,089	108.7	156,468	122.5	60,904	121.0	31,929	86.2	21,446	162.9	114,279	113.7
Year..	1,027,789	100.0	139,191	100.0	365,269	100.0	1,532,249	100.0	604,261	100.0	444,278	100.0	158,021	100.0	1,206,560	100.0
1919.																
January....	84,066	98.2	18,444	159.0	56,748	186.4	159,258	124.7	44,552	88.5	53,071	143.3	14,434	108.1	112,057	111.4
February....	58,488	68.3	14,598	125.9	53,338	175.2	126,424	99.0	47,774	94.9	66,708	180.2	14,230	109.6	128,712	128.0
March.....	57,659	67.3	16,161	139.3	61,585	202.3	135,405	106.1	54,947	109.2	82,546	223.0	25,223	191.6	162,716	161.8
April.....	65,112	76.0	19,356	166.9	80,639	264.9	165,107	129.3	63,385	125.9	88,017	237.7	18,869	143.3	170,271	169.3
May.....	67,595	78.9	15,972	137.7	58,731	192.9	142,298	111.4	81,274	161.4	89,890	242.8	24,861	188.8	196,025	195.0
June.....	98,335	114.8	28,618	247.1	96,088	315.1	223,041	174.7	83,256	171.4	61,885	167.2	18,512	140.6	166,654	165.7
July.....	71,917	84.0	17,150	147.9	52,553	172.7	141,620	110.9	86,443	171.7	77,401	209.1	29,492	224.0	193,336	192.3
August.....	81,250	94.9	19,574	168.8	49,194	161.6	150,018	117.5	85,571	169.9	42,132	113.8	20,953	159.1	148,656	147.8
September..	70,285	82.1	19,359	166.9	43,342	142.4	132,986	104.1	123,524	245.3	70,033	189.2	25,240	191.7	218,797	217.6
October....	70,322	82.1	17,182	148.1	45,844	150.6	133,348	104.4	99,114	196.8	74,736	201.9	20,385	154.8	194,236	193.2
November..	99,552	116.2	15,735	135.7	46,729	153.5	162,016	126.9	98,690	196.1	79,198	213.9	21,254	161.4	199,142	198.1
December..	89,584	104.6	13,208	113.9	43,571	143.1	146,363	114.6	79,965	158.9	71,886	194.2	21,521	163.4	173,372	172.4
Year..	914,165	88.9	215,357	154.7	688,362	188.5	1,817,884	118.6	951,495	157.5	857,504	193.0	254,975	161.4	2,063,974	171.1
1920.																
January....	93,142	108.7	15,647	134.9	35,377	116.2	144,166	112.9	103,782	206.1	90,633	244.8	24,062	182.7	218,477	217.3
February....	70,150	81.9	14,201	122.4	41,645	136.8	125,996	98.7	87,210	173.2	107,162	289.5	19,936	151.4	214,308	213.1
March.....	90,779	106.0	17,259	148.8	50,612	186.0	164,513	128.9	97,011	192.7	125,496	339.0	25,909	197.4	248,506	247.2
April.....	68,048	79.4	17,063	147.1	51,689	169.8	136,800	107.1	87,588	174.0	97,187	262.5	29,076	220.8	213,851	212.7
May.....	63,650	74.3	17,546	151.3	62,457	205.2	143,653	112.5	64,177	127.5	84,134	227.2	14,887	113.1	163,198	162.3
June.....	55,200	64.5	14,063	126.4	46,113	151.5	115,976	90.8	75,225	149.5	85,699	258.5	21,463	163.0	192,387	191.8
July.....	66,924	78.1	19,138	165.0	43,325	142.4	129,387	101.3	60,942	121.0	94,910	253.7	24,562	183.5	179,414	178.1
August.....	67,225	78.5	15,708	135.4	28,594	94.0	111,527	87.3	61,321	121.8	94,836	256.2	22,624	171.8	178,811	177.6
September..	70,699	82.5	13,883	119.7	28,599	94.0	113,181	88.6	51,388	102.1	61,163	165.2	17,226	130.8	129,777	129.0
October....	101,708	118.7	17,049	152.2	37,839	124.4	157,216	123.1	44,866	89.1	48,683	131.5	17,613	133.8	111,162	110.0
November..	95,148	111.1	14,123	121.8	33,996	111.7	143,267	112.2	43,436	85.3	61,560	166.4	14,610	111.0	119,636	119.0
December..	104,828	122.4	21,577	186.0	37,536	123.3	163,941	128.4	39,963	79.4	49,239	133.0	13,401	101.8	102,603	102.0
Year..	947,501	92.2	198,457	142.6	503,802	137.9	1,649,760	107.7	816,909	135.2	1,009,762	227.3	245,459	155.3	2,072,130	171.7
1921.																
January....	90,063	105.2	21,797	187.9	38,356	126.0	150,216	117.6	37,523	74.5	48,442	130.8	19,288	146.5	105,253	104.7
February....	77,922	91.0	16,349	141.0	35,433	116.4	129,704	101.6	59,514	118.2	53,111	143.5	21,179	160.8	133,804	133.1
March.....	65,680	177.4	12,111	104.4	37,243	122.4	116,126	91.1	80,926	160.7	65,698	177.5	27,560	209.3	174,166	173.2

PHYSICAL VOLUME OF TRADE.

In continuation of tables in the April, 1921, FEDERAL RESERVE BULLETIN there are presented in the following tables certain data relative to the physical volume of trade. The January, 1919, issue contains a description of the methods employed in the compilation of the data and the construction of the accompanying index numbers. Additional material will be presented from time to time as reliable figures are obtained.

The textile industry has continued its recovery and has shown the usual seasonal productive activity. Cotton consumption during March increased slightly, but was considerably lower than the consumption during March, 1920. However, the number of cotton spindles active during the month decreased slightly from last month. The percentage of idle wool machinery during the month of March to the total reported continued to decline. The imports of raw silk, after a very large increase last month, decreased slightly during March.

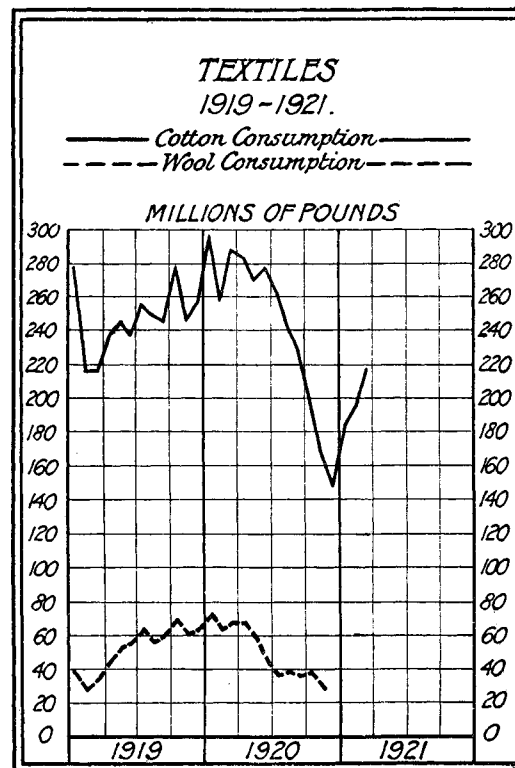
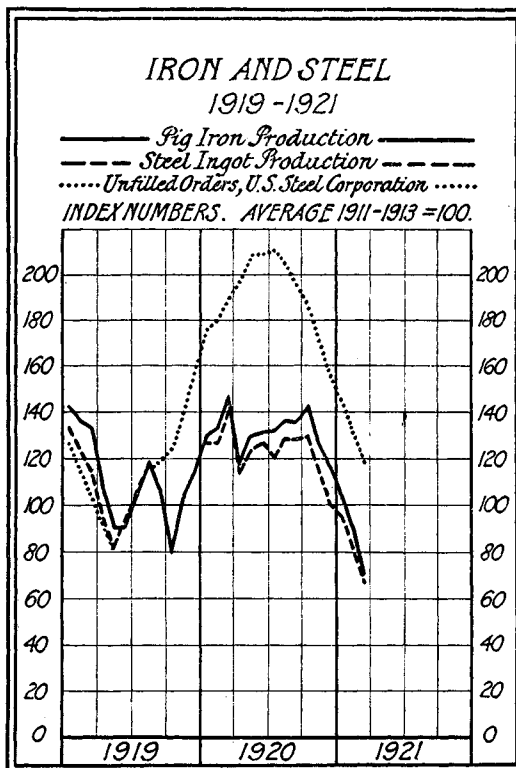
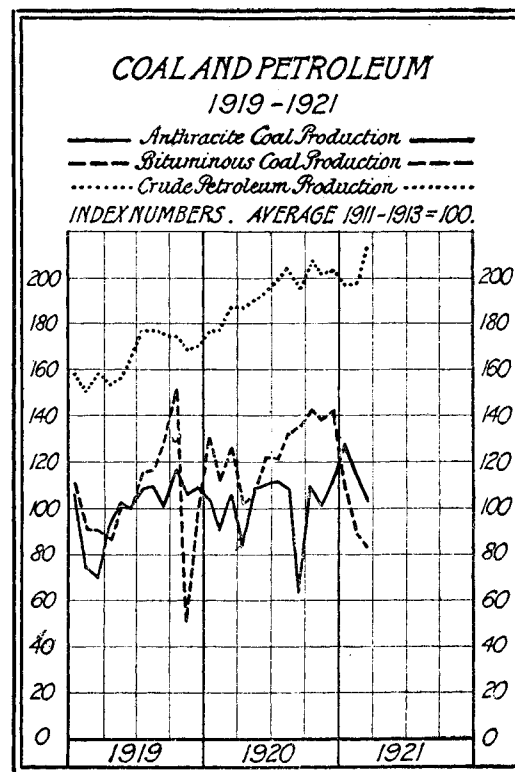
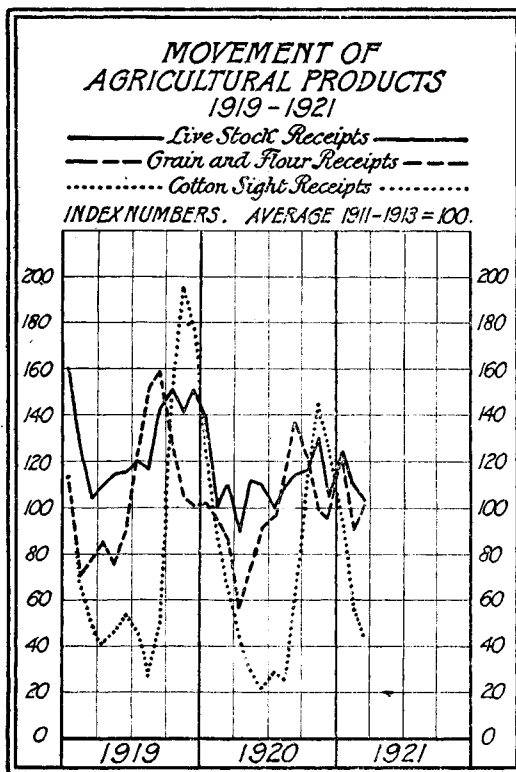
The production of bituminous coal during March continued its decline and was considerably less than the production during March, 1920. The production of anthracite coal also continued to show a downward trend, being slightly less than last month and somewhat less than the same month a year ago. March crude petroleum production showed a considerable increase over the production of last month, as well as over the production for March, 1920. Pig-iron production during April made another record drop, reaching almost the low production of June, 1908. The average daily production during April was 39,768 tons, as compared with 91,327 tons during April, 1920, and 51,468 tons during March, 1921. Steel-ingot production likewise showed another considerable drop, being considerably below the production of last month and the same month a year ago. The unfilled orders of the United States Steel Corporation at the close of April also continued to decline, reaching a new low point.

Receipts of live stock at 15 western markets showed a further decrease during March and were still below the figure for March, 1920. There was an increase over the previous month in the receipts of cattle and calves and sheep, but a large drop occurred in the case of hogs. Total shipments increased slightly over February, but were practically the same

as during March a year ago. Stocker and feeder shipments from 34 markets showed a very large seasonal gain over February, but were still smaller than shipments during March, 1920. The number of animals slaughtered under Federal inspection during March reflected the seasonal decrease and was considerably lower than during March, 1920. Receipts of grain and flour at 17 interior centers during March were in larger volume than either last month or the same month a year ago. Stocks of grain at 11 interior centers at the close of March were much larger than in February, 1921, or March a year ago. Wheat flour production during March showed a marked increase over February and was somewhat larger than during March, 1920. Cotton sight receipts continued their seasonal decrease, and the American spinners' takings decreased to about one-half of last month's takings.

Receipts and shipments of lumber at Chicago and St. Louis during April showed a slight decrease from the March figure, but were still considerably larger than receipts and shipments during April, 1920. The production of lumber during March has shown a considerable revival in each of the five associations, namely, southern pine, western pine, Douglas fir, eastern white pine, and North Carolina pine. The production increased considerably over February, but was still considerably less than the production during March, 1920. Receipts and meltings of raw sugar at the North Atlantic ports showed a considerable increase over February, but in both cases were smaller than during March, 1920. The raw stocks at the close of March at these ports decreased from the February figure, and were practically the same as raw stocks at the close of March, 1920. California shipments of citrus fruits during March increased both when compared with last month and the same month a year ago. Shipments of deciduous fruits were the same as last month and considerably smaller than during March, 1920.

Tonnage of vessels cleared during March was larger than in February, or in March a year ago. The January railway net ton mileage dropped to a very low figure, and was the smallest figure since April, 1920, at which time the railroad outlaw strike occurred.



LIVE-STOCK MOVEMENTS.

[Bureau of Markets.]

	Receipts.					Shipments.				
	Cattle and calves, 59 markets.	Hogs, 59 markets.	Sheep, 59 markets.	Horses and mules, 43 markets.	Total, all kinds.	Cattle and calves, 54 markets.	Hogs, 54 markets.	Sheep, 54 markets.	Horses and mules, 43 markets.	Total, all kinds.
1920.	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.
March	1,643,816	3,903,804	1,234,951	82,584	6,865,155	571,123	1,399,485	483,559	87,896	2,542,054
July	1,657,743	2,837,685	2,009,758	35,668	6,531,854	721,328	1,095,470	1,015,612	37,152	2,869,562
August	1,952,086	2,516,240	2,561,661	73,423	7,103,410	869,849	953,085	1,459,150	69,971	3,352,058
September	2,279,345	2,435,559	2,826,693	57,468	7,599,065	1,079,170	831,261	1,581,680	60,414	3,652,525
October	2,196,939	2,826,277	2,945,709	38,657	8,007,582	1,159,459	1,064,175	1,932,083	37,994	4,193,711
November	2,403,990	3,862,243	2,419,596	22,477	8,708,306	1,148,861	1,394,347	1,474,299	22,963	4,040,470
December	1,382,995	4,186,261	1,546,876	16,118	7,132,250	647,801	1,516,893	704,760	17,030	2,886,484
1921.										
January	1,629,994	4,654,560	1,769,155	34,712	8,088,421	662,320	1,637,902	681,987	34,572	2,956,781
February	1,174,611	3,951,971	1,501,902	41,212	6,669,696	456,471	1,346,092	590,487	40,611	2,433,661
March	1,548,061	3,338,483	1,731,653	41,951	6,660,148	587,898	1,229,405	688,672	42,602	2,547,977

RECEIPTS AND SHIPMENTS OF LIVE STOCK AT 15 WESTERN MARKETS.

[Chicago, Kansas City, Oklahoma City, Omaha, East St. Louis, St. Joseph, St. Paul, Sioux City, Cincinnati, Cleveland, Denver, Fort Worth, Indianapolis, Louisville, Wichita. Monthly average, 1911-1913=100.]

RECEIPTS.

	Cattle and calves.		Hogs.		Sheep.		Horses and mules.		Total, all kinds.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
1920.										
March	1,195,622	119	2,852,171	130	899,760	66	56,880	124	5,904,433	108
July	1,188,019	118	2,115,639	96	1,301,458	95	26,257	57	4,631,373	100
August	1,459,565	145	1,818,245	83	1,688,719	124	55,371	120	5,021,900	109
September	1,736,909	172	1,597,622	73	1,893,312	139	38,950	85	5,265,893	114
October	1,628,564	162	1,856,748	84	1,865,330	136	24,716	54	5,355,358	116
November	1,781,261	177	2,624,185	119	1,542,477	113	12,149	26	5,960,072	129
December	984,309	98	2,932,052	133	942,858	69	9,290	20	4,868,509	105
1921.										
January	1,191,814	118	3,339,419	152	1,112,024	81	24,158	52	5,667,415	123
February	825,686	89	2,902,107	141	972,647	76	27,111	63	4,737,551	110
March	1,119,548	111	2,390,480	109	1,161,549	85	28,437	62	4,700,014	102

SHIPMENTS.

	Cattle and calves.		Hogs.		Sheep.		Horses and mules.		Total, all kinds.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
1920.										
March	418,310	103	923,526	191	298,578	59	61,625	150	1,702,339	119
July	508,199	125	737,923	152	644,557	122	27,728	68	1,918,407	134
August	649,295	157	627,670	130	899,342	179	52,163	127	2,219,470	155
September	819,371	202	540,812	112	1,027,510	204	40,890	100	2,428,583	169
October	866,327	213	584,742	121	1,192,912	237	24,051	59	2,668,032	186
November	810,284	199	784,468	162	952,159	189	12,782	31	2,559,693	178
December	472,748	116	943,515	195	394,646	76	10,201	25	1,811,110	126
1921.										
January	426,887	105	1,078,679	223	316,068	63	24,463	60	1,846,097	129
February	334,113	88	969,718	192	324,311	69	26,495	69	1,554,637	116
March	447,682	110	825,944	170	406,705	81	28,765	70	1,709,096	119

SHIPMENTS OF STOCKERS AND FEEDERS FROM 34 MARKETS.

	Cattle and calves.	Hogs.	Sheep.	Total, all kinds.		Cattle and calves.	Hogs.	Sheep.	Total, all kinds.
	Head.	Head.	Head.	Head.		Head.	Head.	Head.	Head.
1920.					1920.				
March	239,363	101,173	135,244	475,780	November	545,802	52,699	855,545	1,454,046
July	209,563	25,711	322,867	558,141	December	277,053	36,827	258,599	572,479
August	273,512	34,415	567,429	875,356	1921.				
September	473,652	44,340	789,387	1,307,379	January	202,926	41,892	88,089	332,907
October	571,025	59,123	1,055,237	1,685,385	February	164,504	49,229	61,508	275,241
					March	233,477	72,536	88,292	394,305

ANIMALS SLAUGHTERED UNDER FEDERAL INSPECTION.

[Bureau of Animal Industry. Monthly average, 1911-1913=100.]

	Cattle.		Calves.		Hogs.		Sheep.		Total.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
1920.										
March	683,139	113	390,053	221	3,481,680	124	787,867	65	5,342,739	111
July	661,172	109	342,765	194	2,643,772	94	1,048,428	87	4,696,137	98
August	685,763	113	332,349	188	2,176,010	77	1,041,580	86	4,235,702	83
September	825,484	136	347,578	197	1,978,602	70	1,150,776	95	4,302,440	90
October	843,136	139	314,789	178	2,486,940	88	1,067,821	89	4,712,686	98
November	858,945	142	315,971	179	3,328,633	118	968,235	80	5,471,785	114
December	697,344	110	244,573	138	3,985,125	142	932,117	77	5,829,459	121
1921.										
January	689,506	114	282,043	160	4,347,306	154	1,068,346	89	6,387,201	133
February	522,718	92	252,369	153	3,770,974	143	957,751	85	5,503,812	123
March	624,895	103	361,733	205	3,075,137	109	1,075,481	89	5,136,746	107

EXPORTS OF CERTAIN MEAT PRODUCTS.

[Department of Commerce. Monthly average, 1911-1913=100.]

	Beef, canned.		Beef, fresh.		Beef, pickled, and other cured.		Bacon.		Hams and shoulders, cured.		Lard.		Pickled pork.	
	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.	Pounds.	Relative.
1920.														
March	847,397	128	6,036,166	487	2,290,835	86	75,002,410	448	31,088,859	208	69,429,785	158	3,160,456	71
July	5,217,838	788	5,506,812	444	1,973,004	74	31,562,761	188	8,385,089	56	47,061,422	107	2,926,247	66
August	1,231,070	186	343,352	28	2,152,982	81	23,333,156	139	9,360,469	63	31,020,802	71	2,257,511	51
September	244,261	37	1,964,543	158	1,613,657	60	41,371,561	247	8,997,124	60	46,326,353	105	3,279,902	74
October	207,503	31	522,251	42	1,995,039	75	49,838,768	298	8,787,853	59	54,173,979	123	3,549,456	80
November	282,761	43	3,091,895	249	1,678,091	63	57,934,259	346	11,197,880	75	57,316,309	130	2,605,431	59
December	399,916	60	1,583,434	128	3,053,993	114	68,784,322	411	14,491,763	97	90,080,092	205	2,691,452	61
1921.														
January	548,227	83	6,078,550	490	1,725,625	65	43,202,486	258	16,869,841	113	76,185,237	173	3,089,094	70
February	1,733,678	280	979,081	85	1,750,756	70	31,612,140	202	15,847,799	114	91,840,951	224	3,150,452	76
March	504,356	76	508,230	41	2,246,547	84	35,350,774	211	19,102,633	128	82,616,583	188	2,024,334	46

RECEIPTS OF GRAIN AND FLOUR AT 17 INTERIOR CENTERS.

Chicago, Cleveland, Detroit, Duluth, Indianapolis, Kansas City, Little Rock, Louisville, Memphis, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Spokane, Toledo, Wichita; receipts of flour not available for Cleveland, Detroit, Indianapolis, Louisville, Omaha, Spokane, Toledo, and Wichita. Compiled from reports of trade organizations at these cities. Monthly average, 1911-1913=100.]

	Wheat.		Corn.		Oats.		Rye.		Barley.		Total grain.		Flour.		Total grain and flour. ¹	
	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Bushels.	Relative.
1920.																
March	18,007,798	66	24,304,946	108	19,149,624	95	3,549,739	322	2,908,440	41	67,920,547	87	1,618,519	83	75,203,883	87
July	29,714,399	110	20,824,268	93	18,734,180	93	3,096,026	281	2,633,921	37	75,022,794	96	2,052,110	105	84,257,289	97
August	43,039,021	159	9,840,320	44	30,728,748	153	3,191,103	289	3,007,508	42	89,806,700	115	1,949,339	100	98,578,726	114
September	46,181,275	170	20,696,955	92	31,031,569	154	5,571,428	505	6,630,056	92	110,111,283	141	1,843,954	94	118,409,076	137
October	45,403,825	167	19,064,508	85	21,235,162	106	4,455,979	404	5,795,028	81	95,954,502	123	2,137,639	109	105,573,878	122
November	39,272,827	145	11,407,224	51	15,282,651	76	3,706,653	336	6,616,362	92	76,285,717	98	2,054,262	105	85,529,896	96
December	32,758,773	121	19,390,714	87	13,777,300	69	3,482,685	316	5,057,808	71	74,467,280	96	1,570,822	80	81,535,979	94
1921.																
January	32,229,218	119	42,036,812	188	18,508,986	92	2,202,705	203	3,753,837	52	98,731,558	127	1,430,904	73	105,170,626	121
February	22,922,667	91	27,565,779	132	12,553,913	67	1,397,832	136	2,074,908	31	66,515,099	91	1,659,009	91	73,980,640	91
March	22,848,939	84	34,165,324	152	17,432,655	87	1,341,498	121	3,111,127	43	78,898,543	101	2,096,630	107	88,331,678	102

¹ Flour reduced to its equivalent in wheat on basis of 4½ bushels to barrel.

SHIPMENTS OF GRAIN AND FLOUR AT 14 INTERIOR CENTERS.

[Chicago, Cleveland, Detroit, Duluth, Kansas City, Little Rock, Louisville, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, Toledo, Wichita; shipments of flour not available for Cleveland, Detroit, Louisville, Omaha, Toledo, and Wichita.]

	Wheat.		Corn.		Oats.		Rye.		Barley.		Total grain.		Flour.		Total grain and flour. ¹	
	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Bushels.	Relative.
1920.																
March.....	11,027,336	71	11,165,894	78	14,243,957	94	3,063,530	433	1,572,887	40	41,073,604	83	2,960,175	87	54,394,392	84
July.....	19,002,099	122	9,100,527	64	11,345,429	75	4,476,238	632	2,086,672	53	46,010,965	93	3,767,678	111	62,965,516	97
August.....	24,934,816	160	6,260,144	44	12,814,067	84	2,880,003	407	2,231,851	57	49,120,881	99	3,605,105	106	65,343,854	101
September.....	28,700,593	184	6,284,075	44	12,690,866	83	4,339,057	613	3,556,180	91	55,570,771	112	3,187,454	94	69,914,314	108
October.....	26,258,735	169	10,336,378	72	10,601,178	70	4,742,380	670	4,529,091	116	56,467,822	114	3,758,735	111	73,382,130	113
November.....	24,950,771	160	7,890,500	55	10,729,045	71	2,995,524	423	4,247,954	109	50,816,794	102	3,949,699	117	68,590,440	106
December.....	22,253,030	143	7,898,979	55	9,964,743	66	3,171,616	448	3,082,249	79	46,370,617	93	3,141,524	93	60,507,475	93
1921.																
January.....	20,187,379	130	17,288,509	121	11,523,642	76	2,380,797	336	2,874,359	74	54,254,686	109	2,678,257	79	66,306,843	102
February.....	15,134,115	104	12,891,895	97	9,299,842	66	1,041,424	158	1,026,913	45	39,994,189	86	2,696,723	85	52,129,443	86
March.....	17,415,266	112	20,723,904	145	12,435,262	82	1,116,943	158	1,685,989	43	53,377,364	107	3,156,299	93	67,580,710	104

¹ Flour reduced to its equivalent in wheat on basis of $4\frac{1}{2}$ bushels to barrel.

STOCKS OF GRAIN AT 11 INTERIOR CENTERS AT CLOSE OF MONTH.

[Chicago, Detroit Duluth, Indianapolis, Kansas City, Milwaukee, Minneapolis, Omaha, Peoria, St. Louis, and Toledo.]

	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
1920.	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
March.....	32,743,697	4,423,249	7,525,112	14,391,595	2,016,046	61,099,699
July.....	5,492,026	4,950,314	2,059,842	670,563	1,336,553	14,518,298
August.....	5,460,879	1,414,708	7,447,762	338,600	709,469	15,371,418
September.....	9,134,621	5,669,580	23,322,910	1,303,475	2,114,369	41,544,955
October.....	14,627,524	7,823,807	28,941,148	668,084	2,096,517	54,157,080
November.....	16,058,407	3,461,911	28,697,974	1,082,195	1,874,366	51,174,853
December.....	15,525,114	4,793,299	27,858,948	1,007,591	2,378,548	51,063,500
1921.						
January.....	14,414,231	11,596,518	29,435,153	478,125	2,057,434	57,981,461
February.....	12,883,444	17,294,569	30,039,057	600,585	1,800,604	62,618,259
March.....	11,277,724	24,465,117	31,570,022	562,754	1,673,037	69,548,654

RECEIPTS OF GRAIN AND FLOUR AT NINE SEABOARD CENTERS.

[Boston, New York, Philadelphia, Baltimore, New Orleans, San Francisco, Portland (Oreg.), Seattle, Tacoma; receipts of flour not available for Seattle and Tacoma. Compiled from reports of trade organizations at these cities. Monthly average, 1911-1913=100.]

	Wheat.		Corn.		Oats.		Rye.		Barley.		Total grain.		Flour.		Total grain and flour. ¹	
	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Bushels.	Relative.
1920.																
March.....	6,486,745	51	1,203,649	34	3,646,727	77	4,119,986	2,900	1,300,871	78	16,757,978	74	1,752,860	168	24,645,848	90
July.....	18,710,633	149	3,305,542	93	3,499,101	74	5,048,019	3,553	2,098,083	126	32,661,378	144	1,660,849	159	40,135,198	146
August.....	28,098,022	223	1,576,842	44	2,671,385	56	3,407,709	2,398	2,289,791	138	38,043,819	168	1,390,077	133	44,299,166	162
September.....	31,693,246	252	1,456,958	41	3,069,700	65	4,133,465	2,909	1,815,227	109	42,168,506	186	1,422,872	136	48,571,520	177
October.....	29,028,202	230	1,844,753	52	1,828,515	38	5,436,354	3,826	2,558,276	154	40,696,100	179	1,463,830	140	47,283,335	173
November.....	24,410,356	194	2,401,181	68	1,874,271	39	3,329,710	2,344	2,721,320	164	34,736,838	153	3,683,330	353	51,312,048	187
December.....	29,551,950	235	854,138	24	1,911,861	40	3,490,405	2,437	2,291,639	138	38,099,993	168	4,367,180	418	57,752,303	211
1921.																
January.....	12,717,255	101	6,228,175	175	1,542,355	32	2,748,524	1,934	1,970,931	119	25,207,240	111	1,174,815	112	30,493,908	111
February.....	10,315,852	88	7,845,915	237	1,039,537	23	2,059,538	1,553	1,631,288	105	22,892,130	108	1,186,565	122	28,231,673	110
March.....	9,064,534	72	13,933,057	392	1,433,069	30	1,034,760	728	1,689,129	102	27,154,549	120	1,518,450	145	33,987,574	124

¹ Flour reduced to its equivalent in wheat on basis of $4\frac{1}{2}$ bushels to barrel.

STOCKS OF GRAIN AT EIGHT SEABOARD CENTERS AT CLOSE OF MONTH.

[Boston, New York, Philadelphia, Baltimore, New Orleans, Newport News, Galveston, San Francisco. Compiled from reports of trade organizations at these cities.]

	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
March..... 1920.	6,280,682	851,287	1,351,457	2,389,321	1,891,862	12,764,609
July.....	11,923,745	744,167	1,323,940	1,275,554	3,187,611	18,455,017
August.....	13,915,892	1,097,945	1,532,272	777,445	4,052,189	21,375,743
September.....	15,517,070	1,146,514	2,398,157	2,414,910	4,110,158	25,586,809
October.....	17,277,003	1,292,818	2,521,049	1,742,178	3,577,450	26,410,498
November.....	17,794,605	1,371,013	2,327,249	1,906,527	3,097,922	26,497,316
December.....	18,263,476	510,142	2,205,936	2,196,380	3,322,050	26,497,984
January..... 1921.	15,060,423	2,524,700	1,980,265	1,602,358	2,105,450	23,273,196
February.....	12,032,772	3,982,316	1,775,563	1,332,441	1,909,706	21,032,798
March.....	6,782,584	6,353,250	1,286,275	1,069,220	1,454,547	16,945,876

NOTE.—Figures for San Francisco include also stocks at Port Costa and Stockton.

WHEAT FLOUR PRODUCTION.

[January, 1918, to June, 1920, U. S. Grain Corporation; July, 1920, on, estimated by Russell's Commercial News (Inc.), New York.]

	Barrels.		Barrels.
March..... 1920.	9,036,000	November..... 1920.	9,500,000
July.....	8,200,000	December.....	9,600,000
August.....	10,200,000		
September.....	9,450,000	January..... 1921.	8,924,000
October.....	9,650,000	February.....	7,066,000
		March.....	9,100,000

COTTON.

[New Orleans Cotton Exchange. Monthly average crop years, 1911-1913=100.]

	Sight receipts.		Port receipts.		Overland movement.		American spinners' takings.		Stocks at ports and interior towns at close of month.	
	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.	Bales.	Relative.
1920-21.										
August.....	308,262	25	159,586	17	25,322	24	251,841	55	1,365,397	116
September.....	771,590	62	443,149	48	17,324	16	254,460	56	1,607,602	136
October.....	1,466,874	117	971,334	106	87,215	83	395,165	87	2,101,839	178
November.....	1,804,135	144	1,075,803	117	117,139	111	425,089	94	2,597,820	220
December.....	1,579,751	128	797,350	87	134,455	128	672,477	148	2,815,934	239
January.....	1,153,825	92	636,260	69	157,012	149	526,718	116	2,863,377	243
February.....	744,682	64	446,399	52	206,554	210	576,260	136	2,820,403	239
March.....	553,518	44	401,464	44	134,085	127	253,368	56	2,757,715	234

COTTON SEED.

[Bureau of the Census.]

	Received at mills.	Crushed.	On hand at mills (close of month).		Received at mills.	Crushed.	On hand at mills (close of month).
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>		<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
March..... 1920.	178,145	316,393	215,872	November..... 1920.	829,282	719,455	581,806
July.....	7,259	13,219	30,084	December.....	557,787	546,086	593,507
August.....	24,979	20,317	36,760				
September.....	244,382	143,519	135,623	January..... 1921.	418,846	527,521	484,832
October.....	945,998	607,628	471,979	February.....	431,539	499,851	416,520
				March.....	336,226	452,770	299,976

SHIPMENTS OF CITRUS AND DECIDUOUS FRUITS FROM CALIFORNIA.

[March, 1921, on, Bureau of Markets and California Fruit News.² Monthly average, 1911-1913=100.]

	Oranges.		Lemons.		Total citrus fruits.		Total deciduous fruits.
	Carloads.	Relative.	Carloads.	Relative.	Carloads.	Relative.	Carloads.
1920.							
March.....	4,715	193	651	161	5,366	188	155
July.....	2,822	115	664	164	3,486	122	3,179
August.....	1,707	70	751	185	2,458	86	7,239
September.....	1,409	58	464	115	1,873	66	9,021
October.....	752	31	925	228	1,677	59	11,880
November.....	1,602	66	377	93	1,979	69	2,792
December.....	3,774	154	368	91	4,142	146	368
1921.							
January.....	3,429	140	627	155	4,056	143	98
February.....	3,484	153	610	161	4,094	155	81
March.....	4,955	203	936	231	5,891	207	81

¹ Includes grapefruit.² For previous sources, see April, 1921, Bulletin.

SUGAR.

[Data for ports of New York, Boston, Philadelphia. Weekly Statistical Sugar Trade Journal. Tons of 2,240 pounds. Monthly average, 1911-1913=100.]

	Receipts.		Meltings.		Raw stocks at close of month.			Receipts.		Meltings.		Raw stocks at close of month.	
	Tons.	Relative.	Tons.	Relative.	Tons.	Relative.		Tons.	Relative.	Tons.	Relative.	Tons.	Relative.
1920.							1920.						
March.....	335,532	182	333,000	182	88,185	51	December.....	148,464	81	154,000	84	63,715	37
July.....	386,328	210	325,000	177	104,027	60	1921.						
August.....	308,313	168	287,000	156	125,340	73	January.....	92,498	50	94,000	51	62,113	36
September.....	109,302	59	164,000	89	70,642	41	February.....	228,952	133	193,000	113	98,165	57
October.....	109,335	59	118,000	64	61,977	36	March.....	306,914	167	310,000	169	87,466	51
November.....	186,274	101	179,000	98	69,251	40							

SALE OF REVENUE STAMPS FOR MANUFACTURES OF TOBACCO IN THE UNITED STATES (EXCLUDING PORTO RICO AND PHILIPPINE ISLANDS).

[Commissioner of Internal Revenue.]

	Cigars.		Cigarettes.	Manu- factured tobacco.		Cigars.		Cigarettes.	Manu- factured tobacco.
	Large.	Small.	Small.			Large.	Small.	Small.	
1920.	Number.	Number.	Number.	Pounds.	1920.	Number.	Number.	Number.	Pounds.
March.....	753,239,958	55,052,100	4,373,778,917	38,422,481	December.....	506,126,135	47,380,000	2,816,818,050	15,452,701
July.....	678,751,956	51,766,100	3,053,336,563	30,988,646	1921.				
August.....	672,020,289	48,171,240	3,569,397,443	32,138,941	January.....	462,798,039	64,661,867	3,901,560,330	24,750,290
September.....	678,640,116	50,175,580	3,557,482,503	32,094,569	February.....	496,724,482	64,461,733	4,119,376,533	27,096,592
October.....	704,799,089	60,882,760	3,840,334,806	27,123,774	March.....	561,343,699	70,245,500	4,470,292,160	32,209,842
November.....	668,060,015	57,026,500	3,529,200,006	18,513,654					

NAVAL STORES.

[Data for Savannah, Jacksonville, and Pensacola. Compiled from reports of trade organizations at these cities.]

	Spirits of turpentine.		Rosin.			Spirits of turpentine.		Rosin.	
	Receipts.	Stocks at close of month.	Receipts.	Stocks at close of month.		Receipts.	Stocks at close of month.	Receipts.	Stocks at close of month.
1920.	Barrels.	Barrels.	Barrels.	Barrels.	1920.	Barrels.	Barrels.	Barrels.	Barrels.
March.....	1,876	4,819	14,660	103,443	November.....	23,893	49,209	83,177	247,253
July.....	39,158	30,906	117,088	135,979	December.....	21,174	53,356	76,848	300,315
August.....	33,997	27,963	111,497	144,109	1921.				
September.....	32,162	44,396	97,797	176,612	January.....	9,419	51,563	36,333	310,905
October.....	30,260	49,885	88,766	195,837	February.....	7,404	41,755	26,736	316,440
					March.....	7,995	28,838	18,906	319,347

LUMBER.

[From reports of manufacturers' associations.]

	Southern pine.			Western pine.			Douglas fir.			Eastern white pine.			North Carolina pine.		
	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.	Number of mills.	Production.	Shipments.
1920.		<i>M feet.</i>	<i>M feet.</i>		<i>M feet.</i>	<i>M feet.</i>		<i>M feet.</i>	<i>M feet.</i>		<i>M feet.</i>	<i>M feet.</i>		<i>M feet.</i>	<i>M feet.</i>
March.....	205	436,944	424,775	50	130,425	156,211	123	342,948	329,012	21	43,771	61,620	24	29,633	29,896
July.....	207	385,842	331,273	49	177,262	103,500	127	242,612	225,666	20	37,459	49,668	20	20,756	15,217
August.....	204	383,540	337,677	50	171,143	123,344	123	366,433	322,908	20	46,149	55,991	19	19,511	14,130
September.....	204	376,566	378,195	49	164,312	98,808	127	299,277	238,965	20	48,962	45,445	20	21,887	16,043
October.....	206	344,427	329,751	49	146,424	69,936	120	355,614	299,704	19	40,724	30,928	24	19,487	14,877
November.....	203	315,343	320,758	52	107,846	60,259	123	263,452	212,226	19	20,294	19,751	24	14,617	12,929
December.....	199	264,504	281,326	53	45,578	46,112	119	188,905	187,874	19	19,056	10,587	21	8,091	14,716
1921.															
January.....	193	289,824	311,977	54	24,698	42,793	116	153,157	170,821	19	24,319	10,602	16	7,123	7,880
February.....	189	330,680	335,876	53	22,128	48,270	114	159,646	153,649	19	23,722	13,615	18	10,673	10,045
March.....	195	387,959	390,300	55	35,983	63,126	118	192,188	210,842	19	26,396	15,298	15	12,778	8,915

RECEIPTS AND SHIPMENTS OF LUMBER AT CHICAGO AND ST. LOUIS.

[Chicago Board of Trade and Merchants' Exchange of St. Louis. Monthly average, 1911-1913=100.]

	Receipts.		Shipments.			Receipts.		Shipments.	
	M feet.	Relative.	M feet.	Relative.		M feet.	Relative.	M feet.	Relative.
1920.					1920.				
April.....	236,975	51	131,933	52	December.....	351,695	76	192,072	76
July.....	399,615	86	184,767	73	1921.				
August.....	370,352	80	220,368	87	January.....	263,001	57	165,308	65
September.....	375,456	81	242,857	96	February.....	269,632	62	169,843	72
October.....	398,333	86	220,116	87	March.....	349,426	75	215,760	87
November.....	342,971	74	190,282	75	April.....	345,798	74	213,359	84

COAL AND COKE.

[U. S. Geological Survey. Monthly average, 1911-1913=100.]

	Bituminous coal, estimated monthly production.		Anthracite coal, estimated monthly production.		Beehive coke, estimated monthly production.	
	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
1920.						
March.....	46,832,000	126	7,857,000	106	2,025,000	77
July.....	45,009,000	121	8,261,000	112	1,693,000	65
August.....	48,910,000	132	8,025,000	108	1,776,000	68
September.....	49,172,000	133	4,646,000	63	1,757,667	67
October.....	52,144,000	141	8,069,000	109	1,742,333	67
November.....	51,457,000	139	7,453,000	101	1,622,000	62
December.....	52,123,000	141	8,321,000	112	1,515,000	58
1921.						
January.....	40,270,000	109	9,419,000	127	1,074,833	41
February.....	30,851,000	89	7,845,000	114	863,834	35
March.....	30,328,000	82	7,603,000	103	587,333	22

CRUDE PETROLEUM.

[U. S. Geological Survey. Barrels of 42 gallons each. Monthly average, 1911-1913=100.]

	Production.		Stocks at close of month (barrels).			Production.		Stocks at close of month (barrels).	
	Barrels.	Relative.	East of California.	California.		Barrels.	Relative.	East of California.	California.
1920.					1920.				
March.....	35,831,000	187			November.....	38,699,000	202	92,015,000	21,272,000
July.....	38,203,000	199			December.....	38,961,000	203	94,919,000	20,930,000
August.....	39,055,000	204	89,355,000	22,149,000	1921.				
September.....	37,532,000	196	88,155,000	21,874,000	January.....	37,853,000	197	95,838,000	21,261,000
October.....	39,592,000	207	89,584,000	21,265,000	February.....	35,348,000	198	100,147,000	21,566,000
					March.....	40,802,000	213	105,797,000	22,896,000

TOTAL OUTPUT OF OIL REFINERIES AND STOCKS OF OIL.

[Bureau of Mines.]

OUTPUT, BY MONTHS.

	Crude oil run (barrels).	Gasoline (gallons).	Kerosene (gallons).	Gas and fuel (gallons).	Lubricating (gallons).
1920.					
February.....	29,208,723	322,588,697	194,523,334	589,684,857	74,243,073
July.....	37,024,052	423,419,770	172,213,511	751,193,898	92,369,504
August.....	39,757,770	444,141,422	189,010,459	834,322,503	91,078,569
September.....	40,549,316	453,881,096	199,140,024	836,700,086	86,230,371
October.....	40,687,250	465,787,745	213,742,156	823,114,603	93,229,723
November.....	39,458,945	452,642,125	214,804,177	822,638,305	91,180,007
December.....	40,485,409	464,393,356	210,668,109	859,131,359	90,894,798
1921.					
January.....	39,637,382	460,432,439	205,374,611	836,684,040	85,908,641
February.....	34,588,096	388,188,252	163,081,918	732,542,415	72,432,219

STOCKS AT CLOSE OF MONTH.

1920.					
Feb. 29.....	13,500,599	562,996,489	330,120,942	590,322,125	132,759,244
July 31.....	17,086,253	413,279,319	410,853,047	655,152,293	131,866,455
Aug. 31.....	17,960,558	323,239,991	378,543,791	708,608,472	130,797,810
Sept. 30.....	18,830,079	288,195,394	379,300,705	771,126,965	130,449,829
Oct. 31.....	19,237,730	301,283,731	383,823,239	799,024,084	136,194,914
Nov. 30.....	21,373,945	354,835,764	398,991,592	808,802,516	142,180,775
Dec. 31.....	21,200,580	462,381,837	393,070,923	837,404,414	160,522,477
1921.					
Jan. 31.....	21,064,124	571,983,793	418,747,781	921,028,127	183,813,205
Feb. 28.....	22,411,819	680,540,351	430,045,193	993,127,328	201,627,558

IRON AND STEEL.

[Pig-iron production, Iron Age; steel-ingot production, American Iron and Steel Institute. Monthly average, 1911-1913=100.]

	Pig-iron production.		Steel-ingot production.		Unfilled orders U. S. Steel Corporation at close of month.	
	Gross tons.	Relative.	Gross tons.	Relative.	Gross tons.	Relative.
1920.						
April.....	2,739,797	118	2,638,305	113	10,359,747	197
July.....	3,067,043	132	2,802,818	120	11,118,468	211
August.....	3,147,402	136	3,000,432	128	10,805,038	205
September.....	3,129,323	135	2,999,551	128	10,374,804	197
October.....	3,292,597	142	3,015,982	129	9,836,852	187
November.....	2,934,908	127	2,638,670	113	9,021,481	171
December.....	2,703,855	117	2,340,365	100	8,148,122	155
1921.						
January.....	2,416,292	104	2,203,186	94	7,573,164	144
February.....	1,937,257	90	1,749,477	80	6,933,867	132
March.....	1,595,522	69	1,570,978	67	6,284,765	119
April.....	1,193,041	51	1,213,958	52	5,845,224	111

STRUCTURAL-STEEL ORDERS AND SHIPMENTS.

[Bridge Builders and Structural Society.]

	Fabricated structural steel contracted for throughout country.		Structural-steel orders and shipments of the membership of Bridge Builders and Structural Society.			
	Ton-nage.	Per cent shop capacity.	Orders.		Shipments.	
			Ton-nage.	Per cent shop capacity.	Ton-nage.	Per cent shop capacity.
1920.						
March.....	150,400	83.5	50,598	69.0	49,434	67.5
July.....	90,400	50.0	33,213	47.0	49,096	69.0
August.....	72,000	40.0	36,843	50.0	51,381	70.0
September.....	77,400	43.0	26,755	37.0	53,526	74.0
October.....	45,600	25.5	14,161	20.0	47,200	66.0
November.....	49,200	27.5	41,531	16.0	41,268	57.5
December.....	47,000	26.0	14,521	20.0	42,767	60.0
1921.						
January.....	32,000	18.0	12,194	18.0	32,964	48.5
February.....	25,600	14.0	12,013	18.5	25,776	40.0
March.....	52,300	29.0	26,398	38.0	30,011	43.0

IMPORTS OF PIG TIN.

[Department of Commerce. Monthly average, 1911-1913=100.]

	Pounds.	Relative.		Pounds.	Relative.
1920.					
March.....	11,980,019	132	November.....	9,550,535	105
July.....	17,584,167	193	December.....	5,893,627	65
August.....	11,195,937	123	1921.		
September.....	9,596,819	106	January.....	2,584,347	28
October.....	6,741,331	74	February.....	5,269,969	62
			March.....	3,028,356	33

RAW STOCKS OF HIDES AND SKINS.¹

[Bureau of Markets; July, 1920, on, Bureau of the Census.]

	Cattle hides.	Calfskins.	Kipskins.	Goat and kid.	Cabretta.	Sheep and lamb.
1920.						
Mar. 31.....	Pieces. 6,558,300	Pieces. 1,930,218	Pieces. 966,850	Pieces. 16,436,848	Pieces. 2,047,519	Pieces. 9,227,252
Sept. 30.....	5,926,708	3,542,388	1,083,193	13,408,277	2,197,149	11,235,417
Oct. 31.....	6,770,509	3,850,183	1,377,998	12,147,070	2,104,133	13,626,406
Nov. 30.....	7,158,751	3,492,653	1,422,608	11,231,086	2,234,027	12,705,767
Dec. 31.....	7,793,762	3,271,905	1,305,776	11,721,505	2,685,670	13,773,089
1921.						
Jan. 31.....	7,899,138	3,086,862	1,381,748	10,870,210	2,155,200	13,184,052
Feb. 28.....	7,940,359	3,157,723	1,375,110	9,798,311	1,941,832	12,489,855
Mar. 31.....	7,806,867	3,060,144	1,241,984	8,652,171	1,579,457	12,970,857

¹ Includes hides and skins in transit. The number of firms reporting increased in the autumn of 1920 as follows: Sept., 1,307; Oct., 1,915; Nov., 2,027; Dec., 2,059.

TEXTILES—COTTON AND SILK.

[Cotton, Bureau of the Census; silk, Department of Commerce. Cotton, monthly average, crop years 1912-1914=100; silk, monthly average, 1911-1913=100.]

	Cotton consumption.		Cotton spindles active during month.	Imports of raw silk.			Cotton consumption.		Cotton spindles active during month.	Imports of raw silk.	
	Bales.	Relative.		Pounds.	Relative.		Bales.	Relative.		Pounds.	Relative.
1920.											
March.....	575,789	128	34,697,812	2,491,651	122	November....	332,057	74	31,654,126	1,319,995	65
July.....	525,489	117	34,666,794	2,581,920	126	December....	294,851	66	29,879,402	972,011	48
August.....	483,193	107	34,471,515	2,690,690	132	1921.					
September.....	457,647	102	34,040,806	1,968,801	96	January.....	366,270	81	31,509,021	708,897	35
October.....	399,837	89	33,669,804	1,531,850	75	February.....	395,563	94	32,458,528	2,327,949	122
						March.....	437,933	97	32,104,946	2,201,633	108

TEXTILES—WOOL.

[Wool consumption, Bureau of Markets; idle wool machinery, Bureau of the Census.]

	Consumption (pounds). ¹	Percentage of idle machinery on first of month to total reported.						Percentage of idle hours on first of month to total reported.					
		Looms.		Sets of cards.	Combs.	Spinning spindles.		Looms.		Sets of cards.	Combs.	Spinning spindles.	
		Wider than 50- inch reed space.	50-inch reed space or less.			Woolen.	Worsted.	Wider than 50- inch reed space.	50-inch reed space or less.			Woolen.	Worsted.
1920.													
April.....	66,935,318	13.1	16.9	9.6	7.1	9.5	7.0						
July.....	37,097,077	42.5	32.3	38.0	35.0	42.0	32.7						
August.....	38,054,708	49.5	29.9	39.6	33.4	45.5	37.6						
September.....	36,297,221	51.8	34.8	39.6	37.3	44.6	38.0						
October.....	38,443,688	49.0	34.9	38.3	26.3	43.2	26.0						
November.....	28,096,047	46.9	37.7	39.5	32.8	42.8	34.8	54.1	47.7	45.9	38.4	46.7	38.5
December.....		51.2	44.8	50.3	41.4	51.7	42.7	59.7	60.4	57.1	51.0	53.9	53.4
1921.													
January.....		57.0	49.2	58.1	52.9	59.4	50.8	66.7	71.2	66.1	62.9	68.4	65.2
February.....		53.9	48.7	56.5	43.8	58.9	43.0	60.0	66.7	64.3	51.0	64.5	55.3
March.....		43.1	41.7	46.2	28.3	47.2	33.0	45.3	57.1	50.6	26.2	50.5	37.9
April.....		36.1	34.4	33.0	18.7	32.3	21.8	38.3	47.3	35.8	11.3	34.1	25.7

¹ Converted to grease equivalent basis.

PRODUCTION OF WOOD PULP AND PAPER.

[Federal Trade Commission.]

	Wood pulp.	News- print.	Book.	Paper board.	Wrap- ping.	Fine.		Wood pulp.	News- print.	Book.	Paper board.	Wrap- ping.	Fine.
	Net tons.	Net tons.	Net tons.	Net tons.	Net tons.	Net tons.		Net tons.	Net tons.	Net tons.	Net tons.	Net tons.	Net tons.
1920.							1920.						
March.....	327,143	127,847	95,851	207,863	68,403	33,671	December.....	302,527	124,857	76,093	105,227	54,308	27,233
July.....	312,334	129,853	95,526	218,771	73,487	34,078	1921.						
August.....	305,965	128,818	94,424	215,633	75,226	33,122	January.....	275,353	123,830	64,382	105,806	44,620	22,756
September.....	293,913	121,005	94,142	218,743	70,917	34,207	February.....	243,797	103,040	56,687	123,832	46,352	19,242
October.....	319,877	124,818	93,849	196,604	73,100	34,526	March.....	262,332	107,532	59,832	139,723	49,879	19,058
November.....	326,041	122,993	89,564	133,818	65,920	31,208							

OUTPUT OF LOCOMOTIVES AND CARS.

[Locomotives, reports from individual producers; cars, Railway Car Manufacturers' Association.]

	Locomotives.		Output of cars.				Locomotives.		Output of cars.		
	Domes- tic shipped.	Foreign com- pleted.	Domes- tic.	Foreign.	Total.		Domes- tic shipped.	Foreign com- pleted.	Domes- tic.	Foreign.	Total.
1920.	Number.	Number.	Number.	Number.	Number.	1920.	Number.	Number.	Number.	Number.	Number.
March.....	45	59	3,053	2,040	5,093	December.....	198	93	7,551	1,420	8,971
July.....	122	54	2,731	434	3,165	1921.					
August.....	114	125	3,409	1,210	4,619	January.....	154	71	7,169	843	8,012
September.....	126	69	3,955	1,103	5,058	February.....	108	70	6,482	518	7,000
October.....	198	106	6,309	684	6,993	March.....	112	49	6,041	705	6,746
November.....	204	73	6,243	985	7,228						

VESSELS BUILT IN UNITED STATES, INCLUDING THOSE FOR FOREIGN NATIONS, AND OFFICIALLY NUMBERED BY THE BUREAU OF NAVIGATION.

[Monthly average, 1911-1913=100.]

	Number.	Gross tonnage.	Relative.		Number.	Gross tonnage.	Relative.
1920.				1920.			
March.....	170	279,709	1,157	December.....	87	176,903	732
July.....	173	217,239	899	1921.			
August.....	178	259,210	1,073	January.....	94	216,280	895
September.....	135	261,962	1,084	February.....	95	121,404	538
October.....	120	227,162	940	March.....	86	154,864	641
November.....	119	213,966	885				

TONNAGE OF VESSELS CLEARED IN THE FOREIGN TRADE.

[Department of Commerce. Monthly average, 1911-1913=100.]

	Net tonnage.			Relative.	Percentage American to total.	Relative.		Net tonnage.			Relative.	Percentage American to total.	Relative.
	American.	Foreign.	Total.					American.	Foreign.	Total.			
1920.							1920.						
March.....	2,040,031	2,040,538	4,080,569	100	50.0	189	December.....	2,785,615	2,949,416	5,735,031	140	48.6	183
July.....	3,302,538	3,616,052	6,918,590	169	47.7	180	1921.						
August.....	3,616,267	3,929,602	7,545,869	184	47.9	181	January.....	2,191,201	2,454,617	4,645,818	114	47.2	178
September.....	3,421,531	3,513,599	6,935,130	170	49.3	186	February.....	2,017,303	2,149,300	4,166,603	109	48.4	183
October.....	3,500,312	3,756,512	7,256,824	177	48.2	182	March.....	2,097,843	2,396,309	4,494,152	110	46.7	176
November.....	3,302,367	2,868,294	6,170,661	151	53.5	202							

NET TON-MILES, REVENUE AND NONREVENUE.

[United States Railroad Administration; March, 1920, on Interstate Commerce Commission.]

February.....	1920.	32,958,000,000	November.....	1920.	37,458,630,000
July.....		40,450,094,000	December.....		34,722,365,000
August.....		42,706,838,000		1921.	
September.....		40,999,843,000	January.....		29,817,000,000
October.....		42,562,687,000	February.....		24,915,000,000

REPORT OF KNIT-GOODS MANUFACTURES.

The total production of winter and summer underwear for the 6 months ending March 31 was as follows:

	Number of mills reporting.	Actual production (dozens).	Per cent of normal.
1920.			
October.....	61	393,422	50.4
November.....	63	191,831	23.2
December.....	61	98,671	11.0
1921.			
January.....	61	148,023	16.4
February.....	63	248,431	28.0
March.....	62	421,140	50.1
Winter underwear (March).....		102,415	31.0
Summer underwear (March).....		318,725	62.5

Order and production report for month ending March 31, 1921, follows. The number of mills reporting was 46.

	Dozens.	Per cent of normal production.
Unfilled orders 1st of month.....	273,962	
New orders received during month.....	371,657	61.5
Total (A).....	645,619	
Shipments during month.....	285,537	47.3
Cancellations during month.....	5,389	0.89
Total (B).....	290,926	
Balance orders on hand Mar. 1 (A minus B).....	354,693	
Production.....	315,159	52.1

Thirty-eight representative mills which reported for February and March furnish the data for the following tables:

[In dozens.]

	February (38 mills).	March (38 mills).	Gain.	Loss.
Unfilled orders 1st of month.....	588,127	269,104		319,023
New orders.....	205,260	284,712	79,452	
Shipments.....	175,226	266,823	91,597	
Cancellations.....	1,619	5,173	3,554	
Production.....	147,822	261,934	114,112	

FINISHED COTTON FABRICS.

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

The accompanying figures are compiled from statistics furnished by 34 out of 58 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, 72 per cent; dyed goods, 62 per cent; printed goods, 32 per cent. The figures given represent reports from exactly the same finishers for the two months, both for the totals and for the subdivisions and, therefore, are strictly comparable.

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

PRODUCTION AND SHIPMENTS OF FINISHED COTTON FABRICS.

	February, 1921.				March, 1921.			
	White goods.	Dyed goods.	Printed goods.	Total.	White goods.	Dyed goods.	Printed goods.	Total.
Total finished yards billed during month:								
District 1.....	9,201,380	12,009,687	5,145,619	28,279,941	14,560,030	19,056,336	7,804,941	45,046,635
2.....	5,553,700	1,070,187	359,555	12,415,909	7,425,289	2,461,016	4,323,519	21,695,892
3.....	4,520,032	3,231,582	.....	8,291,903	6,246,321	5,449,031	.....	12,533,513
5.....	4,698,536	24,034	.....	4,722,570	5,500,003	76,348	.....	5,576,351
6.....	126,265	380,241	.....	506,506	86,151	457,629	.....	543,780
8.....	.....	.....	.....	1,220,042	.....	.....	.....	1,336,450
Total.....	24,099,913	16,715,731	5,505,174	55,436,871	33,817,794	27,500,360	12,128,460	86,732,621
Total finishing charges billed during month:								
District 1.....	\$182,214	\$502,706	\$239,014	\$1,015,721	\$276,003	\$814,343	\$374,326	\$1,654,083
2.....	110,950	36,629	9,225	288,014	119,672	60,916	186,977	553,920
3.....	143,350	123,713	.....	277,460	188,596	221,512	.....	425,235
5.....	96,080	347	.....	96,427	106,373	1,351	.....	107,724
6.....	2,360	16,973	.....	19,333	1,808	19,829	.....	21,637
8.....	.....	.....	.....	15,961	.....	.....	.....	20,307
Total.....	\$534,954	\$680,368	\$248,239	\$1,712,916	\$692,452	\$1,117,951	\$561,303	\$2,782,906
Total average per cent of capacity operated:								
District 1.....	50	57	30	46	63	68	44	59
2.....	73	34	54	58	77	49	85	79
3.....	66	41	.....	51	87	62	.....	71
5.....	73	.....	.....	73	96	.....	.....	96
6.....	.....	.....	.....	34	.....	.....	.....	39
8.....	.....	.....	.....	46	.....	.....	.....	57
Average for all districts.....	61	50	34	51	75	64	50	67
Total gray yardage of finishing orders received:								
District 1.....	10,745,070	16,816,715	7,084,145	37,372,981	12,517,785	18,675,645	8,453,394	43,461,754
2.....	6,396,320	2,978,397	5,162,723	19,212,796	7,302,473	3,970,174	6,780,303	22,908,747
3.....	7,365,939	5,036,959	.....	13,205,870	7,115,387	5,122,275	.....	13,007,284
5.....	4,689,469	45,178	.....	4,734,647	6,743,059	116,232	.....	6,859,291
6.....	65,706	328,072	.....	393,778	126,760	408,843	.....	535,603
8.....	.....	.....	.....	1,281,734	.....	.....	.....	1,569,920
Total.....	29,262,504	25,203,321	12,246,868	76,201,806	33,805,464	28,293,169	15,233,697	88,342,599
Number of cases of finished goods shipped to customers (case equal approximately 3,000 yards):								
District 1.....	4,662	3,399	1,818	16,650	6,095	5,938	2,612	24,261
2.....	4,079	94	.....	9,455	5,424	140	.....	12,299
3.....	3,576	1,956	.....	5,777	4,426	2,512	.....	7,306
5.....	1,464	.....	.....	2,685	1,603	.....	.....	3,193
6.....	.....	.....	.....	.....	.....	.....	.....	.....
8.....	.....	.....	.....	376	.....	.....	.....	398
Total.....	13,781	5,449	1,818	34,943	17,548	8,590	2,612	47,457
Number of cases of finished goods held in storage at end of month:								
District 1.....	3,879	3,198	3,196	18,506	3,581	3,102	2,323	16,829
2.....	2,309	145	.....	6,354	1,968	214	.....	6,029
3.....	216	310	.....	5,059	189	278	.....	4,824
5.....	457	.....	.....	1,560	433	.....	.....	1,346
6.....	.....	.....	.....	.....	.....	.....	.....	.....
8.....	.....	.....	.....	1,309	.....	.....	.....	1,296
Total.....	6,861	3,653	3,196	32,788	6,171	3,594	2,323	30,324
Total average work ahead at end of month (expressed in days):								
District 1.....	7.3	6.8	7.8	7.2	5.8	7.0	7.0	6.5
2.....	12.0	6.8	16.0	13.0	16.0	8.5	17.0	12.0
3.....	11.0	6.3	.....	8.4	16.0	8.1	.....	11.0
5.....	6.1	.....	.....	6.1	8.2	.....	.....	8.2
6.....	.....	.....	.....	2.2	.....	.....	.....	2.1
8.....	.....	.....	.....	8.1	.....	.....	.....	6.0
Average for all districts.....	8.8	6.7	9.1	8.5	10.0	7.5	8.6	8.4

RETAIL TRADE.

In the following tables is given a summary of the data obtained from representative department stores in each Federal Reserve district, showing the activity of retail trade during the past several months. In district Nos. 1, 5, 6, 7, 9, 11, and 12 the data were received in (and averages computed from) actual amounts (dollars). In districts Nos. 2, 3, 4, 8, and 10 the material was received in the form of percentages, the 1921 averages for the cities and districts computed from such percentages being

weighted according to volume of business done during the calendar year 1920, and the averages for the several months in 1920 by similar figures for the calendar year 1919. For the month of March the tables are based on reports from 24 stores in district No. 1, 37 in district No. 2, 47 in district No. 3, 15 in district No. 4, 25 in district No. 5, 11 in district No. 6, 19 in district No. 7, 11 in district No. 8, 19 in district No. 9, 16 in district No. 10, 18 in district No. 11, and 28 in district No. 12. The number of stores varies somewhat, due to the inclusion of new stores from time to time in the reporting list.

CONDITION OF RETAIL TRADE IN THE 12 FEDERAL RESERVE DISTRICTS.

District and city.	Percentage of increase in net sales as compared with corresponding period previous year.																		
	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.	July 1, 1920, to close of—						Jan. 1, 1921, to close of—			
										July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.	
District No. 1:																			
Boston.....	16.3	11.6	16.0	0.1	15.0	1.4	5.4	10.8	2.1	16.3	24.1	15.9	9.7	11.0	8.5	5.4	7.7	5.5	
Outside.....	27.2	9.1	14.7	2.2	1.7	16.4	10.1	16.0	1.9	27.2	18.1	16.9	11.1	9.0	5.0	10.1	19.1	16.2	
District.....	19.9	10.9	15.4	.6	11.4	1.4	1.5	6.5	1.5	19.9	15.1	15.2	10.1	10.4	7.7	1.5	3.5	2.7	
District No. 2:																			
N. Y. City and Brooklyn.	22.4	10.9	13.2	1.7	7.6	13.6	16.5	11.1	15.8	22.4	13.0	3.6	5.2	3.0	3.2	16.5	14.6	14.5	
Outside.....	26.9	26.4	16.9	15.4	18.9	5.9	11.5	9.5	1.3	26.9	27.1	23.4	19.6	22.8	14.3	11.5	1.6	.7	
District.....	24.4	15.9	3.6	6.2	11.6	11.6	15.3	1.0	14.6	24.4	17.5	10.2	10.0	10.0	5.5	15.3	13.5	13.4	
District No. 3:																			
Philadelphia.....					8.5	2.9	2.9	3.4	.9					12.0	9.1	2.9	4.4	2.0	
Outside.....					8.5	10.8	3.3	4.7	4.6					18.5	21.6	3.3	1.7	2.1	
District.....	23.8	22.6	15.2	15.8	8.5	6.1	3.1	3.8	1.8	23.8	24.9	19.6	17.3	14.6	14.1	3.1	3.6	2.0	
District No. 4.....	29.9	25.7	24.6	20.8	26.1	14.7	3.6	6.4	1.4	29.9	27.3	25.9	23.9	24.8	22.0	3.6	.....	4.3	
District No. 5:																			
Baltimore.....							5.9	5.3	12.2							5.9	4.6	1.9	
Richmond.....							14.2	14.2	6.3							14.2	4.2	5.6	
Washington.....							9.3	8.4	5.5							9.3	8.8	7.4	
Other cities.....							4.0	15.9	9.4							4.0	9.4	10.8	
District.....	15.7	20.9	7.5	12.4	13.1	4.9	5.4	8.6	2.7	15.7	21.1	14.1	13.6	13.5	10.4	5.4	6.4	5.2	
District No. 6.....	11.6	27.6	12.6	25.1	14.6	3.0	19.0	1.4	15.6	11.6	19.6	16.9	19.7	18.8	15.3	19.0	15.4	14.7	
District No. 7.....	41.2	33.2	28.6	8.3	17.6	9.6	10.5	15.4	13.2	41.2	29.6	35.5	32.6	24.2	18.1	10.5	14.7	13.3	
District No. 8.....		20.8	11.8	10.5	10.8	5.3	13.8	13.1	1.7		18.0	16.8	16.5	13.8	13.3	13.8	13.7	11.7	
District No. 9.....	11.6	8.8	.3	12.9	2.9	.5	12.3	17.0	11.2	11.6				3.8	7.6	12.3	10.9	11.8	
District No. 10.....	14.1	9.9	7.8	11.9	9.2	15.1	11.6	4.1	16.1	14.1	14.2	11.1	5.2	12.9	.7	11.6	11.8	13.9	
District No. 11.....	25.9	25.6	12.4	16.0	12.7	12.9	18.9	14.6	16.0	25.9	25.2	20.9	21.6	17.9	10.5	18.9	18.4	11.4	
District No. 12:																			
Los Angeles.....	35.1	48.9	29.1	19.3	31.2	13.7	17.1	14.6	9.9	35.1	42.4	37.9	33.9	33.7	28.5	17.1	13.3	11.9	
San Francisco.....	21.0	13.6	10.4	11.5	9.9	13.8	12.1	.4	13.1	21.0	19.6	17.3	15.4	11.7	8.7	12.1	16.5	14.3	
Oakland.....	16.9	15.3	.....	22.0	7.2	.....	10.4	8.2	.9	16.9	14.7	.....	21.3	18.2	.....	10.4	12.2	9.8	
Sacramento.....	20.1	3.1	.....	9.9	.....	2.3	16.8	.....	16.2	20.1	13.3	.....	16.1	.....	7.0	16.8	.....	14.2	
Seattle.....	.2	18.0	14.5	114.6	114.6	118.7	23.4	12.4	14.6	.2	14.4	14.2	17.3	19.2	11.1	23.4	19.3	15.6	
Spokane.....	22.7	12.7	.....	4.6	5.6	11.5	10.1	12.2	4.6	22.7	16.8	.....	9.4	8.4	8.6	10.1	.....	1.3	
Salt Lake City.....	20.6	11.6	.....	8.9	14.7	9.1	1.6	15.2	1.7	20.6	16.1	.....	14.0	12.2	14.6	1.6	1.9	6.0	
District.....	21.2	21.7	14.5	8.2	11.3	14.3	14.3	12.4	.6	21.2	21.4	19.8	16.8	14.8	5.0	14.3	15.9	1.6	

† Decrease.

CONDITION OF RETAIL TRADE IN THE 12 FEDERAL RESERVE DISTRICTS—Continued.

District and city.	Percentage of increase in stocks at close of month compared with—																	
	Same month previous year.									Previous month.								
	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.
District No. 1:																		
Boston.....	32.1	26.3	20.7	9.5	7.1	11.7	10.7	13.7	118.2	17.0	4.9	9.5	14.2	9.0	118.2	114.5	15.5	16.6
Outside.....	30.4	26.4	21.7	15.9	10.6	2.0	10.6	3.7	10.3	.2	3.2	9.7	3.0	12.0	120.5	118.2	15.4	15.7
District.....	31.5	26.4	21.0	11.6	8.2	1.7	10.7	11.6	116.0	14.7	4.3	9.5	11.8	4.9	118.9	112.7	15.5	16.4
District No. 2:																		
N. Y. City and Brooklyn.....	46.2	30.7	18.0	17.2	5.1	12.3	19.5	116.5	123.2	14.3	7.3	5.7	1.0	14.8	120.4	118.1	6.3	8.3
Outside.....	30.9	26.3	20.2	15.6	3.8	12.7	120.0	123.0	117.9	4.6	5.6	9.3	1.4	17.0	124.0	116.1	1.3	9.0
District.....	39.5	29.3	18.7	16.7	4.6	14.5	112.0	117.8	122.0	1.5	6.8	6.9	.5	15.6	121.1	117.6	5.3	8.5
District No. 3:																		
Philadelphia.....					5.7	2.2	1.9	111.7	120.4					15.0	115.5	113.8	4.2	5.4
Outside.....					17.4	8.0	10.8	112.4	114.3					14.1	120.0	117.4	9.5	7.3
District.....	28.4	31.0	20.6	16.0	10.1	4.4	14.6	111.9	119.0	3.3	6.2	8.4	.9	14.7	117.3	111.5	5.6	5.9
District No. 4.....	48.3	40.4	34.0	34.9	22.5	11.6	14.0	113.2	117.1	11.4	9.4	9.2	4.8	16.4	120.0	114.6	3.1	7.9
District No. 5:																		
Baltimore.....							119.7	124.0	128.2							17.0	6.9	8.8
Richmond.....							19.8	113.1	116.6							115.2	7.7	7.8
Washington.....							128.6	129.9	126.2							118.7	9.8	7.1
Other cities.....							120.3	121.4	122.6							132.1	13.9	10.1
District.....	44.6	29.6	21.1	15.1	5.3	14.2	122.2	124.8	125.9	2.5	2.3	10.2	.1	17.7	125.5	116.2	8.9	8.4
District No. 6.....	51.6	39.8	37.2	30.1	16.3	1.2	18.3	113.9	112.7	5.6	5.4	13.1	.8	16.7	130.8	118	6.0	4.4
District No. 7.....	70.1	64.1	55.5	51.7	39.7	27.7	115.5	113.1	114.3	8.4	14.6	4.8	1.0	15.9	124.0	118	1.4	9.2
District No. 8.....		24.2	35.4	30.5	17.0	16.2	9.9	111.5	119.8		5.6	11.6	1.8	14.3	118.8	113.3	1.8	9.6
District No. 9.....	12.6	17.7	22.6	12.0	7.1	13.5	110.9	123.1	114.8	14.7	2.9	6.9	.5	14.2	118.7	118.8	1.2	6.2
District No. 10.....	43.6	39.1	29.1	25.0	11.8	9.4	114.9	118.2	120.9	8.9	9.8	4.6	11.9	15.0	123.9	111.1	10.1	6.4
District No. 11.....	69.5	59.5	52.8	42.3	31.5	8.8	112.9	115.5	117.7	8.3	22.3	6.6	13.0	19.3	128.8	117.9	5.0	9.3
District No. 12:																		
Los Angeles.....	47.5	31.2	33.4	21.6	16.4	129.7	14.9	112.4	112.8	1.8	12.5	13.7	.2	14.2	145.4	3.6	.5	6.2
San Francisco.....	43.1	27.1	16.2	15.4	8.0	19.6	19.3	116.5	121.9	1.5	1.4	7.4	15.4	1.8	114.7	119.0	6.1	3.1
Oakland.....	27.7	22.5		8.3	3.8		12.1	127.8	127.2	12.9	2.3		.6	13.1		110.9	4.2	7.7
Sacramento.....		11.4		17.5		13.6			130.3		9.8		.3		123.1			6.8
Seattle.....	23.4	18.4	3.9		14.4	112.3	121.4	127.5	133.8	14.2	1.9	6.3	2.8	12.9	122.5	111.3	6.6	3.1
Spokane.....	45.8	45.5		40.1	33.6	112.2	13.6	114.0	120.9	1.8	9.1		12.7	14.2	113.6	2.1	4.4	1.4
Salt Lake City.....					12.7				115.1						122.4			6.6
District.....	40.1	25.3	20.6	15.6	20.1	.3	.4	17.6	121.6	1.8	.7	4.9	1.2	13.4	114.3	114.1	2.2	4.5

District and city.	Ratio of average stocks at close of each month to average monthly sales for same period (per cent).									Ratio of outstanding orders at close of month to total purchases during previous calendar year (per cent).								
	July 1, 1920, to close of—						Jan. 1, 1921, to close of—			July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.
	July, 1920.	Aug., 1920.	Sept., 1920.	Oct., 1920.	Nov., 1920.	Dec., 1920.	Jan., 1921.	Feb., 1921.	Mar., 1921.									
District No. 1:																		
Boston.....	419.2	447.1	412.7	388.4	368.4	329.9	270.2	325.3	300.7	18.5	13.7	11.4	7.5	5.4	3.6	5.1	7.4	5.7
Outside.....	436.4	472.1	485.9	482.6	456.6	452.0	392.9	473.7	445.8	9.1	14.2	14.7	10.8	10.4	.....	4.5	8.6	11.2
District.....	425.1	455.1	433.5	415.6	398.6	357.9	297.2	358.1	332.5	12.0	14.0	13.1	9.1	7.7	.....	4.8	8.1	6.4
District No. 2:																		
New York City and																		
Brooklyn.....	390.0	489.3	613.7	479.4	464.1	361.1	315.8	323.3	310.1	15.7	16.8	14.7	9.2	6.9	5.3	5.5	7.3	7.1
Outside.....	485.8	506.3	492.1	441.3	430.6	347.7	351.3	350.6	407.7	18.9	14.3	12.0	6.6	4.1	3.1	4.1	7.2	5.7
District.....	440.1	496.7	573.9	466.9	452.3	358.0	325.0	328.7	330.6	17.4	15.9	13.6	8.1	5.5	4.5	5.1	7.3	6.7
District No. 3:																		
Philadelphia.....					360.4	322.6	281.9	314.3	330.5					4.7	4.9	4.4	7.9	7.6
Outside.....					520.5	458.6	479.3	508.7	465.8					2.9	4.1	4.8	6.2	6.1
District.....	399.8	471.2	500.3	437.2	418.0	371.1	357.6	365.6	361.9	19.8	14.2	10.1	5.9	4.0	4.6	4.6	7.5	7.3
District No. 4.....	403.6	412.7	468.8	466.8	452.1	398.5	306.4	353.6	345.9	18.9	17.0	13.3	7.6	5.9	4.7	7.1	7.0	7.7

¹ Decrease.

CONDITION OF RETAIL TRADE IN THE 12 FEDERAL RESERVE DISTRICTS—Continued.

District and city.	Ratio of average stocks at close of each month to average monthly sales for same period (per cent).										Ratio of outstanding orders at close of month to total purchases during previous calendar year (per cent).								
	July 1, 1920, to close of—										Jan. 1, 1921, to close of—								
	July, 1920.	Aug. 1920.	Sept. 1920.	Oct. 1920.	Nov. 1920.	Dec. 1920.	Jan. 1921.	Feb. 1921.	Mar. 1921.		July, 1920.	Aug. 1920.	Sept. 1920.	Oct. 1920.	Nov. 1920.	Dec. 1920.	Jan. 1921.	Feb. 1921.	Mar. 1921.
District No. 5:																			
Baltimore.....							311.8	341.6	324.5								7.2	7.9	6.5
Richmond.....							403.5	403.1	354.4								5.4	6.1	5.5
Washington.....							351.2	370.9	341.3								3.9	4.8	4.2
Other cities.....							407.1	434.3	402.2								5.4	6.9	4.4
District.....	505.9	560.7	512.9	489.0	454.5	386.6	344.5	368.7	343.2		16.1	14.8	8.4	7.1	3.0	2.7	6.0	6.6	5.4
District No. 6.....				403.9	381.6	307.8	549.1	405.3	387.3		17.4	15.6	11.0	6.9	5.8	4.9	3.1	6.1	6.4
District No. 7.....	432.7	427.9	410.7	371.0	431.7	391.0	544.3	404.4	360.2		19.3	23.2	15.7	5.1	6.5	5.6	10.8	11.0	12.7
District No. 8.....		432.6	377.0	396.8	324.4	245.1	336.5	407.9	388.6			17.2	9.2	6.1	3.9	3.8	3.4	8.9	4.1
District No. 9.....											13.7	9.1		12.4	11.9	18.7	4.2	5.5	5.2
District No. 10.....	384.1	334.0	340.4	343.3	526.8	466.3	480.8	450.3	359.2		15.6	9.7	8.8	3.1	1.9	2.3	22.1	11.8	6.4
District No. 11.....		425.5	523.9	454.0	416.7	383.7	357.6	395.7	363.6		18.6	12.7	10.0	4.1	3.2	2.7	7.0	6.5	5.1
District No. 12:																			
Los Angeles.....	522.5	454.2	486.0	462.5	478.0	432.5	354.1	355.6	353.2		22.8	15.5	12.0	9.3	7.6	10.6	6.9	11.5	10.2
San Francisco.....	539.9	512.8	511.5	511.9	515.8	434.3	424.2	444.6	401.5		25.9	21.1	10.8	13.6	9.6	4.3	4.4	8.2	6.9
Oakland.....	625.1	598.3		732.5	567.4		427.2	467.1	455.3										
Sacramento.....		423.3		387.4		490.5													
Seattle.....	470.2	532.7	508.0	502.5	454.5	413.7	463.0	468.1	438.0		16.3	12.2	8.6	6.4	7.0	1.6	2.7	6.0	5.6
Spokane.....	652.6	675.5		579.0	544.3	458.5	620.5	610.9	621.6		29.9						1.1	5.2	6.3
Salt Lake City.....					601.4						18.7						2.6		
District.....	536.5	489.6	504.0	467.3	488.5	490.7	502.4	448.2	404.7		22.3	14.2	9.5	9.8	7.0	5.8	5.4	8.6	7.8

WHOLESALE TRADE.

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN MARCH, 1921, AS COMPARED WITH THE PRECEDING MONTH (FEBRUARY, 1921).

District.	Groceries.		Dry goods.		Hardware.		Boots and shoes.		Furniture.		Drugs.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 3.....	+18.6	50			+30.2	25												
No. 5.....	+ 8.6	9	+14.7	8	+35.2	8	+53.4	8	-22.4	4								
No. 6.....	+ 7.2	10	+35.6	13	+ 6.0	8	+72.6	7										
No. 10.....	+19.5	4			+65.5	3												
No. 11.....	- 0.7	4	+16.1	4	-29.3	2					+ 7.3	4			-18.4	2		
No. 12.....	+20.9	30	+28.5	11	+33.9	23	+68.4	15	+19.7	19	+14.3	12	+ 1.3	20			+46.7	14

PERCENTAGE OF INCREASE (OR DECREASE) IN NET SALES IN MARCH, 1921, AS COMPARED WITH MARCH, 1920.

District.	Groceries.		Dry goods.		Hardware.		Shoes.		Furniture.		Drugs.		Stationery.		Farm implements.		Auto tires.	
	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.	Per cent.	Number of firms.
No. 3.....	-27.9	50			-19.2	25												
No. 4.....	-33.1	14	-14.9	6	-16.3	7					-29.2	5						
No. 5.....	-23.9	9	-38.3	8	-24.1	8	-25.4	8	-66.5	4								
No. 6.....	-33.6	10	-41.7	13	-45.6	8	-37.6	7										
No. 7.....	-25.0	22	-35.9	13			-31.6	10										
No. 10.....	-22.7	4			-34.3	3												
No. 11.....	-42.1	4	-34.0	4	-37.7	2					-29.1	4			-88.0	2		
No. 12.....	- 7.3	30	-29.1	11	-33.6	23	-16.0	16	-30.6	19	-10.4	12	-9.7	24			-47.4	15

COMPARATIVE WHOLESALE PRICE LEVELS IN PRINCIPAL COUNTRIES.

The foreign index numbers published below are constructed by various statistical offices according to methods described in most cases in the BULLETIN for January, 1920. A description of the method used in the construction of the Swedish index number appeared in the BULLETIN for February, 1921, for the new Italian index number in the April, 1921, issue of the BULLETIN, and the method used by the Frankfurter Zeitung in the case of the German index number was described in the BULLETIN for February and March, 1921. Complete information regarding the computation of the United States Bureau of Labor Statistics appears in the publications of that bureau, and a description of the index number of the Federal Reserve Board may be found in the BULLETIN for May, 1920. The new British index number, compiled by the Board of Trade, will be found on p. 602 of this issue of the BULLETIN. It is

not included in the table below as it can not be referred back to a definite prewar base. In the case of the two American index numbers, 1913 is used as the basis in the original computations. In the other cases in which 1913 appears as the basis for the computation the index numbers have been shifted from their original bases. The computations in these cases are, therefore, only approximately correct. In a few cases July, 1914, or the year immediately preceding that, is used as the base. The figures are for the most part received by cable, and the latest ones are subject to revision. In cases where the index numbers were available they have been published for the war years in various issues of the BULLETIN in 1920.

In the following table the all-commodities index numbers for the whole series of countries appear together to facilitate the study of comparative price levels.

INDEX NUMBERS OF WHOLESALE PRICES (ALL COMMODITIES).

	United States; Federal Reserve Board (88 commodities). ^a	United States; Bureau of Labor Statistics (328 quotations). ^a	United Kingdom; Statist (45 commodities). ^b	France; Bulletin de la Statistique Générale (45 commodities). ^b	Italy; Prof. Bachi (38 commodities until 1920, 76 thereafter). ^b	Germany; Frankfurter Zeitung (77 commodities). ^d	Sweden; Svensk Handelstidning (47 quotations). ^c	Japan; Bank of Japan for Tokyo (56 commodities). ^a	Australia; Commonwealth Bureau Census and Statistics (92 commodities). ^a	Canada; Department of Labor (272 quotations). ^c	Calcutta, India; Department of Statistics (75 commodities). ^b
1913.....	100	100	100	100	100	.....	² 100	100	.....	100	.....
1914.....	.....	100	101	101	95	⁶ 100	116	96	³ 100	101	⁴ 100
1915.....	.....	101	128	137	133	.....	145	97	141	110	.....
1916.....	.....	124	159	187	202	.....	185	117	132	135	.....
1917.....	.....	176	206	262	299	.....	244	147	⁶ 155	177	.....
1918.....	.....	196	226	339	409	.....	339	192	170	206	.....
1919.....	206	212	242	357	364	.....	330	236	180	217	.....
1920.....	233	243	291	510	624	.....	347	259	218	246	204
1920.											
March.....	248	253	307	555	692	1,615	354	321	209	258	198
April.....	263	265	313	588	664	1,604	354	300	217	261	200
May.....	264	272	305	550	660	1,714	361	272	225	263	210
June.....	258	269	300	493	632	1,473	366	248	233	258	206
July.....	250	262	299	496	604	1,495	363	239	234	256	209
August.....	234	250	298	501	625	1,547	365	235	236	244	209
September.....	226	242	292	526	655	1,582	362	230	230	241	208
October.....	208	225	282	502	659	1,604	346	226	215	234	206
November.....	190	207	263	461	670	1,670	331	221	208	225	194
December.....	173	189	243	435	655	1,681	299	206	197	214	180
1921.											
January.....	163	178	232	407	642	1,626	267	201	196	208	178
February.....	154	167	215	377	613	1,495	250	195	192	199	174
March.....	150	162	208	360	604	1,440	237	191	181	194	183
April.....	.....	154	199	344	.....	1,429	229	190	.....	.....	.....

^a Average for the month. ^b End of month. ^c Middle of month. ^d Beginning of month but not always the first.
¹ Index numbers for 1920 and thereafter based upon prices of 76 commodities. Computations arrived at by the method described on p. 465 of this BULLETIN.

² July 1, 1913, to June 30, 1914=100. ³ July, 1914=100. ⁴ End of July, 1914=100. ⁵ Middle of 1914=100. ⁶ Last six months of 1917.

In the following tables the index numbers for individual groups of commodities are given for each country separately. Reference should be made to the preceding table for the "all commodities" indexes. In the case of the Italian group index numbers, Prof. Bachi's

new computations only are given. These can not be referred back to the 1913 base and it is therefore impossible to compare present levels with prewar levels in these cases. No group index numbers are compiled by the Bank of Japan.

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

[1913=100.]

Date.	Farm products.	Food, etc.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Lumber and building material.	Chemicals and drugs.	House furnishing goods.	Miscellaneous.
1913.....	100	100	100	100	100	100	100	100	100
1914.....	103	103	98	96	87	97	101	99	99
1915.....	105	104	100	93	97	94	114	99	99
1916.....	122	126	128	119	148	101	159	115	120
1917.....	189	176	181	175	208	124	198	144	155
1918.....	220	189	239	163	181	151	221	196	193
1919.....	234	210	261	173	161	192	179	226	217
1920.....	218	239	302	238	186	308	210	366	236
1920.									
March.....	239	246	356	192	192	325	205	329	230
April.....	246	270	353	213	195	341	212	331	238
May.....	244	287	347	235	193	341	215	339	246
June.....	243	279	335	246	190	337	218	362	247
July.....	236	268	317	252	191	333	217	362	243
August.....	222	235	299	268	193	328	216	363	240
September.....	210	223	278	284	192	318	222	371	239
October.....	182	204	257	282	184	313	216	371	229
November.....	165	195	234	258	170	274	207	369	220
December.....	144	172	220	236	157	266	188	346	205
1921.									
January.....	136	162	205	234	152	239	182	283	190
February.....	129	150	198	218	146	222	178	277	180
March.....	125	150	192	207	139	208	171	275	167
April.....	115	141	186	199	138	203	168	274	154

ALL COMMODITIES AND GROUP INDEX NUMBERS—UNITED KINGDOM, BOARD OF TRADE.

[1920=100.]

	Cereals.	Meat and fish.	Other foods.	Total food.	Iron and steel.	Other metals and minerals.	Cotton.	Other textiles.	Other articles.	Total not food.	All articles.
1921.											
January.....	90.5	108.0	88.0	94.8	88.6	85.5	46.7	61.1	80.4	73.1	80.1
February.....	78.4	100.8	81.6	86.2	79.0	80.7	40.6	55.6	78.6	67.3	73.4
March.....	75.5	95.5	82.0	83.8	69.5	77.2	36.1	49.3	74.7	61.4	68.6

GROUP INDEX NUMBERS—UNITED KINGDOM, STATIST.

[1913=100.]

Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Food-stuffs.	Minerals.	Textiles.	Sundries.	Materials.	Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Food-stuffs.	Minerals.	Textiles.	Sundries.	Materials.
1913.....	100	100	100	100	100	100	100	100	1920.								
1914.....	110	100	107	105	90	97	105	98	July.....	343	278	425	325	276	298	277	283
1915.....	155	125	130	137	109	111	131	119	August.....	317	295	404	319	281	298	278	285
1916.....	193	152	161	169	140	152	163	153	September.....	319	291	334	308	283	286	279	282
1917.....	252	192	213	218	152	228	212	198	October.....	334	290	257	302	276	261	268	266
1918.....	248	210	238	229	167	265	243	225	November.....	308	293	238	291	265	212	253	245
1919.....	252	215	275	238	190	271	268	243	December.....	257	262	212	253	254	205	248	237
1920.....	321	264	366	301	269	299	290	285	1921.								
1920.									January.....	234	283	192	251	225	198	230	219
March.....	342	237	393	300	263	360	318	312	February.....	206	270	187	234	200	179	224	203
April.....	346	265	392	315	263	354	321	311	March.....	214	262	182	232	179	171	221	193
May.....	351	244	473	318	273	308	311	298	April.....	212	249	180	225	176	172	199	184
June.....	359	244	496	325	269	308	282	285									

GROUP INDEX NUMBERS—FRANCE, GENERAL STATISTICAL BUREAU.

[1913=100.]

Date.	Animal foods.	Vegetable foods.	Sugar, coffee, and cocoa.	Foods (20).	Minerals.	Textiles.	Sundries.	Raw materials (25).	Date.	Animal foods.	Vegetable foods.	Sugar, coffee, and cocoa.	Foods (20).	Minerals.	Textiles.	Sundries.	Raw materials (25).
1913.....	100	100	100	100	100	100	100	100	1920.....								
1914.....	103	103	106	104	98	109	99	101	July.....	501	370	405	432	469	746	500	548
1915.....	126	126	151	131	164	132	145	145	August.....	515	359	399	432	475	737	524	558
1916.....	162	170	164	167	232	180	199	206	September.....	531	412	544	487	468	715	540	558
1917.....	215	243	201	225	271	303	302	291	October.....	533	421	422	469	453	637	527	528
1918.....	286	298	231	231	283	460	420	387	November.....	519	390	377	442	424	510	498	476
1919.....	392	313	253	336	272	444	405	373	December.....	515	360	355	424	385	475	471	444
1920.....	503	427	422	459	449	737	524	550	1921.....								
March.....	500	516	439	498	460	884	548	600	January.....	483	334	337	397	341	460	445	415
April.....	522	511	447	506	507	953	598	653	February.....	452	317	338	378	300	398	422	378
May.....	480	480	424	472	459	841	601	614	March.....	406	322	367	366	289	375	382	355
June.....	482	400	392	434	428	734	517	540	April.....	389	337	359	364	281	314	371	328

GROUP INDEX NUMBERS—ITALY, RICCARDO BACHI.

[1920=100.]

	Vegetable foods.	Animal foods.	Chemicals.	Textiles.	Minerals and metals.	Building materials.	Other vegetable products.	Sundries.
1920.....								
Average for the year.....	100	100	100	100	100	100	100	100
March.....	93.1	82.7	96.8	115.6	104.8	82.2	102.4	92.8
April.....	102.7	83.6	110.4	130.8	115.8	96.4	99.8	104.2
May.....	102.2	92.9	122.6	101.9	113.2	101.8	97.2	107.8
June.....	100.2	101.1	112.8	90.8	99.1	106.3	95.9	105.7
July.....	96.8	100.3	100.0	88.3	95.5	108.4	90.2	104.9
August.....	100.7	103.4	102.3	94.9	96.6	109.9	91.9	101.4
September.....	104.8	108.8	100.1	99.6	103.7	109.9	97.5	102.1
October.....	107.1	108.0	103.4	97.9	106.5	112.8	100.5	105.4
November.....	107.7	124.1	107.7	94.0	101.4	112.6	108.7	105.2
December.....	106.9	126.4	102.8	81.9	92.7	112.6	121.8	106.8
1921.....								
January.....	106.7	120.7	98.1	77.4	88.2	113.3	123.4	107.1
February.....	103.4	119.5	89.2	65.4	79.5	117.0	127.3	106.7
March.....	107.8	117.4	86.9	63.5	72.0	112.9	123.2	103.9

GROUP INDEX NUMBERS—GERMANY, FRANKFURTER ZEITUNG.

[Middle of 1914=100.]

	Agricultural products.	Textiles, leather.	Minerals.	Miscellaneous.
1920.....				
Beginning of—				
April.....	1,186	4,114	1,888	1,417
May.....	1,178	3,243	1,860	1,417
June.....	1,125	2,670	1,528	1,642
July.....	1,283	2,561	1,552	1,625
August.....	1,309	2,643	1,566	1,617
September.....	1,318	2,807	1,650	1,608
October.....	1,344	2,943	1,734	1,592
November.....	1,450	3,025	1,678	1,658
December.....	1,555	2,698	1,636	1,625
1921.....				
Beginning of—				
January.....	1,353	2,643	1,678	1,575
February.....	1,265	2,507	1,580	1,525
March.....	1,204	2,371	1,552	1,517
April.....	1,195	2,153	1,608	1,500

GROUP INDEX NUMBERS—SWEDEN, SVENSK HANDELSTIDNING.

[July 1, 1913—June 30, 1914=100.]

Date.	Vegetable food.	Animal food.	Raw materials for agriculture.	Coal.	Metals.	Building material.	Wood pulp.	Hides and leather.	Textiles.	Oils.
1913-14.....	100	100	100	100	100	100	100	100	100	100
1914 ¹	136	191	114	123	109	104	116	118	103	111
1915.....	151	140	161	177	166	118	116	158	116	120
1916.....	152	182	180	266	272	165	223	229	166	149
1917.....	181	205	198	551	405	215	267	206	247	212
1918.....	221	419	304	856	398	275	300	195	.....	.....
1919.....	261	409	340	804	258	286	308	211	.....	.....
1920.....	262	296	312	1,007	278	371	675	215	324	294
1920.....										
March.....	270	304	318	960	291	367	682	268	380	275
April.....	265	284	320	1,008	283	367	767	263	368	275
May.....	269	283	320	1,069	324	367	788	252	374	275
June.....	250	273	311	1,252	318	381	778	212	368	303
July.....	252	277	312	1,252	293	388	767	202	336	303
August.....	271	307	310	1,117	298	388	756	191	328	322
September.....	273	312	308	1,085	273	388	753	180	310	340
October.....	258	306	309	1,026	256	390	740	166	250	340
November.....	264	290	303	910	253	387	609	161	233	332
December.....	247	293	301	602	247	362	598	156	206	328
1921.....										
January.....	244	266	281	371	230	320	520	131	169	328
February.....	231	241	248	362	204	319	511	108	147	318
March.....	238	229	240	279	185	298	510	85	134	268
April.....	232	231	236	291	178	236	510	84	125	264

¹ Average for 6 months ending Dec. 31, 1914.

GROUP INDEX NUMBERS—AUSTRALIAN COMMONWEALTH, BUREAU OF CENSUS AND STATISTICS.
[July, 1914=100.]

Date.	Metals and coal.	Textiles, leather, etc.	Agricultural products.	Dairy products.	Groceries and tobacco.	Meat.	Building materials.	Chemicals.
July, 1914.....	100	100	100	100	100	100	100	100
1915.....	117	93	202	127	110	150	116	149
1916.....	154	131	113	124	127	155	136	172
1917.....	212	207	110	116	131	155	194	243
1918.....	220	232	135	121	138	147	245	315
1919.....	193	217	186	137	147	145	261	282
1920.....	209	243	229	184	186	201	295	277
1920.								
March.....	205	281	226	162	160	126	298	280
April.....	205	277	234	160	192	160	298	280
May.....	214	265	252	177	197	170	307	297
June.....	214	260	281	187	195	208	307	287
July.....	211	252	244	188	193	261	307	283
August.....	209	251	238	189	193	284	312	282
September.....	211	222	231	209	196	273	295	276
October.....	222	220	208	214	195	226	280	276
November.....	222	180	206	212	195	211	281	255
December.....	215	156	193	210	198	193	271	252
1921.								
January.....	215	145	197	208	197	191	279	242
February.....	214	132	192	206	197	184	303	244
March.....	203	107	176	207	198	178	303	234

GROUP INDEX NUMBERS—CANADA, DEPARTMENT OF LABOR.
[1913=100.]

Date.	Grains and fodder.	Animals and meats.	Dairy products.	Fruits and vegetables.	Other foods.	Textiles.	Hides, leather, etc.	Metals.	Implements.	Building materials, lumber.	Fuel and lighting.	Drugs and chemicals.
1913.....	100	100	100	100	100	100	100	100	100	100	100	100
1914.....	114	107	100	99	104	102	105	96	101	100	94	106
1915.....	136	104	105	93	121	114	110	128	106	97	92	160
1916.....	142	121	119	130	136	148	143	167	128	100	113	222
1917.....	206	161	149	233	180	201	168	217	174	118	163	236
1918.....	231	197	168	214	213	273	169	229	213	147	188	250
1919.....	227	199	192	206	222	285	213	173	228	171	201	205
1920.....	263	198	204	261	258	303	191	203	245	268	255	204
1920.												
March.....	280	198	206	295	254	322	222	210	237	268	215	194
April.....	291	200	196	316	264	328	239	214	237	268	245	201
May.....	301	207	189	358	275	323	210	213	237	294	257	203
June.....	302	211	183	338	274	314	182	207	238	294	279	206
July.....	292	211	194	295	283	305	178	209	242	282	294	218
August.....	271	204	198	216	277	300	173	209	243	285	298	218
September.....	254	202	202	190	261	296	161	207	259	273	296	217
October.....	229	194	207	177	249	292	156	203	259	265	295	211
November.....	201	184	209	203	236	273	153	195	259	265	270	205
December.....	190	179	221	189	223	251	141	178	259	252	269	201
1921.												
January.....	186	175	216	184	212	228	131	174	257	248	247	196
February.....	171	171	185	163	205	204	126	167	257	239	234	188
March.....	168	171	174	175	203	198	112	158	243	231	233	181

¹ Unimportant groups omitted.

GROUP INDEX NUMBERS—CALCUTTA, INDIA, DEPARTMENT OF STATISTICS.
[End of July, 1914=100.]

Date.	Building materials.	Manufactured articles.	Metals.	Hides and skins.	Cotton manufactures.	Raw cotton.	Jute manufactures.	Other textiles.	Oils, mustard.	Raw jute.	Oil seeds.	Tea.	Sugar.	Pulses.	Cereals.	Other foods.
End of July, 1914...	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1920.																
Average for the year.	138	231	238	147	354	153	149	162	128	104	173	78	407	166	154	184
March.....	127	218	222	211	351	179	150	159	135	118	166	87	321	160	151	192
April.....	114	201	210	209	357	158	170	161	116	119	163	90	377	159	156	185
May.....	128	215	248	160	365	135	142	164	123	120	169	90	511	150	157	183
June.....	131	233	244	116	364	144	147	164	119	83	171	73	482	149	156	180
July.....	139	235	249	100	364	132	151	168	119	89	169	74	503	159	151	188
August.....	142	235	257	99	360	139	163	168	115	91	167	72	477	160	154	185
September.....	158	237	245	105	347	154	163	164	115	105	179	65	456	170	154	186
October.....	154	282	245	96	343	142	136	164	132	104	184	64	392	169	155	178
November.....	161	246	243	89	341	133	118	164	118	90	163	62	348	168	150	173
December.....	161	229	242	90	333	116	107	156	124	83	152	69	273	149	139	160
1921.																
January.....	158	238	247	81	324	107	104	149	116	85	130	77	314	135	139	139
February.....	147	226	243	80	306	104	101	149	97	80	124	70	352	119	129	148
March.....	147	242	255	97	311	119	97	123	110	85	131	76	354	147	141	150

COMPARATIVE RETAIL PRICES IN PRINCIPAL COUNTRIES.

In the following table are presented statistics showing the trend of retail prices and the cost of living in the United States and important European countries. Three of these index numbers—those for the United Kingdom, Paris, and Sweden—are constructed on the basis of prices in July, 1914=100. In the case of the United States, the original base, that of the year 1913, has been shifted to the July, 1914 base. The German index has not been computed for the prewar period, the base being July 15 to August 15, 1919.

The American index number, constructed by the Bureau of Labor Statistics, was based upon the retail prices of 22 articles of food, weighted according to family consumption, until January, 1921, when it was increased to 43 articles reported by dealers in 51 important cities. The method of weighting continues the same for the larger number of commodities, although the actual "weights" applied have been changed.

The British index number of the cost of living constructed by the Ministry of Labor consists of the retail prices of not only foodstuffs but of other articles as well. Retail clothing prices, rents, and the cost of fuel, lighting, and miscellaneous household items are also taken into consideration. The index number is weighted according to the importance of the items in the budgets of working-class families.

The retail price index for Paris, compiled by the French General Statistical Office, consists of retail prices of 13 different commodities, weighted according to the average annual consumption of a working man's family of four persons. Eleven of the commodities included in this index are foods, and the other two are kerosene and alcohol.

The Swedish index number consists of the retail prices of foodstuffs, fuel, and lighting and is based upon the prices of 51 articles in 44 towns (in 1920, 50 articles in 49 towns), weighted according to the budget of a working

man's family which before the war had a yearly income of 2,000 kroner.

The German index is that prepared by Dr. Silbergleit, of the Berlin Statistical Office, and is based upon the number of marks required to purchase the minimum amount of food needed by one growing person weekly.

RETAIL PRICES IN THE UNITED STATES, PARIS, AND SWEDEN; COST OF LIVING IN UNITED KINGDOM.

[July, 1914=100.]

	United States, retail prices. ¹	United Kingdom, cost of living. ²	Paris, retail prices. ¹	Sweden, retail prices.
1919.....	182	216	260	321
1920.....	199	249	371	298
1920				
March.....	196	230	339	291
April.....	207	232	358	297
May.....	211	241	378	294
June.....	215	250	369	294
July.....	215	252	373	297
August.....	203	255	373	308
September.....	199	261	407	307
October.....	194	264	420	306
November.....	189	276	426	303
December.....	175	269	424	294
1921				
January.....	169	265	410	283
February.....	155	251	382	262
March.....	153	241	358	253
April.....		233		

¹ Average for the month.² Beginning of month.

WEEKLY COST OF FOOD PER PERSON IN BERLIN.

[July 15-Aug. 15, 1919=100.]

1920 (average).....	239
February.....	237
March.....	255
April.....	269
May.....	264
June.....	255
July.....	235
August.....	215
September.....	217
October.....	226
November.....	227
December.....	232
1921:	
January.....	231
February.....	219

FOREIGN TRADE—UNITED KINGDOM, FRANCE, ITALY, SWEDEN, AND JAPAN.

In the following table are presented figures showing the monthly value of the foreign trade of a group of important European countries and Japan. Similar statistics for Germany are not available. Currencies have not been converted to a common unit, nor are methods of valuation the same in all countries. In England, imports are given current c. i. f. values in England; exports and reexports, current f. o. b. values. The same method is followed in Japan and Sweden. In France and Italy, on the other hand, the value of foreign trade is estimated not in terms of current prices but in terms of those of some earlier date, usually the preceding year.

None of the figures presented below include the import or export of gold and silver. In the case of England and France, group figures are given as well as total values, while in the case of the other countries, total values only are presented. This does not mean that group figures are not obtainable, merely that they are either delayed in publication or appear not to be of such general interest as the French and English material.

Japanese figures for recent months are received by cable and subject to revision.

FOREIGN TRADE OF UNITED KINGDOM.

[In thousands of pounds sterling.]

	Imports.					Exports.					Re-exports.
	Food, drink, and tobacco.	Raw materials and articles wholly or mainly unmanufactured.	Articles wholly or mainly manufactured.	Miscellaneous, including parcel post.	Total.	Food, drink, and tobacco.	Raw materials and articles wholly or mainly unmanufactured.	Articles wholly or mainly manufactured.	Miscellaneous, including parcel post.	Total.	
1913 monthly average.....	24,184	23,485	16,134	259	64,061	2,716	5,825	34,281	949	43,770	9,131
1919 monthly average.....	59,927	50,565	24,663	358	135,513	2,814	9,274	53,457	1,008	66,553	13,729
1920 monthly average.....	63,948	59,292	37,902	254	161,395	4,241	12,138	93,394	1,528	111,297	18,701
March.....	61,808	76,540	38,156	144	176,648	4,280	14,482	83,287	1,551	103,699	27,031
April.....	57,387	71,587	38,050	131	167,154	3,959	12,194	88,689	1,410	106,252	20,407
May.....	64,993	60,509	40,580	252	166,334	4,020	13,211	100,727	1,361	119,319	20,260
June.....	67,566	57,919	44,681	325	170,491	4,313	11,447	99,081	1,512	116,352	20,124
July.....	69,571	51,899	41,923	450	163,842	4,515	12,551	118,954	1,432	137,452	17,848
August.....	61,785	51,268	40,016	185	153,255	3,503	10,467	99,645	1,288	114,903	13,368
September.....	67,269	44,557	40,573	293	152,692	4,311	9,515	102,216	1,415	117,456	13,351
October.....	69,168	44,299	36,267	156	149,889	4,678	9,632	95,701	2,285	112,295	16,134
November.....	61,499	46,560	35,955	246	144,260	4,723	9,399	103,694	1,548	119,365	13,115
December.....	59,378	48,613	34,553	241	142,785	3,842	12,277	78,819	1,694	96,631	12,699
1921.											
January.....	49,158	37,005	30,467	420	117,051	3,852	7,668	79,746	1,491	92,756	9,955
February.....	47,750	25,504	23,394	326	96,974	3,075	5,881	58,177	1,089	68,222	8,004
March.....	50,888	17,739	24,930	184	93,742	2,897	5,832	56,969	1,111	66,809	8,888
April ¹					89,996					59,868	8,524

¹ These figures are provisional.

FOREIGN TRADE OF FRANCE.¹

[In thousands of francs.]

	Imports.				Exports.				
	Food.	Raw materials.	Manufactured articles.	Total.	Food.	Raw materials.	Manufactured articles.	Parcel post.	Total.
1913 monthly average ²	151,465	412,144	138,169	701,778	69,908	154,841	301,420	47,182	573,351
1919 monthly average ³	892,040	1,229,434	861,797	2,983,272	99,201	203,691	615,630	71,444	989,966
1920 monthly average ⁴	718,179	1,400,046	832,187	2,950,413	184,277	397,677	1,187,742	99,867	1,869,563
1920.									
March.....	871,857	1,478,987	772,007	3,122,851	114,223	349,521	834,031	39,884	1,337,659
April.....	675,799	1,398,592	813,216	2,887,607	125,678	353,344	844,901	52,987	1,376,910
May.....	547,825	1,193,960	644,911	2,386,696	103,355	348,361	726,654	31,658	1,210,028
June ⁵	558,951	1,302,867	726,856	2,588,674	216,849	421,735	1,100,931	69,862	1,809,377
July ⁶									
August ⁶	723,749	1,171,091	905,613	2,800,453	210,888	440,482	1,631,883	116,255	2,399,508
September.....	608,822	1,294,160	724,894	2,627,876	229,892	446,131	1,363,469	112,081	2,151,573
October.....	667,709	1,243,294	684,442	2,595,445	262,808	337,464	1,597,808	134,472	2,332,552
November.....	549,834	1,389,928	732,416	2,672,178	200,388	405,858	1,136,356	140,996	1,883,598
December.....	672,861	1,548,681	726,715	2,948,257	218,626	366,981	929,222	146,067	1,660,896
1921.									
January.....	346,703	1,101,267	534,498	1,982,468	188,546	436,069	1,142,398	115,605	1,882,618
February.....	386,169	803,231	424,531	1,613,931	172,992	478,561	1,162,817	85,074	1,899,444
March.....	455,545	786,352	501,011	1,742,908	162,901	379,281	1,035,826	108,418	1,686,426

¹ Not including gold, silver, or the reexport trade.² Calculated in 1913 value units.³ Calculated in 1919 value units.

⁴ February-June, 1920, figures are calculated in 1918 value units. French foreign trade figures are originally recorded in quantity units only, and the value of the trade is calculated by applying official value units to the quantities imported and exported. Normally the monthly statements of trade appear computed at the rates of the year previous, and only at the end of the year is the trade evaluated at the prices prevailing during that year. Because of the disturbed price conditions in France last year, however, it was not until July that the 1919 price units were decided upon and applied.

⁵ Monthly French foreign trade figures are published only in cumulative form, and as the value rates used were changed in July it is impossible to give separate figures for that month.

⁶ August, 1920, through March, 1921, figures calculated in 1919 value units.

FOREIGN TRADE OF ITALY, SWEDEN, AND JAPAN.

	Italy. (In millions of lire.)		Sweden. (In millions of kroner.)		Japan. (In millions of yen.)	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
1913, monthly average.....	304	210	71	68	61	53
1919, monthly average.....	1,385	506	211	131	181	175
1920, monthly average.....	1,322	650	281	191	195	162
1920.						
January.....	1,002	497	238	127	205	176
February.....	1,141	616	282	106	271	174
March.....	1,431	683	301	151	329	194
April.....	1,363	679	267	164	297	217
May.....	1,401	662	314	227	296	193
June.....	2,076	752	283	224	220	184
July.....	1,040	521	331	268	157	154
August.....	1,249	532	308	230	123	175
September.....	1,202	570	325	233	118	154
October.....	1,126	707	299	218	108	134
November.....	1,240	731	228	177	108	105
December.....	1,591	853	197	171	105	87
1921.						
January.....			122	91	² 105	² 75
February.....			² 116	² 89	² 119	² 76
March.....					² 137	² 94

¹ 1920 figures based on 1919 prices.² Provisional.

FINANCIAL STATISTICS FOR ENGLAND, FRANCE, ITALY, GERMANY, SWEDEN, AND JAPAN.

A summary of banking and financial conditions abroad is presented statistically in the accompanying tables. Similar material will be published regularly each month in the BULLETIN.

BRITISH FINANCIAL SITUATION.

[Amounts in millions of pounds sterling.]

	Deposit and note accounts, Bank of England and Treasury.				Government floating debt.			Nine London clearing banks. ³				Discount rates.	
	Bank notes. ¹	Currency notes and certificates outstanding.	Deposits, public and other.	Coin and bullion. ²	Treasury bills.	Temporary advances.	Total floating debt.	Money at call and short notice.	Discounts and advances.	Investments.	Deposits.	3 months' bank bills.	6 months' trade bills.
1913, average of end of month figures...	29	-----	57	38	-----	-----	-----	-----	-----	-----	-----	Per cent. 4½	Per cent. 4½
1920, end of—													
March.....	99	335	137	141	1,107	205	1,312	-----	-----	-----	-----	5½	6½
April.....	101	337	140	141	1,048	249	1,297	-----	-----	-----	-----	6½	7½
May.....	104	348	118	141	1,062	221	1,283	-----	-----	-----	-----	6½	7½
June.....	107	357	192	146	1,050	244	1,294	-----	-----	-----	-----	6½	7½
July.....	107	362	134	152	1,058	204	1,262	-----	-----	-----	-----	6½	7½
August.....	106	356	116	152	1,067	183	1,250	-----	-----	-----	-----	6½	7½
September.....	109	354	127	152	1,139	143	1,282	-----	-----	-----	-----	6½	7½
October.....	109	356	137	152	1,028	241	1,269	-----	-----	-----	-----	6½	7½
November.....	109	349	123	153	1,097	231	1,328	-----	-----	-----	-----	6½	7½
December.....	113	368	190	157	1,102	306	1,408	-----	-----	-----	-----	6½	7½
1921:													
January.....	109	342	129	157	1,145	242	1,387	99	1,207	317	1,810	6½	7
February.....	108	336	127	157	1,110	189	1,299	88	1,172	340	1,754	6½	7½
March.....	110	344	138	157	1,121	155	1,275	83	1,145	336	1,715	6½	7½
April.....	109	338	141	157	-----	-----	-----	-----	-----	-----	-----	5½	7

¹ Less notes in currency note account.

² Held by the Bank of England and by the treasury as note reserve.

³ Average weekly figures.

FRENCH FINANCIAL SITUATION.

[Amounts in millions of francs.]

	Bank of France.					Situation of the Government.		
	Gold reserves.	Silver reserves.	Deposits. ¹	Circulation.	Advances to the Government for purposes of the war. ²	Government revenue. ³	Public debt.	Price of 3 per cent perpetual rente.
1913, average.....	3,343	629	830	5,565	-----	320	35,000	86.77
1920, end of—								
March.....	4,306	247	4,039	37,569	26,300	859	-----	58.8-
April.....	4,308	244	3,469	37,688	25,300	1,057	-----	57.40
May.....	4,309	240	3,751	37,915	26,050	857	-----	59.35
June.....	4,310	241	3,653	37,544	26,000	908	-----	57.25
July.....	4,311	248	3,416	37,696	25,550	1,109	-----	58.90
August.....	4,312	255	3,267	37,905	25,800	882	-----	56.30
September.....	4,331	256	3,307	39,208	26,600	1,120	285,836	54.15
October.....	4,337	264	3,474	39,084	26,600	1,332	-----	56.20
November.....	4,343	265	3,927	38,807	26,600	1,088	-----	55.40
December.....	4,352	266	3,575	37,902	26,600	1,168	-----	57.95
1921:								
January.....	4,353	268	3,429	37,913	25,600	1,204	-----	59.16
February.....	4,355	264	3,293	37,808	25,600	921	302,735	58.15
March.....	4,356	267	3,103	38,435	26,200	972	-----	58.17
April.....	4,356	271	3,018	38,211	26,000	-----	-----	56.92

¹ Includes Treasury and individual deposits.

² Under the laws of Aug. 5 and Dec. 26, 1914, July 10, 1915, and Feb. 16, 1917.

³ From indirect taxation and Government monopolies.

⁴ Not including about 1,978 million francs held abroad.

⁵ Foreign debt calculated at the exchange rates of Sept. 30, 1920.

⁶ Not including about 1,948 million francs held abroad.

⁷ Foreign debt calculated at the exchange rates of Feb. 28, 1921.

ITALIAN FINANCIAL SITUATION.

[In millions of lire.]

	Leading private banks. ¹			Banks of issue.						Government finances.				
	Cash.	Loans, discounts, and correspondents' debts.	Deposits and correspondents' credits.	Loans and discounts.	Gold reserve.	Total reserve.	Deposits and demand liabilities.	Commercial circulation.	Circulation for account of the state.	State currency notes.	Treasury metallic reserve.	Short-term treasury bills.	Total public debt.	Principal revenues from taxation and monopolies during month. ²
End of December, 1913	129	2,007	1,674	857	1,375	1,661	318	2,284	-----	499	117	-----	-----	-----
1920.														
January	825	13,054	12,094	4,173	1,038	2,021	2,376	4,920	10,714	2,345	338	-----	-----	-----
February	749	13,571	12,629	4,671	1,038	2,047	2,224	4,848	10,599	-----	-----	-----	-----	-----
March	818	14,421	13,397	5,322	1,028	2,053	2,296	5,478	10,454	-----	-----	-----	-----	-----
April	850	14,884	14,045	5,804	1,038	2,035	2,377	6,029	10,401	-----	-----	-----	-----	-----
May	813	15,240	14,044	5,782	1,038	2,065	2,264	6,459	10,402	-----	-----	-----	-----	-----
June	874	14,996	14,060	6,784	1,039	2,110	2,379	7,484	10,333	2,538	343	9,300	95,000	-----
July	864	14,924	14,131	6,576	1,039	2,113	2,196	7,615	10,284	-----	-----	9,800	-----	561
August	872	15,177	14,457	6,233	1,039	2,172	2,276	7,413	10,524	2,546	349	10,200	-----	878
September	942	15,653	14,824	6,628	1,039	2,217	2,494	8,231	10,682	-----	-----	10,300	-----	461
October	1,035	15,700	14,909	7,083	1,058	2,082	2,337	8,361	10,940	2,546	-----	10,700	99,000	1,268
November	1,097	16,003	15,315	6,397	1,058	2,069	2,589	8,577	10,899	-----	-----	11,700	-----	563
December	1,297	16,538	15,801	7,074	1,058	2,077	2,559	8,988	10,743	-----	-----	13,200	101,000	1,222
January	1,184	17,113	16,392	6,931	1,058	-----	2,635	(³)	(³)	-----	-----	-----	-----	822
February	1,012	16,842	15,961	7,158	1,059	-----	2,221	(⁴)	(⁴)	-----	-----	-----	-----	1,210

¹ Banca Commerciale Italiana, Banca Italiana di Sconto, Credito Italiano, Banco di Roma.² Revenues from state railways; from post, telegraph, and telephones; from state domain; from import duties on grain; and from Government sales of sugar are not included.³ Combined circulation, 19,264.⁴ Combined circulation, 18,926.

GERMAN FINANCIAL SITUATION.

[Amounts in millions of marks.]

	Reichsbank statistics.				Darlehns- kassen- scheine in circula- tion.	Situation of the Government.				Index • number of securi- ties prices. ²
	Reserve.		Note circula- tion.	Deposits.		Receipts from taxes and Govern- ment monop- olies.	Floating debt.	3 per cent imperial loan. ¹	5 per cent war loan. ¹	
	Gold.	Reichs und Darlehns- kassen- scheine.								
1913 average	1,068	32	1,958	668	-----	265	-----	75.90	-----	-----
1920, end of—										
March	1,091	13,972	45,170	18,498	13,731	-----	-----	77.00	97.20	³ 139
April	1,092	15,193	47,940	16,499	13,776	2,072	-----	74.50	98.75	⁴ 133
May	1,092	15,907	50,017	17,024	13,567	2,599	-----	67.50	98.70	⁵ 109
June	1,092	17,252	53,975	23,414	13,633	3,227	141,987	62.90	98.30	⁶ 117
July	1,092	17,874	55,969	17,282	13,328	3,739	-----	60.64	98.50	⁷ 140
August	1,092	18,686	58,401	15,772	13,266	3,635	148,750	60.80	98.70	148
September	1,092	19,861	61,735	20,054	13,348	4,126	156,825	62.25	99.90	161
October	1,092	21,341	63,596	17,945	13,024	5,121	161,920	66.25	99.00	172
November	1,092	20,363	64,284	17,340	12,370	6,130	165,918	68.60	98.75	179
December	1,092	23,417	68,806	22,327	12,033	9,103	-----	65.75	98.90	189
1921, end of—										
January	1,092	22,810	66,621	15,834	11,341	8,721	-----	67.00	99.50	179
February	1,092	21,982	67,427	17,357	10,755	-----	-----	67.25	99.75	155
March	1,092	23,836	69,417	28,043	10,168	-----	-----	67.60	99.70	⁸ 161

¹ Quotations of the Berlin Bourse.² Calculated by the Frankfurter Zeitung with the prices of 10 bonds and 25 stocks. Prices as of Jan. 1, 1920=100.³ As of Apr. 5.⁴ As of May 3.⁵ As of June 1.⁶ As of July 1.⁷ As of Aug. 2.⁸ As of Apr. 2.

SWEDISH FINANCIAL SITUATION.

[In millions of kronor.]

	Riksbank.		Joint stock banks.			Riksbank.		Joint stock banks.	
	Gold coin and bullion.	Note circulation.	Bills discounted with the Riksbank.	Loans and discounts.		Gold coin and bullion.	Note circulation.	Bills discounted with the Riksbank.	Loans and discounts.
1913, end of December.....	102.1	234.5	155.2	2,286.9	1920, end of—Continued:				
1920, end of:					October.....	282.4	772.8	503.4	6,079.0
March.....	261.1	741.6	507.4	5,877.4	November.....	282.4	752.8	447.2	6,117.8
April.....	261.0	718.3	497.7	5,969.4	December.....	281.8	759.9	451.3	6,211.3
May.....	261.0	708.3	473.5	5,998.6	1921—January.....	281.9	672.5	431.2	6,172.6
June.....	261.1	736.5	531.1	5,982.9	February.....	281.8	687.6	452.7	6,119.2
July.....	261.3	724.8	514.2	6,028.9	March.....	281.7	716.9	445.7	6,093.6
August.....	261.4	742.2	567.8	6,007.4	April.....	281.8	680.5	442.2	6,065.3
September.....	279.8	779.8	547.0	6,068.7					

¹ Provisional.

JAPANESE FINANCIAL SITUATION.

[Amounts in millions of yen.]

	Bank of Japan.				Tokyo banks.		
	Private and Government deposits.	Loans and discounts.	Note circulation.	Specie reserve. ²	Tokyo associated banks, total loans.	Tokyo bank clearings (total within the month).	Average discount rate (Tokyo market).
End of—							<i>Per cent.</i>
1920.							
January.....	1,167	305	1,375	944	1,929	3,063	9.38
February.....	1,146	336	1,360	937	2,022	3,532	9.67
March.....	1,181	364	1,368	921	1,982	4,135	10.15
April.....	1,261	432	1,367	917	1,982	3,168	10.62
May.....	1,209	445	1,328	930	2,089	2,922	10.95
June.....	1,165	381	1,349	979	2,036	2,524	10.99
July.....	1,120	273	1,202	1,011	2,029	2,109	10.95
August.....	1,202	278	1,217	1,040	2,014	2,139	10.80
September.....	1,079	180	1,170	1,078	2,076	2,032	10.59
October.....	1,048	164	1,192	1,117	2,133	1,922	10.48
November.....	1,137	128	1,180	1,152	2,134	2,302	10.44
December.....	1,040	158	1,439	1,247	2,137	2,841	10.26
1921.							
January.....	1,071	115	1,235	1,235	2,171	2,013	10.33
February.....	1,126	103	1,141	1,141	2,188	2,143	9.71
March.....	³ 1,159	³ 92	³ 1,056	.....	⁴ 1,852	2,502	.....

¹ In case of Tokyo banks, and note circulation and specie reserve of Bank of Japan, last day of month.² It is generally understood that in recent years a certain portion of the reserve has been held abroad. Specie reserve figures do not include bank's own notes held in the bank.³ Mar. 5.⁴ Mar. 26.

CONDITION OF PRINCIPAL EUROPEAN BANKS OF ISSUE.

BANK OF ITALY.

[From annual reports and weekly statements of the Bank of Italy.]

[In thousands of dollars.]

	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 31, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.
ASSETS.							
Gold.....	215,810	207,931	173,639	161,320	157,827	155,331	158,128
Silver.....	20,823	20,227	14,023	16,870	14,890	14,494	14,472
Total metallic reserve.....	236,633	228,158	187,662	178,190	172,717	169,825	172,600
Notes of Italian Government and of other, including foreign, banks of issue.....	11,150	20,112	27,504	34,591	65,322	103,150	85,218
Other cash and cash equivalents.....	3,287	2,724	4,971	6,173	8,201	773	547
Bills payable in Italy.....	136,227	91,430	104,187	146,127	171,159	261,692	609,652
Bills payable in foreign countries, including foreign treasury bills.....	16,804	4,034	4,016	4,270	60,871	4,163	3,992
Bills payable, received for collection.....	4,648	4,893	3,946	680	2,106	1,730	2,290
Advances, ordinary.....	29,181	37,168	59,254	84,222	147,202	263,507	442,773
Advances to the Government or for account of the Government.....	100,131	310,447	353,335	835,136	1,012,260	1,499,991	1,551,087
Securities.....	39,486	39,549	42,414	43,063	39,543	41,045	41,336
Debtors in current account:							
In Italy.....	7,725	2,118	2,139	2,404	73,682	71,320	218,165
In foreign countries.....	8,195	28,652	74,592	90,309	149,645	148,987	150,045
Bank premises.....	5,364	5,500	5,647	5,462	5,643	5,755	6,760
In fiscal account with the Government and provincial administration.....	988	1,703	1,399	18,384	48,705	100,191	67,266
Sundry assets.....	33,871	82,446	141,661	774,237	452,513	512,651	324,649
Total.....	633,690	858,934	1,012,727	2,223,248	2,409,569	3,184,780	3,676,380
LIABILITIES.							
Capital.....	34,740	34,740	34,740	34,740	34,740	34,740	34,740
Surplus.....	9,264	9,264	9,264	9,264	9,264	9,264	9,264
Extraordinary and special reserves.....	2,321	2,321	3,382	5,587	8,998	13,243	15,349
Circulation:							
For account of commerce.....	417,353	276,299	394,877	426,929	767,848	949,522	1,428,238
For account of Government.....		310,460	353,335	835,136	1,012,260	1,499,991	1,551,087
Demand and time deposits.....	106,135	143,956	167,125	279,672	308,155	402,376	401,743
In fiscal account with the Government and provincial administration.....	40,320	21,660	16,648	56,033	51,329	8,651	68,484
Sundry liabilities.....	23,557	60,234	33,356	575,887	216,975	266,993	167,475
Total.....	633,690	858,934	1,012,727	2,223,248	2,409,569	3,184,780	3,676,380
Ratio of metallic reserve to deposit and note liabilities combined, per cent.....	45.20	31.22	20.50	11.56	8.27	5.95	5.10

BANK OF NORWAY.

[From the annual reports and monthly statements of the Bank of Norway.]

[In thousands of dollars.]

	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 31, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.
ASSETS.							
Gold in vault.....	10,290	13,837	33,027	31,193	32,691	39,590	39,472
Total metallic reserve.....	10,290	13,837	33,027	31,193	32,691	39,590	39,472
Held with Scandinavian banks of issue.....	892	4,191	828	902	866	1,279	1,279
Held with other foreign agencies.....	7,473	16,948	21,227	20,615	18,703	19,140	15,623
Loans and discounts, domestic.....	32,066	23,140	42,802	109,822	116,289	106,686	130,003
Foreign bills.....	216	83	148	178	64	31	11
Real estate loans.....	404	371	337	296	267	244	219
Securities.....	2,402	3,590	3,602	3,508	3,543	2,831	2,433
Sundry assets.....	1,753	651	2,006	225	288	3,693	11,120
Total.....	55,496	62,811	103,977	166,739	172,691	173,494	198,881
LIABILITIES.							
Capital.....	6,700	6,700	6,700	9,380	9,380	9,380	9,380
Surplus.....	3,581	3,201	3,069	4,654	4,569	4,120	3,752
Notes in circulation.....	35,961	43,473	69,105	87,454	116,905	121,747	133,272
Deposits.....	5,666	7,309	22,326	60,689	34,178	29,411	35,721
Sundry liabilities.....	3,588	2,127	2,777	4,562	7,659	8,836	16,756
Total.....	55,496	62,811	103,977	166,739	172,691	173,494	198,881
Ratio of metallic reserve to deposit and note liabilities combined—per cent.....	24.72	27.25	36.12	21.06	21.64	26.19	23.36

BANK OF COPENHAGEN (DENMARK).

[From monthly statements of the Bank of Denmark.]

[In thousands of dollars.]

	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 31, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.
ASSETS.							
Gold coin and bullion.....	24,506	29,833	42,847	46,611	52,159	60,807	60,992
Silver and other metallic reserve.....	908	829	448	660	654	887	698
Total metallic reserve.....	25,414	30,662	43,295	47,271	52,813	61,694	61,690
Foreign credits.....			11,245	12,038	24,003	7,912	2,520
Danish Government securities.....			8,492	7,204	4,463	11,318	9,752
Other Danish securities.....			1,641	1,720	2,602	3,094	2,872
Foreign Government securities.....			2,449	2,311	1,071	1,141	1,095
Notes of and credits with other banks of issue.....			13	8	7,933	6,839	8,608
Domestic bills.....			15,335	9,000	15,013	47,411	50,317
Foreign bills.....			2,790	2,655	2,518	4,082	971
Loans and discounts.....			6,246	5,864	6,566	14,352	14,155
Real estate.....			664	819	792	814	828
Other assets.....			20,874	41,119	47,016	43,781	62,179
Total.....			113,044	130,009	164,790	202,438	214,987
LIABILITIES.							
Capital.....			7,236	7,236	7,236	7,236	7,236
Surplus and special reserves.....			2,732	4,001	5,293	7,301	8,575
Notes in circulation.....	55,376	59,081	76,344	90,547	120,609	131,145	149,197
Government deposits.....			918	839	859	827	795
Current account deposits.....			16,313	14,734	26,619	19,275	17,476
Other deposits.....			7,657	11,671	3,928	36,279	31,452
Due to foreign central banks of issue.....			1,532	771			
Profit and loss.....			134		134	134	134
Other liabilities.....			178	26	112	241	122
Total.....			113,044	130,009	164,790	202,438	214,987
Ratio of metallic reserve to deposit and note liabilities combined—percent.....			42.77	40.11	34.74	32.90	31.01

BANK OF SWEDEN.

[From the Bank of Sweden's year book and weekly statements.]

[In thousands of dollars.]

	Dec. 31, 1914.	Dec. 31, 1915.	Dec. 31, 1916.	Dec. 31, 1917.	Dec. 31, 1918.	Dec. 31, 1919.	Dec. 31, 1920.
ASSETS.							
Gold coin and bullion.....	29,088	33,385	49,183	65,515	76,532	75,351	75,516
Silver and other metallic reserve.....	506	572	627	429	98	272	732
Total metallic reserve.....	29,594	33,957	49,810	65,944	76,630	75,623	76,248
Checks and sight drafts, including foreign.....	3,572	4,832	4,602	6,756	9,504	10,146	13,039
Current account deposits held abroad.....	4,489	13,691	10,471	5,132	12,239	13,065	19,714
Government securities.....	6,586	13,978	16,860	16,041	14,638	12,959	3,403
Securities of domestic corporations.....		1,430	1,525	1,485	1,352	1,352	1,203
Bills payable in Sweden.....	46,883	30,450	32,595	49,940	75,122	121,503	145,038
Bills payable abroad.....	11,631	24,426	32,807	29,515	18,892	17,950	8,397
Advances in current account.....		613	669	374	322	369	302
Other advances.....	11,442	6,668	14,177	32,507	48,386	27,173	4,260
Sundry assets.....	19,289	17,142	17,792	22,788	24,739	8,029	1,091
Total.....	134,962	147,187	181,308	230,482	281,824	288,169	272,695
LIABILITIES.							
Capital.....	13,400	13,400	13,400	13,400	13,400	13,400	13,400
Surplus.....	3,350	3,350	3,350	3,350	3,350	3,350	3,350
Deposits.....	28,983	34,590	46,399	52,916	37,902	57,278	45,967
Due to foreign banks.....	2,417	2,668	1,289	518	85	1,344	1,312
Notes in circulation.....	81,488	87,874	111,895	153,490	218,027	200,347	203,647
Bank orders.....		699	964	2,364	3,076	2,774	1,437
Dividends due and payable to the Government.....	2,358	2,348	2,176				
Sundry liabilities.....	2,417	2,258	1,835	4,444	5,984	9,676	3,582
Total.....	134,962	147,187	181,308	230,482	281,824	288,169	272,695
Ratio of metallic reserve to deposit and note liabilities combined, per cent.....	26.77	27.73	31.47	31.95	29.94	29.35	30.55

DISCOUNT AND OPEN-MARKET OPERATIONS OF FEDERAL RESERVE BANKS.

DISCOUNTS.

Discount operations of the Federal Reserve Banks during March and February, 1921 and 1920, are shown in summary form for the entire system in the table below. Detailed figures for each Federal Reserve Bank for the most recent month are given on pages 615 to 617.

VOLUME OF DISCOUNT OPERATIONS.
[In thousands of dollars.]

	1921		1920	
	March.	February.	March.	February.
Total.....	7,368,268	8,120,849	6,970,331	6,517,439
Secured by Government obligations.....	3,549,797	3,856,306	5,298,884	5,514,279
Otherwise secured and unsecured—Total.....	3,818,471	4,264,543	1,671,447	973,160
Commercial paper, n. e. s.....	3,709,669	4,187,059	1,613,530	933,557
Agricultural paper.....	59,129	46,263		
Live-stock paper.....	26,451	11,806		
Trade acceptances—				
Total.....	11,709	13,256	23,383	10,992
Domestic.....	11,620	12,799		
Foreign.....	89	457		
Bankers' acceptances—Total.....	11,513	6,159	34,534	28,611
Domestic.....	4,809	2,907		
Foreign.....	6,704	3,752		
Average maturity (in days).....	12.38	9.53	13.77	12.26
Average rate (365-day basis), per cent.....	6.43	6.41	5.64	5.52

Discount operations during March aggregated \$7,368,000,000, a decrease of \$753,000,000 from the total of \$8,121,000,000 reported for February, but an increase of \$398,000,000 over the amount shown for March, 1920. Volume of discounts reduced to a daily basis by the method explained in the BULLETIN for April, 1921, page 466, together with average maturity, is shown for each Federal Reserve district for March and for February in the table below:

VOLUME OF DISCOUNTS REDUCED TO DAILY BASIS.

Federal Reserve Bank.	Volume of discounts (in millions).		Average maturity (in days).		Volume on daily basis (in millions).	
	March.	February.	March.	February.	March.	February.
All banks.....	7,368	8,121	12.38	9.53	2,943	2,765
Boston.....	732	524	8.86	7.89	209	148
New York.....	4,272	5,631	6.41	5.51	883	1,109
Philadelphia.....	399	310	12.56	12.70	162	140
Cleveland.....	279	381	14.74	9.40	133	128
Richmond.....	299	225	12.89	12.99	124	105
Atlanta.....	164	150	26.50	25.81	140	138
Chicago.....	519	387	41.13	33.50	689	463
St. Louis.....	154	122	24.33	26.43	121	115
Minneapolis.....	66	69	36.55	32.66	78	81
Kansas City.....	111	91	32.86	30.79	118	100
Dallas.....	74	67	32.86	31.62	78	76
San Francisco.....	299	164	21.55	27.77	208	162

It will be noted that, as a result of a large increase in average maturity, namely, from 9.53 to 12.38 days, volume of discounts on the daily basis shows an increase of 6 per cent, in spite of a decrease in the total volume of business of 10 per cent. The greatest increases in average maturity are shown for the Cleveland and Chicago banks, the average for the former having increased from 9.4 days in February to 14.74 days in March, and for the latter from 33.5 days to 41.13 days. Longer average maturities of discounted paper are shown for all the districts, except the Richmond, St. Louis, and San Francisco districts.

Decreases between February and March are noted in the volume of discounts secured by United States obligations, as well as in all other discounts. Of this latter class of paper, commercial paper, n. e. s., shows a decline from \$4,187,000,000 to \$3,710,000,000, while agricultural paper increased from \$46,000,000 to \$59,000,000, and live-stock paper from \$12,000,000 to \$26,000,000. Discounted trade acceptances show a decline from \$13,000,000 to \$12,000,000, while discounted bankers' acceptances increased from \$6,000,000 to \$12,000,000. The rate of discount charged in March was slightly higher on the average than that for February—6.43 per cent as compared with 6.41 per cent.

Following is a summary of holdings of discounted bills at the end of March and February, 1921 and 1920. Detailed figures for each Federal Reserve Bank are shown on page 618.

HOLDINGS OF DISCOUNTED BILLS.

[In thousands of dollars.]

	1921		1920	
	Mar. 31.	Feb. 28.	Mar. 26.	Feb. 27.
Total.....	2,233,054	2,389,510	2,449,230	2,453,511
Secured by United States Government obligations.....	970,911	997,968	1,441,015	1,572,980
Otherwise secured and unsecured—Total.....	1,262,143	1,391,542	1,008,215	880,531
Commercial and industrial paper, n. e. s.....	1,010,891	1,140,826	861,848	755,750
Agricultural paper.....	140,987	136,679	29,321	30,125
Live-stock paper.....	81,693	83,654	45,344	37,070
Trade acceptances—				
Total.....	15,520	16,962	20,813	18,508
Foreign trade.....	256	540		
Domestic trade.....	15,264	16,422		
Bankers' acceptances—				
Total.....	13,052	13,421	50,889	39,078
Foreign trade.....	8,787	10,335		
Domestic trade.....	4,183	3,086		
Dollar exchange.....	82			

BANKS ACCOMMODATED.

During the month of March 34 banks were added to the membership of the system, the total number of member banks increasing from 9,681 to 9,715. The number of banks accommodated in February was 5,107 and in March 5,332, so that the percentage of banks accommodated was 54.9 per cent in March, as against 52.8 per cent in February, the increases being general throughout the system. The number of member banks in each district at the end of March and of February, and the number and percentage accommodated during each of the two months are shown in the following statement:

Federal Reserve Bank.	Member banks in district.		Member banks accommodated.		Percentage accommodated.	
	Mar. 31.	Feb. 28.	March.	February.	March.	February.
Boston.....	436	439	257	225	58.9	51.3
New York.....	788	788	349	316	44.3	40.6
Philadelphia.....	701	701	330	318	47.1	45.4
Cleveland.....	875	874	261	237	29.8	27.1
Richmond.....	612	611	347	335	56.7	54.8
Atlanta.....	484	472	355	340	73.3	72.0
Chicago.....	1,425	1,425	922	908	64.7	63.7
St. Louis.....	578	575	306	299	52.9	52.0
Minneapolis.....	1,011	1,005	589	539	58.3	53.6
Kansas City.....	1,094	1,093	585	561	53.5	51.4
Dallas.....	855	851	570	550	66.7	64.6
San Francisco.....	856	847	461	429	53.9	50.6
Total.....	9,715	9,681	5,332	5,107	54.9	52.8

ACCEPTANCES.

A summary of open-market operations of the Federal Reserve Banks in March and in February, 1921 and 1920, is shown in the following table:

OPEN-MARKET OPERATIONS.

[In thousands of dollars.]

	1921		1920	
	March.	February.	March.	February.
Total.....	149,255	169,456	303,360	300,303
Bankers' acceptances—Total..	148,698	167,362	294,301	296,959
In the domestic trade.....	31,362	37,074	57,350	65,918
In the foreign trade.....	100,598	115,638	236,951	228,091
Dollar exchange.....	16,738	14,650	4,158	2,950
Trade acceptances—Total.....	557	2,094	4,901	3,349
In the domestic trade.....	557	15	812	29
In the foreign trade.....	33.99	2,079	4,089	3,320
Average maturity (in days)...	33.99	36.98	49.33	50.50
Average rate (365-day basis), per cent.....	6.01	6.01	5.80	5.53
United States securities purchased:				
Bonds.....			22	5
Certificates of indebtedness.....	448,487	18,879	1,496,388	304,296

Bills purchased in March totaled \$149,000,000, as against \$169,000,000 the month before and \$303,000,000 in March, 1920. Decreased

totals are shown for all classes of bills purchased, bankers' acceptances declining from \$167,000,000 to \$149,000,000 and trade acceptances from \$2,000,000 to a little over \$500,000. Of the bankers' acceptances purchased in March about two-thirds and of the trade acceptances the entire amount were bills drawn in the foreign trade. The average maturity of acceptances declined from 36.98 days in February to 33.99 days in March, while the average rate of interest remained unchanged at 6.01 per cent.

The following table shows the volume of acceptances purchased by each of the Federal Reserve Banks, reduced to a daily basis:

VOLUME OF OPEN-MARKET PURCHASES REDUCED TO DAILY BASIS.

Federal Reserve Bank.	Volume of purchases (in millions).		Average maturity (in days).		Volume on daily basis (in millions).	
	Mar.	Feb.	Mar.	Feb.	Mar.	Feb.
All banks.....	149	169	33.99	36.98	164	224
Boston.....	24	23	19.57	19.46	15	16
New York.....	78	58	29.89	25.31	75	52
Philadelphia.....	9	11	40.13	49.80	12	20
Cleveland.....	11	27	44.65	49.50	16	49
Richmond.....	3	2	39.78	37.88	4	2
Atlanta.....	(¹)	1	70.05	47.14	1	1
Chicago.....	15	16	57.27	58.01	28	34
St. Louis.....	2	1	21.27	32.28	1	2
Minneapolis.....	(¹)	.....	39.29	.....	.....	.....
Kansas City.....	.....	.....	.....	.....	.....	.....
Dallas.....	(¹)	.....	82.90	.....	.....	.....
San Francisco.....	7	30	50.60	45.54	12	48

¹ Less than \$500,000.

Following is a summary of the holdings of purchased and discounted acceptances at the end of March and of February, 1921:

HOLDINGS OF PURCHASED AND DISCOUNTED ACCEPTANCES.

[In thousands of dollars.]

	End of—	
	March.	February.
All classes.....	147,913	199,804
Purchased in open market.....	119,341	169,420
Discounted for member banks.....	28,572	30,384
Total, distributed by classes of acceptances:		
Bankers' acceptances—Total.....	132,106	182,469
Foreign.....	93,782	134,885
Domestic.....	28,224	37,072
Dollar exchange.....	10,100	10,512
Trade acceptances—Total.....	15,807	17,335
Foreign.....	543	1,222
Domestic.....	15,264	16,113
Bankers' acceptances, distributed by classes of accepting institutions:		
Member banks—		
National.....	46,304	64,652
Nonnational.....	28,745	40,330
Nonmember banks and banking corporations..	23,736	37,561
Private banks.....	16,015	18,729
Branches and agencies of foreign banks.....	17,306	21,197

It will be noted that the total holdings of acceptances declined from about \$200,000,000 to \$148,000,000 during the month. Of the \$148,000,000 held at the end of March, \$119,000,000 were purchased in open market and \$29,000,000 were discounted for member banks. Of the total of \$148,000,000 of acceptances held, \$132,000,000 were bankers' acceptances and \$16,000,000 were trade acceptances. Of the bankers' acceptances, about 71 per cent

were drawn in the foreign trade, while of the trade acceptances all but \$2,000,000 were drawn in the domestic trade. Of the total of \$132,000,000 of bankers' acceptances held, 35 per cent were acceptances of national banks, 21.8 per cent of nonnational member banks, 18 per cent of nonmember banks and banking corporations, 12.1 per cent of private banks, and 13.1 per cent of branches and agencies of foreign banks.

VOLUME OF OPERATIONS.

VOLUME OF DISCOUNT AND OPEN-MARKET OPERATIONS DURING MARCH, 1921.

Federal Reserve Bank.	Bills discounted for member banks.	Bills bought in open market.	United States securities purchased.		Total.	
			Bonds and Victory notes.	Certificates of indebtedness.	March, 1921.	March, 1920.
Boston.....	\$731,710,033	\$23,787,794	-----	\$17,384,500	\$772,882,327	\$493,475,209
New York.....	4,271,627,879	78,089,389	-----	281,578,557	4,631,295,825	4,574,324,471
Philadelphia.....	399,243,410	9,022,991	-----	26,939,000	435,205,401	544,618,766
Cleveland.....	279,380,406	11,155,289	-----	71,030,500	361,566,195	484,519,424
Richmond.....	298,973,793	2,665,401	-----	6,000,000	307,639,194	351,353,026
Atlanta.....	163,603,783	470,519	-----	-----	164,074,302	163,917,786
Chicago.....	519,190,203	15,022,539	-----	22,698,500	556,911,242	911,114,648
St. Louis.....	154,417,963	1,599,984	-----	844,000	156,861,947	288,699,660
Minneapolis.....	66,495,192	38,988	-----	16,500	66,550,680	145,259,885
Kansas City.....	110,900,132	-----	-----	1,214,000	112,114,132	178,502,098
Dallas.....	73,451,683	20,907	-----	100,000	73,572,590	210,928,153
San Francisco.....	299,273,577	7,381,522	-----	20,681,500	327,336,599	423,386,935
Total:						
March, 1921.....	7,368,268,054	149,255,323	-----	448,487,057	7,966,010,434	-----
March, 1920.....	6,970,330,977	303,359,534	\$22,050	1,490,387,500	-----	8,770,100,061
3 months ending Mar. 31, 1921.....	23,746,878,928	440,979,807	11,800	741,538,557	24,929,409,092	-----
3 months ending Mar. 31, 1920.....	19,729,041,586	906,119,686	244,450	2,443,059,000	-----	23,078,464,722

VOLUME OF BILLS DISCOUNTED DURING MARCH, 1921, BY CLASSES OF PAPER; ALSO AVERAGE RATES AND MATURITIES.

Federal Reserve Bank.	Customer's paper secured by Government obligations.	Member banks' collateral notes.		Commercial paper, n. e. s.	Agricultural paper.	Live-stock paper.
		Secured by Government obligations.	Otherwise secured.			
Boston.....	\$16,470,870	\$417,741,200	-----	\$297,030,160	\$97,703	\$8,500
New York.....	48,046,031	1,514,553,505	-----	2,702,476,882	581,356	-----
Philadelphia.....	17,767,127	234,020,402	-----	146,910,516	240,814	1,500
Cleveland.....	1,468,625	218,453,307	\$187,000	51,667,521	225,380	77,555
Richmond.....	2,431,130	254,805,468	535,000	35,204,021	4,881,691	-----
Atlanta.....	5,387,167	98,368,950	845,300	52,389,759	5,438,061	564,896
Chicago.....	16,512,028	243,338,073	6,404,200	226,902,647	21,518,787	3,138,211
St. Louis.....	4,604,685	84,453,877	128,887	59,609,246	4,064,234	284,112
Minneapolis.....	469,755	30,685,083	9,737,992	17,796,710	5,147,620	2,218,348
Kansas City.....	2,909,603	73,893,339	58,607	15,005,622	6,840,246	11,357,394
Dallas.....	847,293	49,593,677	2,420,900	10,871,662	4,666,356	4,557,552
San Francisco.....	3,433,348	209,542,901	9,409,933	64,073,047	5,427,138	4,243,026
Total:						
March, 1921.....	120,847,662	3,429,449,782	29,730,819	3,679,937,806	59,129,386	26,451,094
February, 1921.....	128,787,544	3,727,518,681	22,571,562	4,164,487,425	46,262,837	11,806,039
March, 1920.....	189,512,507	5,109,371,143	11,451,320	-----	1,602,079,269	-----
February, 1920.....	199,299,992	5,344,979,056	7,148,484	-----	926,408,815	-----

VOLUME OF BILLS DISCOUNTED DURING MARCH, 1921, BY CLASSES OF PAPER; ALSO AVERAGE RATES AND MATURITIES—Continued.

Federal Reserve Bank.	Trade acceptances.		Bankers' acceptances.		Total all classes.	Average maturity.	Average rate (365-day basis).
	Domestic.	Foreign.	Domestic.	Foreign.			
						<i>Days.</i>	<i>Per cent.</i>
Boston.....	\$361,600				\$731,710,033	8.86	6.57
New York.....	3,079,961		\$881,250	\$2,008,894	4,271,627,879	6.41	6.52
Philadelphia.....	176,051		127,000		399,243,410	12.56	5.67
Cleveland.....	1,388,818		2,162,928	3,749,259	279,380,406	14.74	6.00
Richmond.....	1,113,483				298,973,793	12.89	6.00
Atlanta.....	560,650		49,000		163,603,783	26.50	6.39
Chicago.....	1,052,948		323,309		519,190,203	41.13	6.72
St. Louis.....	252,702	\$72,805	587,415	360,000	154,417,963	24.33	5.90
Minneapolis.....	428,184		11,500		66,495,192	36.55	6.78
Kansas City.....	802,307		33,014		110,900,132	32.86	6.50
Dallas.....	440,032		54,211		73,451,683	32.86	6.68
San Francisco.....	1,963,515	16,100	578,898	585,671	299,273,577	21.55	6.00
Total: March, 1921.....	11,620,251	88,905	4,808,525	6,703,824	7,368,268,054	12.38	6.43
February, 1921.....	12,798,707	456,920	2,406,877	3,752,037	8,120,848,629	9.53	6.41
March, 1920.....	23,382,954		34,533,784		6,970,330,977	13.77	5.64
February, 1920.....	10,991,506		28,611,229		6,517,439,982	12.26	5.52

VOLUME OF BANKERS' AND TRADE ACCEPTANCES PURCHASED DURING MARCH, 1921, BY CLASSES OF PAPER; ALSO AVERAGE RATES AND MATURITIES.

Federal Reserve Bank.	Bankers' acceptances.				Trade acceptances.			Total bills purchased.	Average maturity.	Average rate (365-day basis).
	Foreign.	Domestic.	Dollar exchange bills.	Total.	Foreign.	Domestic.	Total.			
									<i>Days.</i>	<i>Per cent.</i>
Boston.....	\$17,291,762	\$4,526,032	\$1,970,000	\$23,787,794				\$23,787,794	19.57	5.88
New York.....	53,242,351	13,852,620	10,558,910	77,653,881	\$435,508		\$435,508	78,089,389	29.89	5.98
Philadelphia.....	5,605,398	1,092,593	2,325,000	9,022,991				9,022,991	40.13	5.99
Cleveland.....	6,939,851	3,689,674	525,764	11,155,289				11,155,289	44.65	6.01
Richmond.....	2,214,501	450,900		2,665,401				2,665,401	39.73	6.08
Atlanta.....	194,919	275,600		470,519				470,519	70.05	7.10
Chicago.....	9,473,473	4,754,066	793,000	15,022,539				15,022,539	57.27	6.08
St. Louis.....	568,207	1,031,777		1,599,984				1,599,984	21.27	6.09
Minneapolis.....	38,988			38,988				38,988	39.29	5.96
Kansas City.....	20,907			20,907				20,907	82.90	7.10
Dallas.....	5,007,983	1,688,679	563,513	7,260,175	121,347		121,347	7,381,522	50.60	6.04
San Francisco.....										
Total: March, 1921.....	100,598,340	31,361,941	16,738,187	148,698,468	556,855		556,855	149,255,323	33.99	6.01
February, 1921.....	115,637,555	37,074,502	14,650,397	167,362,454	2,078,542	\$15,000	2,093,542	169,455,996	36.98	6.01
March, 1920.....	236,951,064	57,350,003	4,157,622	298,458,689	4,089,335	811,510	4,900,845	303,359,534	49.33	5.80
February, 1920.....	228,091,255	65,917,632	2,950,000	296,958,887	3,319,569	29,312	3,348,881	300,307,768	50.50	5.53

VOLUME OF PAPER DISCOUNTED AND PURCHASED DURING THREE MONTHS ENDING MARCH 31, 1921, BY MATURITIES.

Federal Reserve Bank.	15-day maturities.			30-day maturities.			60-day maturities.		
	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.
Boston.....	\$1,593,139,556	\$43,320,245	\$1,636,459,801	\$26,712,057	\$7,621,412	\$34,333,469	\$74,600,347	\$5,469,656	\$80,070,003
New York.....	15,116,124,528	112,856,895	15,228,981,423	71,673,633	32,858,523	104,532,206	69,257,069	30,780,058	100,037,127
Philadelphia.....	982,330,713	3,231,727	985,562,440	15,071,092	6,284,239	21,355,331	16,888,633	5,436,448	22,325,081
Cleveland.....	944,948,301	7,897,423	952,845,724	15,282,526	8,791,205	24,073,731	28,488,192	20,292,534	48,780,726
Richmond.....	652,734,594	1,519,575	654,254,169	19,239,926	2,717,370	21,957,296	38,661,650	1,655,201	40,316,851
Atlanta.....	377,778,004	53,600	377,831,604	17,059,708	751,100	17,810,808	35,989,555	847,314	36,836,869
Chicago.....	725,812,811	18,797,223	744,610,034	84,233,672	6,012,345	90,246,017	221,241,041	16,810,362	238,051,403
St. Louis.....	283,745,571	3,645,729	287,391,300	33,160,225		33,160,225	53,949,649	43,871	53,993,520
Minneapolis.....	140,213,092		140,213,092	8,175,961	25,000	8,200,961	22,236,372	13,988	22,250,360
Kansas City.....	211,243,683		211,243,683	9,059,155	143,125	9,202,280	25,795,192	788,723	26,583,915
Dallas.....	166,726,201		166,726,201	5,064,630		5,064,630	17,090,232		17,090,232
San Francisco.....	506,256,772	3,543,002	509,799,774	17,186,417	13,654,238	30,840,655	44,769,264	17,014,010	61,783,274
Total.....	21,701,053,826	194,865,419	21,895,919,245	321,919,052	78,858,557	400,777,609	648,967,196	99,152,165	748,119,361

VOLUME OF PAPER DISCOUNTED AND PURCHASED DURING THREE MONTHS ENDING MARCH 31, 1921, BY MATURITIES—Continued.

Federal Reserve Bank.	90-day maturities.			Over 90-day maturities.			Total.		
	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.
Boston.....	\$56,898,055	\$1,664,439	\$58,562,494	\$25,716	.....	\$25,716	\$1,751,375,731	\$58,075,752	\$1,809,451,483
New York.....	211,027,297	19,762,380	230,789,677	87,746	.....	87,746	15,468,170,323	196,257,856	15,664,428,179
Philadelphia.....	44,428,773	11,743,980	56,172,753	37,141	.....	37,141	1,058,756,352	26,696,394	1,085,452,746
Cleveland.....	62,921,427	12,307,205	75,228,632	282,649	.....	282,649	1,051,923,095	49,288,367	1,101,211,462
Richmond.....	41,126,458	1,400,900	42,527,358	1,307,104	.....	1,307,104	753,069,732	7,293,046	760,362,778
Atlanta.....	58,946,780	921,204	59,867,984	4,015,524	.....	4,015,524	493,789,571	2,573,218	496,362,789
Chicago.....	275,740,169	7,258,813	282,998,982	22,088,518	.....	22,088,518	1,329,116,211	48,878,742	1,377,994,953
St. Louis.....	46,640,796	791,126	47,431,922	2,812,178	.....	2,812,178	420,308,419	4,480,727	424,789,146
Minneapolis.....	38,441,286	400,860	38,842,146	8,308,314	.....	8,308,314	217,375,025	439,848	217,814,873
Kansas City.....	39,477,793	222,500	39,700,293	15,854,782	.....	15,854,782	301,430,605	1,154,348	302,584,953
Dallas.....	28,721,666	20,907	28,742,573	14,966,628	.....	14,966,628	232,569,357	20,907	232,590,264
San Francisco.....	90,040,745	11,609,352	101,650,097	10,741,309	.....	10,741,309	668,994,507	45,820,602	714,815,109
Total.....	994,411,245	68,103,666	1,062,514,911	80,527,609	.....	80,527,609	23,746,878,928	440,979,807	24,187,858,735

VOLUME OF REDISCOUNTS AND SALES OF DISCOUNTED AND PURCHASED PAPER BETWEEN FEDERAL RESERVE BANKS FROM JAN. 1 TO MAR. 31, 1921.

[In thousands of dollars.]

Discounted or purchased by Federal Reserve Bank of—	Rediscounted or sold by Federal Reserve Bank of—									
	New York.		Richmond.	Atlanta.		Chicago.		Minneapolis.		Kansas City.
	January.	February.	January.	January.	February.	January.	February.	January.	February.	January.
Boston.....	10,671	.....	10,000	6,550	2,000	.....	.....	3,500	.....	.....
New York.....	.....	.....	.....	.....	.....	315	.....	.....	.....	.....
Philadelphia.....	.....	6,823	.....	4,000	.....	.....	.....	1,000	.....	.....
Cleveland.....	25,094	.....	.....	11,400	.....	.....	.....	.....	3,000	9,008
St. Louis.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	.....
San Francisco.....	15,058	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	50,823	6,823	10,000	21,950	2,000	315	1,000	8,500	3,000	9,008
Purchased bills.....	50,823	6,823	.....	.....	.....	315	1,000	.....	.....	.....
Discounted bills.....	.....	.....	10,000	21,950	2,000	.....	.....	8,500	3,000	9,008

Discounted or purchased by Federal Reserve Bank of—	Rediscounted or sold by Federal Reserve Bank of—				Rediscounted or sold by all Federal Reserve Banks during—					
	Dallas.			San Francisco.	January.	February.	March.	Total.	Purchased bills.	Discounted bills.
	January.	February.	March.	February.	.....	.....	.....	.....	.....	.....
Boston.....	.....	.....	.....	.....	30,721	2,000	.....	32,721	10,671	22,050
New York.....	.....	.....	.....	25	315	25	.....	340	340	.....
Philadelphia.....	.....	.....	.....	.....	5,000	6,823	.....	11,823	6,823	5,000
Cleveland.....	49,000	34,500	33,000	.....	98,502	37,500	33,000	169,002	25,094	143,908
St. Louis.....	.....	.....	.....	.....	.....	1,000	.....	1,000	1,000	.....
San Francisco.....	.....	.....	.....	.....	15,058	.....	.....	15,058	15,058	.....
Total.....	49,000	34,500	33,000	25	149,596	47,348	33,000	229,944	.....	.....
Purchased bills.....	.....	.....	.....	25	51,138	7,848	.....	.....	58,986	.....
Discounted bills.....	49,000	34,500	33,000	.....	98,458	39,500	33,000	.....	.....	170,958

HOLDINGS, BY CLASSES.

AVERAGE DAILY HOLDINGS OF EACH CLASS OF EARNING ASSETS, EARNINGS THEREON, AND ANNUAL RATES OF EARNINGS, DURING MARCH, 1921.

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.
									Per ct.	Per ct.	Per ct.	Per ct.
Boston.....	\$177,753,391	\$142,902,696	\$12,424,595	\$22,426,100	\$890,123	\$788,398	\$62,214	\$39,511	5.90	6.59	5.90	2.07
New York.....	834,540,680	777,122,543	37,721,615	69,696,522	4,675,636	4,332,350	190,854	152,432	6.22	6.56	5.96	2.58
Philadelphia.....	200,396,883	152,102,403	14,963,745	33,240,735	871,143	731,835	76,122	63,186	5.11	5.66	5.98	2.23
Cleveland.....	183,339,615	126,674,508	29,720,876	29,944,231	872,955	670,434	151,721	60,800	5.52	6.08	6.01	2.22
Richmond.....	127,059,014	110,150,103	3,219,963	13,688,948	601,695	561,319	16,629	23,747	5.58	6.00	6.08	2.04
Atlanta.....	140,156,266	122,357,549	1,016,571	10,732,146	688,636	653,828	6,121	28,687	5.79	6.29	7.09	2.01
Chicago.....	442,293,989	387,171,774	10,357,260	41,704,955	2,326,280	2,192,179	53,387	80,714	6.19	6.67	6.07	2.12
St. Louis.....	105,686,223	88,872,655	2,185,878	14,627,690	433,590	445,301	11,170	27,109	5.39	5.96	6.02	2.18
Minneapolis.....	78,614,500	70,016,000	2,500	8,590,000	412,247	397,518	1,13	14,716	0.17	6.68	5.92	2.02
Kansas City.....	118,919,247	99,265,519	311,969	19,341,759	556,476	519,289	1,890	35,307	5.51	6.16	7.10	2.15
Dallas.....	77,910,037	65,610,217	4,441	12,285,379	365,624	345,498	23	22,163	5.53	6.16	6.24	2.12
San Francisco.....	193,114,266	156,292,592	26,467,837	13,353,337	933,231	792,892	136,021	24,318	5.72	5.97	6.05	2.15
Total, March, 1921...	2,735,784,111	2,301,628,559	138,397,250	295,758,302	13,697,626	12,428,781	706,155	562,690	5.96	6.36	6.01	2.24
February, 1921...	2,869,233,489	2,408,791,923	173,082,366	237,359,180	13,022,158	11,762,106	795,795	464,257	5.92	6.37	5.99	2.11
March, 1920...	3,211,935,980	2,386,536,699	481,238,308	344,161,003	13,906,325	11,065,472	2,231,078	609,775	5.11	5.47	5.47	2.09
February, 1920...	3,154,053,873	2,298,976,613	546,457,974	308,619,286	12,210,019	9,487,201	2,191,536	531,282	4.88	5.20	5.06	2.17

HOLDINGS ON MAR. 31, 1921, OF DISCOUNTED BILLS, BY CLASSES.

[In thousands of dollars.]

Federal Reserve Bank.	Total.	Customers' paper secured by Government obligations.	Member banks' collateral notes.		Commercial paper n. e. s.	Agricultural paper.	Live-stock paper.	Trade acceptances.		Bankers' acceptances.		
			Secured by Government obligations.	Otherwise secured.				Foreign.	Domestic.	Foreign.	Domestic.	Dollar exchange.
Boston.....	149,334	22,306	42,548	.....	83,953	169	9	.....	349	.....	.....	.....
New York.....	642,011	86,219	268,440	20	276,713	492	.....	1,855	6,938	1,334	.....	.....
Philadelphia.....	156,357	35,660	72,871	.....	47,208	400	5	.....	213	.....	.....	.....
Cleveland.....	134,536	5,549	53,442	100	71,085	480	199	1,760	988	933	.....	.....
Richmond.....	114,364	5,282	45,267	383	52,744	8,838	25	1,825	.....	.....	.....	.....
Atlanta.....	122,890	11,104	45,777	372	50,657	11,902	1,678	120	1,091	89	100	.....
Chicago.....	427,569	21,632	107,036	3,941	238,510	53,375	.....	2,895	.....	180	.....	.....
St. Louis.....	89,021	5,848	30,214	114	43,630	7,033	607	110	449	90	926	.....
Minneapolis.....	70,768	1,297	11,988	4,897	16,815	19,761	15,361	.....	449	200	.....	.....
Kansas City.....	100,095	4,320	30,690	5	24,774	9,914	29,190	1,170	.....	33	.....	.....
Dallas.....	63,578	920	11,534	1,600	13,646	16,221	18,936	667	.....	54	.....	.....
San Francisco.....	162,580	4,432	46,585	4,357	75,367	12,402	15,683	26	2,541	482	623	82
Total Mar. 31, 1921...	2,233,104	204,569	766,392	15,789	995,102	140,987	81,693	256	15,264	8,787	4,183	82
Feb. 28, 1921.....	2,389,510	224,607	773,361	13,031	1,127,795	136,679	83,654	540	16,422	10,335	3,086	.....
March, 1920...	2,449,230	359,106	1,081,909	6,248	855,600	29,321	45,344	20,813	.....	50,889	.....	.....
Feb., 1920...	2,453,511	353,504	1,219,476	3,744	752,006	39,125	37,070	18,508	.....	39,078	.....	.....

HOLDINGS ON MAR. 31, 1921, OF BANKERS' AND AND TRADE ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTANCES.

[In thousands of dollars.]

Federal Reserve Bank.	All classes.			Bankers' acceptances.				Trade acceptances.		
	Total.	Purchased in open market.	Discounted for member banks.	Total.	Foreign.	Domestic	Dollar exchange bills.	Total.	Foreign.	Domestic
Boston.....	10,033	9,684	349	9,684	6,750	2,324	610	349	.....	349
New York.....	50,430	40,303	10,127	48,542	35,609	8,140	4,793	1,888	33	1,855
Philadelphia.....	14,080	13,867	213	13,867	10,158	1,484	2,225	213	.....	213
Cleveland.....	25,590	21,910	3,680	23,788	18,015	4,291	1,482	1,802	42	1,760
Richmond.....	4,602	2,777	1,825	2,777	1,752	1,025	.....	1,825	.....	1,825
Atlanta.....	2,111	711	1,400	900	328	572	.....	1,211	120	1,091
Chicago.....	14,190	11,114	3,076	11,295	6,436	4,539	320	2,895	.....	2,895
St. Louis.....	3,800	2,225	1,575	3,241	1,225	2,016	.....	559	110	449
Minneapolis.....	649	.....	649	200	.....	.....	.....	449	.....	449
Kansas City.....	1,388	185	1,203	218	180	38	.....	1,170	.....	1,170
Dallas.....	742	21	721	75	21	54	.....	667	.....	667
San Francisco.....	20,298	16,544	3,754	17,519	13,108	3,741	670	2,779	238	2,541
Total:										
Mar. 31, 1921.....	147,913	119,341	28,572	132,106	93,782	28,224	10,100	15,807	543	15,264
Feb. 28, 1921.....	199,804	169,420	30,384	182,469	134,885	37,072	10,512	17,335	1,222	16,113
Purchased in open market:										
Mar. 31, 1921.....	.....	119,341	.....	119,054	84,995	24,041	10,018	287	287	.....
Feb. 28, 1921.....	.....	169,420	.....	169,048	124,550	33,986	10,512	372	347	25
Discounted for member banks:										
Mar. 31, 1921.....	.....	.....	28,572	13,052	8,787	4,183	82	15,520	256	15,264
Feb. 28, 1921.....	.....	.....	30,384	13,421	10,335	3,086	.....	16,963	875	16,088

HOLDINGS ON MAR. 31, 1921, OF BANKERS' ACCEPTANCES PURCHASED OR DISCOUNTED, BY CLASSES OF ACCEPTING INSTITUTIONS.

[In thousands of dollars.]

Federal Reserve Bank.	Total.	Member banks.		Non-member banks and banking corporations.	Private bankers.	Branches and agencies of foreign banks.
		National.	Non-national.			
Boston.....	9,684	7,114	2,022	367	69	112
New York.....	48,542	12,123	10,339	10,886	6,619	8,575
Philadelphia.....	13,867	3,482	3,850	2,739	1,580	2,216
Cleveland.....	23,788	6,522	5,001	3,916	4,831	3,518
Richmond.....	2,777	2,742	35	.....	.....	.....
Atlanta.....	900	496	404	.....	.....	.....
Chicago.....	11,295	6,828	3,747	426	268	26
St. Louis.....	3,241	1,135	1,565	320	10	211
Minneapolis.....	200	200	.....	.....	.....	.....
Kansas City.....	218	218	.....	.....	.....	.....
Dallas.....	75	54	.....	.....	12	0
San Francisco.....	17,519	5,390	1,782	5,082	2,626	2,639
Total:						
Mar. 31, 1921.....	132,106	46,304	28,745	23,736	16,015	17,306
Feb. 28, 1921.....	182,469	64,652	40,330	37,561	18,729	21,197
Purchased in open market:						
Mar. 31, 1921.....	119,054	40,404	25,464	20,653	15,878	16,655
Feb. 28, 1921.....	169,048	59,258	37,055	33,768	18,458	20,509
Discounted for member banks:						
Mar. 31, 1921.....	13,052	5,900	3,281	3,083	137	651
Feb. 28, 1921.....	13,421	5,394	3,275	3,793	271	688

CHANGES IN CONDITION OF FEDERAL RESERVE BANKS.

Between March 25 and April 22 the Federal Reserve Banks reduced their holdings of discounted paper from \$2,286,700,000 to \$2,113,900,000, all the banks, except those of Cleveland, Richmond, and Minneapolis, reporting smaller discount holdings at the close of the period than at its beginning. Decreases are shown in practically equal proportions for bills secured by United States Government obligations as well as for other discounted bills, with the result that the proportion of "Government paper" to total discounts held shows but slight fluctuations between 43 per cent and a little over 44 per cent, compared with about 60 per cent the year before. Government credit operations during the period included the purchase in open market before maturity of moderate amounts of Liberty bonds and Treasury certificates, also the redemption on April 15 of about \$100,000,000 of loan certificates, falling due on that date, and the issuance on the same date of about \$190,000,000 of loan certificates. These operations had but little effect on the volume of member bank borrowings from the Federal Reserve Banks, partly for the reason that Reserve Bank rates on paper secured by Treasury certificates in most cases

are at present in excess of the coupon rates of the certificates, and thus no longer act as inducement for the discounting with the Reserve Bank of this class of paper. To judge from the volume of subscriptions received on the more recent offerings and from the gradual decline in the member bank holdings of certificates, the investment demand for these securities was sufficient to absorb the new issues with a minimum amount of temporary assistance of the Federal Reserve Banks. As a matter of fact, Reserve Bank holdings of paper secured by Treasury certificates fluctuated between \$94,500,000 on March 25 and \$68,000,000 on April 15, and following the most recent certificate issue, show an increase of but \$10,300,000 for the last week under review. A reduction for the four weeks of \$51,400,000 in the holdings of paper secured by United States bonds and notes is due largely to Government purchases of Liberty bonds in connection with sinking fund operations.

In the following exhibit, there is given a summary of the weekly changes in the principal asset and liability items of the Federal Reserve Banks for the four weeks under review:

MOVEMENT OF PRINCIPAL ASSETS AND LIABILITIES OF THE TWELVE FEDERAL RESERVE BANKS COMBINED.

[In millions of dollars.]

	Mar. 25.	Apr. 1.	Apr. 8.	Apr. 15.	Apr. 22.
Reserves:					
Total.....	2,422.0	2,461.2	2,481.8	2,485.1	2,492.8
Gold.....	2,210.8	2,246.4	2,264.0	2,286.9	2,298.1
Bills discounted:					
Total.....	2,286.7	2,214.6	2,154.7	2,104.6	2,113.9
Secured by United States Government obligations.....	1,010.4	950.7	936.0	929.2	942.7
All other.....	1,276.3	1,263.9	1,218.7	1,175.4	1,171.2
Bills bought in open market.....	123.1	122.5	103.6	119.6	104.5
Certificates of indebtedness.....	256.9	250.4	253.7	253.7	246.7
Total earning assets.....	2,692.4	2,613.2	2,537.6	2,503.8	2,490.7
Government deposits.....	114.7	82.1	48.1	31.1	67.5
Members' reserve deposits.....	1,674.5	1,672.4	1,661.9	1,685.5	1,648.9
Total deposits.....	1,840.9	1,789.2	1,745.3	1,754.9	1,749.4
Federal Reserve notes in circulation.....	2,930.7	2,908.2	2,894.0	2,868.5	2,856.7
Federal Reserve Bank notes in circulation—net liability.....	175.5	169.7	167.2	163.2	159.6
Reserve percentage.....	50.8	52.4	53.5	53.7	54.1

Some changes are shown in the distribution of discounted bills by maturities. Thus, 15-day paper at the beginning of April declined by over \$75,000,000, or by slightly more than the total decline in discounts shown on that date, though the relative share of shortest-term paper in the total discounts held shows but a slight change from 60 to 59 per cent. A relatively large reduction is shown in the holdings of 90-day paper, while the decline in 30-day paper was merely proportionate to the total

decline in discounts. Only holdings of 60-day paper show both an absolute and relative gain, the share of this class of paper increasing from 16 to almost 20 per cent of the total discounts held. Six-month paper increased from about \$42,000,000 to \$47,700,000.

A further decline from \$123,000,000 to \$104,500,000 is shown in the holdings of acceptances purchased in open market. With the lessened supply of these bills, the market, apparently, was able to absorb the new offer-

ings without enlisting the assistance of the Federal Reserve Banks. Reduction from \$254,400,000 to \$240,900,000 in the total of so-called "Pittman" certificates held by the banks with the Treasury of the United States to secure Federal Reserve Bank note circulation is due in part to the redemption by the Government of \$10,000,000 of these certificates held as excess collateral by the Boston, New York, Philadelphia, Atlanta, Chicago, and Dallas banks. A further reduction of \$3,500,000 was made in connection with the issuance of silver certificates and the deposit with the Treasury by the New York and Chicago banks of equivalent funds to cover the withdrawals of Federal Reserve Bank note circulation. An increase of \$3,300,000 in other Treasury certificates represents largely the increase in the amount held under repurchase agreements, largely by the New York and Philadelphia banks. As a consequence of the changes shown, total earning assets show a decline of \$201,700,000 for the four weeks under review, and on April 22 stood at \$2,490,700,000, or \$931,200,000 below the peak figure reported on October 15 of last year.

Rediscounting operations are reported by the Richmond and Dallas Federal Reserve Banks. On April 22 the Dallas bank reported \$7,400,000 of bills held under rediscount with the Boston and Cleveland banks, compared with \$14,700,000 held under rediscount with the Cleveland bank four weeks earlier. During the last week under review the Richmond bank rediscounted \$10,000,000 of bills with the New York bank, which no longer appears among the borrowing Federal Reserve Banks. Aggregate contingent liabilities of the Federal

Reserve Banks on bills purchased for foreign correspondents continued unchanged at \$32,400,000.

Total deposits show a decline for the period of \$91,500,000, all classes of deposits, but largely those on Government account, sharing in the decline. Federal Reserve note circulation continued its decline from \$2,930,700,000 to \$2,856,700,000, or at an average weekly rate of \$18,500,000. Between December 23, 1920, and April 22 of the present year, the reduction in Federal Reserve note circulation amounted to \$548,200,000, or to 16 per cent, while as compared with the circulation figures for the corresponding Friday in 1920, a decline of \$211,600,000, or of 7 per cent, is shown. There is also noted a reduction during the period of \$15,900,000 in the Federal Reserve Banks' net liabilities on Federal Reserve Bank notes, corresponding to a reduction of \$13,500,000 in the amount of Pittman certificates held by the banks as cover for these notes.

Owing to the continued imports of gold from Europe and the purchase of this gold by the Federal Reserve Banks, gold reserves show a further gain for the period of \$87,300,000. This gain is partially offset by a loss of \$16,500,000 in other reserves, i. e., silver and legals. Since the beginning of the year gold holdings of the Federal Reserve Banks, largely through purchase of imported gold, show a gain of \$235,300,000, while total cash reserves increased during the same period by \$239,100,000. The banks' reserve ratio, owing to the substantial reduction in note and deposit liabilities and the simultaneous gain in cash reserves, shows a steady rise during the review period from 50.8 to 54.1 per cent.

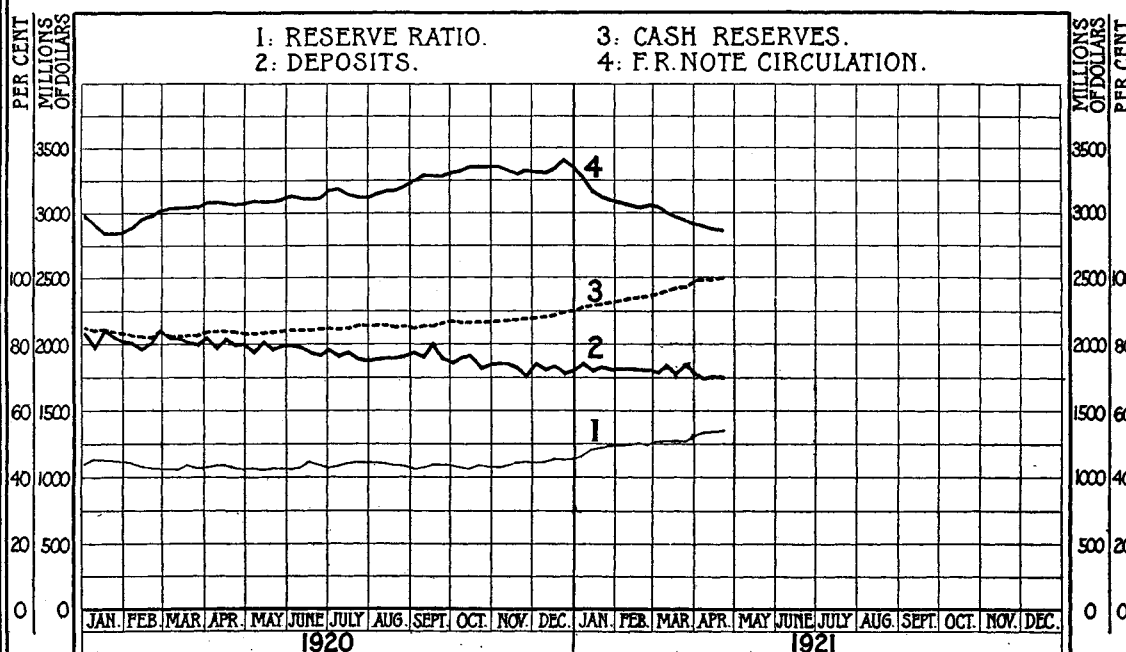
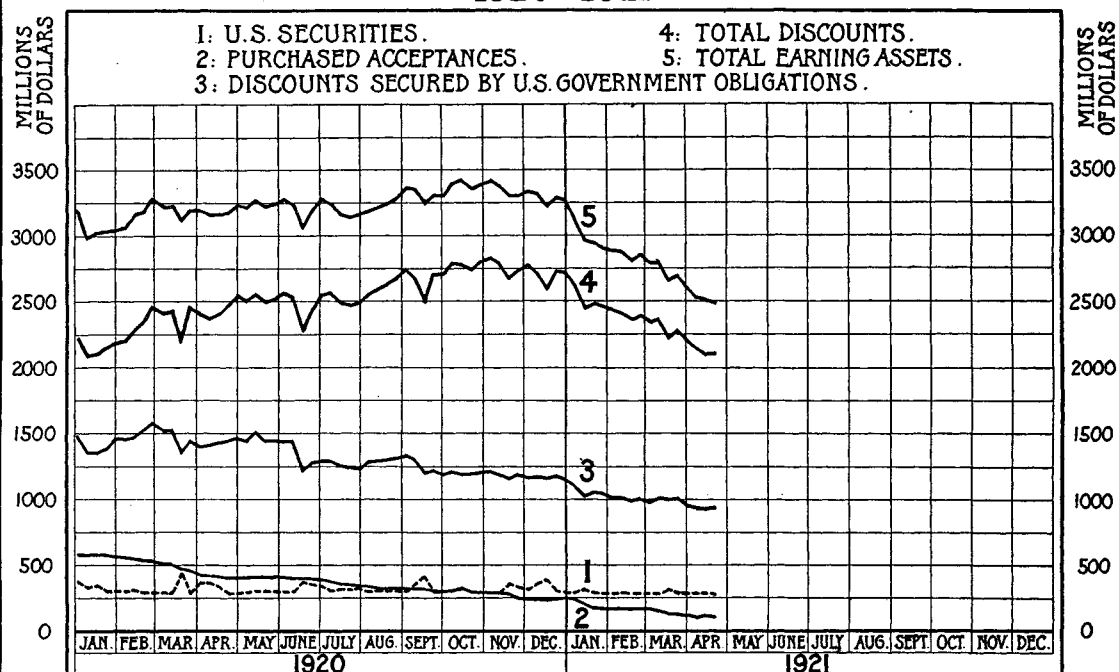
CASH RESERVES, TOTAL DEPOSITS, FEDERAL RESERVE NOTE CIRCULATION, AND RESERVE PERCENTAGES FOR MARCH AND APRIL, 1921.

[Daily averages. Amounts in thousands of dollars.]

Federal Reserve Bank.	Total cash reserves.		Total deposits.		Federal Reserve notes in circulation.		Reserve percentage.	
	April.	March.	April.	March.	April.	March.	April.	March.
Boston.....	257,249	228,977	112,520	114,174	257,916	263,028	69.4	60.7
New York.....	778,936	661,950	671,799	678,428	762,884	789,258	54.3	45.1
Philadelphia.....	192,534	192,265	106,546	109,383	235,260	247,776	56.3	53.8
Cleveland.....	286,271	308,282	143,834	153,948	283,200	296,596	67.0	68.4
Richmond.....	82,173	95,992	58,054	62,004	139,854	149,234	41.5	45.4
Atlanta.....	90,542	89,847	48,436	54,161	155,675	159,336	44.4	42.1
Chicago.....	337,832	351,637	245,052	258,126	474,999	487,105	46.9	47.2
St. Louis.....	102,009	101,513	67,133	69,555	113,397	116,181	56.5	53.8
Minneapolis.....	48,367	55,826	46,050	48,224	66,748	70,073	42.9	47.2
Kansas City.....	73,171	82,306	76,644	83,599	91,155	97,446	43.6	45.5
Dallas.....	41,448	44,141	48,681	53,998	57,512	62,931	39.0	37.8
San Francisco.....	194,547	190,734	124,619	122,919	232,045	237,322	54.5	52.9
Total, 1921.....	2,485,079	2,403,470	1,749,568	1,808,529	2,870,645	2,979,486	53.8	50.2
1920.....	2,084,077	2,058,293	1,998,732	2,032,787	3,071,754	3,040,440	1 43.0	1 42.7
1919.....	2,224,948	2,202,368	1,878,879	1,951,752	2,547,535	2,503,350	1 52.0	1 51.6

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

MOVEMENT OF PRINCIPAL ASSETS AND LIABILITIES OF THE FEDERAL RESERVE BANKS 1920 - 1921



RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON FRIDAYS, APR. 1 TO 22, 1921.

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 Fran- cisco.
Gold and gold certifi- cates:													
Apr. 1.....	299,485	7,428	214,187	3,216	6,628	3,422	4,900	21,300	3,213	8,319	2,605	6,701	17,566
Apr. 8.....	313,322	7,506	226,697	3,275	6,710	3,405	5,435	21,073	3,315	8,351	2,623	7,040	17,892
Apr. 15.....	327,637	7,598	240,265	3,294	6,759	3,419	5,508	21,155	3,351	8,377	2,636	7,223	18,052
Apr. 22.....	339,432	7,649	251,345	3,324	6,646	3,403	5,446	21,292	3,369	8,413	2,724	7,255	18,566
Gold settlement fund—Federal Re- serve Board:													
Apr. 1.....	497,790	36,499	131,932	59,039	73,442	20,192	12,856	62,478	20,857	17,015	27,161	7,210	29,109
Apr. 8.....	504,061	52,963	56,688	55,231	84,000	20,228	13,667	105,539	27,185	13,756	28,521	6,287	39,996
Apr. 15.....	466,241	53,213	61,704	41,473	66,957	18,608	13,656	107,792	20,365	10,348	28,549	4,036	39,230
Apr. 22.....	477,229	53,467	59,899	48,813	72,105	22,982	14,348	103,988	19,822	9,977	28,001	6,506	37,318
Gold with Federal Reserve Agents:													
Apr. 1.....	1,300,345	135,988	300,115	120,395	196,558	50,377	55,401	175,766	57,916	25,410	35,847	15,826	129,746
Apr. 8.....	1,306,949	157,459	299,594	128,495	196,347	45,777	54,892	165,299	57,504	26,095	35,161	19,108	121,218
Apr. 15.....	1,346,558	164,784	299,077	129,555	194,920	42,537	64,213	177,730	67,400	26,266	34,520	18,158	127,398
Apr. 22.....	1,321,816	172,172	298,524	115,592	194,639	46,297	60,057	170,430	63,265	22,484	33,089	16,485	128,782
Gold redemption fund:													
Apr. 1.....	148,819	29,279	36,000	8,451	6,024	6,194	7,026	24,948	5,134	2,819	4,901	7,697	10,343
Apr. 8.....	139,678	17,176	36,000	11,837	5,360	9,754	6,897	25,161	5,242	3,908	4,174	4,121	10,018
Apr. 15.....	146,443	19,260	36,000	10,397	5,823	11,897	6,769	31,303	4,061	3,330	4,315	4,768	8,520
Apr. 22.....	159,594	21,211	36,000	15,150	7,425	7,034	7,823	37,983	3,958	3,097	3,346	6,203	10,364
Total gold reserves:													
Apr. 1.....	2,246,439	209,194	682,234	191,104	282,652	80,185	80,183	284,492	87,120	53,563	71,514	37,434	186,764
Apr. 8.....	2,264,010	235,104	618,979	198,838	292,417	79,164	80,891	317,072	93,246	52,110	70,479	36,556	189,154
Apr. 15.....	2,286,879	244,860	637,046	184,724	274,459	76,461	90,146	337,980	95,177	48,321	70,320	34,185	193,200
Apr. 22.....	2,298,071	254,499	645,768	182,879	280,815	79,716	87,674	333,693	90,414	43,971	67,163	36,449	195,030
Legal tender notes, silver, etc.:													
Apr. 1.....	214,792	14,790	151,207	3,106	3,319	4,810	4,593	11,976	9,392	532	3,242	5,240	2,585
Apr. 8.....	217,824	15,038	151,272	3,027	3,447	4,516	5,129	13,103	10,248	633	3,399	5,329	2,683
Apr. 15.....	198,198	15,328	130,428	3,428	3,824	4,231	5,098	13,532	10,276	590	3,366	5,421	2,676
Apr. 22.....	194,733	15,907	122,972	4,083	4,080	4,415	5,484	13,964	11,158	554	3,449	6,009	2,658
Total reserves:													
Apr. 1.....	2,461,231	223,984	833,441	194,210	285,971	84,995	84,776	296,468	96,512	54,095	74,756	42,674	189,349
Apr. 8.....	2,481,834	250,142	770,251	201,865	295,864	83,680	86,020	330,175	103,494	52,743	73,878	41,885	191,837
Apr. 15.....	2,485,077	260,188	767,474	188,152	278,283	80,692	95,244	351,512	105,453	48,911	73,686	39,606	195,876
Apr. 22.....	2,492,804	270,406	768,740	186,962	284,895	84,131	93,158	347,657	101,572	44,525	70,612	42,458	197,688
Bills discounted:¹ Secured by United States Government obligations—													
Apr. 1.....	950,688	63,338	335,628	106,646	62,194	52,877	56,571	128,391	36,665	13,118	34,147	12,774	48,339
Apr. 8.....	936,021	54,361	342,653	102,335	59,991	49,688	54,355	127,644	35,993	13,648	34,738	11,365	49,250
Apr. 15.....	929,186	46,770	349,507	104,274	63,038	48,148	52,433	123,798	35,225	13,142	33,450	9,243	50,158
Apr. 22.....	942,665	45,161	367,624	108,198	56,889	43,640	52,893	126,814	34,584	15,368	32,804	12,645	46,045
All other—													
Apr. 1.....	1,263,907	84,291	288,430	45,987	79,852	64,428	67,162	299,050	51,020	56,718	64,253	49,366	113,350
Apr. 8.....	1,218,731	69,371	304,324	29,698	77,751	65,454	64,053	270,348	48,513	58,548	64,895	51,887	113,889
Apr. 15.....	1,175,368	60,754	291,576	40,222	86,865	64,173	59,843	245,641	43,494	58,516	62,439	52,537	109,308
Apr. 22.....	1,171,191	61,425	275,035	36,035	88,372	68,940	63,402	247,123	45,903	59,166	64,302	52,187	109,301
Bills bought in open market:²													
Apr. 1.....	122,491	9,431	42,185	14,577	21,596	2,798	711	12,049	2,225	-----	185	21	16,718
Apr. 8.....	103,607	6,405	34,492	15,600	19,161	2,243	727	9,298	1,380	-----	170	21	14,030
Apr. 15.....	119,582	7,233	50,849	16,856	19,184	1,724	742	9,950	1,453	-----	69	25	11,497
Apr. 22.....	104,452	6,866	42,085	14,018	17,520	1,825	718	8,991	784	-----	25	25	11,595
United States Gov- ernment bonds:													
Apr. 1.....	25,720	550	1,255	1,434	833	1,233	113	4,490	1,153	116	8,867	3,979	1,697
Apr. 8.....	25,547	550	1,255	1,434	834	1,233	114	4,489	1,153	116	8,867	3,979	1,523
Apr. 15.....	25,914	550	1,255	1,434	833	1,233	481	4,490	1,153	116	8,867	3,979	1,523
Apr. 22.....	25,691	550	1,005	1,434	834	1,233	621	4,490	1,153	116	8,867	3,979	1,409
United States Vic- tory notes:													
Apr. 1.....	19	5	-----	-----	10	-----	3	-----	-----	-----	1	-----	-----
Apr. 8.....	19	5	-----	-----	10	-----	3	-----	-----	-----	1	-----	-----
Apr. 15.....	19	5	-----	-----	10	-----	3	-----	-----	-----	1	-----	-----
Apr. 22.....	19	5	-----	-----	10	-----	3	-----	-----	-----	1	-----	-----
United States certifi- cates of indebted- ness:													
One year certifi- cates (Pittman Act)—													
Apr. 1.....	247,375	20,436	56,276	28,280	23,799	12,260	16,664	38,612	13,068	8,480	10,320	8,300	10,880
Apr. 8.....	247,375	20,436	56,276	28,280	23,799	12,260	16,664	38,612	13,068	8,480	10,320	8,300	10,880
Apr. 15.....	245,875	20,436	55,276	28,280	23,799	12,260	16,664	38,112	13,068	8,480	10,320	8,300	10,880
Apr. 22.....	240,875	20,436	55,276	28,280	23,799	12,260	15,564	38,112	13,068	8,480	10,320	4,400	10,880
All other—													
Apr. 1.....	2,983	174	1,424	926	21	2	1	77	256	-----	-----	100	2
Apr. 8.....	6,303	352	5,000	735	-----	1	1	19	30	-----	-----	-----	165
Apr. 15.....	7,824	479	5,934	874	125	1	1	45	45	30	100	-----	190
Apr. 22.....	5,827	305	1,860	2,626	125	1	1	108	628	31	-----	-----	142

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON FRIDAYS, APR. 1 TO 22, 1921—Continued.

RESOURCES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Total earning assets:													
Apr. 1.....	2,613,183	178,225	725,198	197,845	188,305	133,598	141,225	482,669	104,387	78,432	117,773	74,540	190,986
Apr. 8.....	2,537,603	151,480	744,000	178,162	181,546	130,879	135,917	450,410	100,137	80,792	118,991	75,552	189,737
Apr. 15.....	2,503,768	136,227	754,397	191,940	193,854	127,539	130,167	422,036	94,438	80,284	115,246	74,084	183,556
Apr. 22.....	2,490,720	134,748	742,885	190,591	187,549	127,899	133,202	425,638	96,120	83,161	116,319	73,236	179,372
Bank premises:													
Apr. 1.....	20,651	3,232	4,708	506	1,716	1,635	729	2,828	626	599	1,741	1,802	529
Apr. 8.....	21,002	3,269	4,708	501	1,733	1,640	730	2,828	626	599	2,032	1,807	529
Apr. 15.....	21,514	3,290	4,708	508	1,802	1,752	730	3,106	626	599	2,032	1,820	541
Apr. 22.....	21,782	3,307	4,910	520	1,802	1,768	730	3,106	626	599	2,052	1,821	541
5 percent redemption fund against Federal Reserve Banknotes:													
Apr. 1.....	11,856	1,072	1,916	1,300	1,239	602	664	2,006	523	367	916	586	665
Apr. 8.....	11,647	1,072	1,840	1,300	1,239	602	566	1,930	523	408	916	586	665
Apr. 15.....	12,166	1,072	1,835	1,300	1,239	602	744	2,085	523	599	916	586	665
Apr. 22.....	11,562	1,072	1,812	1,300	1,239	601	653	1,899	523	417	916	586	544
Uncollected items:													
Apr. 1.....	554,315	41,898	115,590	49,254	53,860	44,417	23,565	76,282	29,603	15,907	39,503	26,736	37,700
Apr. 8.....	544,255	38,255	111,609	50,323	47,851	44,118	22,934	69,829	36,592	15,374	42,039	27,099	38,232
Apr. 15.....	618,107	47,872	135,855	57,072	60,080	48,905	23,562	78,118	34,228	16,005	44,002	27,288	45,120
Apr. 22.....	550,950	46,390	114,524	49,148	51,194	43,406	21,615	73,552	29,855	16,180	40,190	27,171	37,725
All other resources:													
Apr. 1.....	11,200	519	3,062	572	607	493	683	1,706	567	148	578	1,763	502
Apr. 8.....	11,454	505	3,252	539	655	709	527	1,782	558	147	582	1,691	507
Apr. 15.....	11,892	534	3,259	592	707	1,206	622	2,213	579	169	608	919	484
Apr. 22.....	12,310	614	3,359	601	754	678	572	2,233	588	187	582	1,716	426
Total resources:													
Apr. 1.....	5,672,436	448,930	1,683,915	443,687	531,698	265,740	251,642	861,959	232,218	149,548	235,267	148,101	419,731
Apr. 8.....	5,607,795	444,723	1,635,660	432,690	528,888	261,628	246,694	856,954	241,930	150,063	238,438	148,620	421,507
Apr. 15.....	5,652,524	449,183	1,667,528	439,564	535,965	260,696	251,069	859,070	235,847	146,567	236,490	144,303	426,242
Apr. 22.....	5,580,128	456,537	1,636,230	429,122	527,433	258,483	249,930	854,085	229,284	145,069	230,671	146,988	416,296
¹ Includes bills discounted for other Federal Reserve Banks:													
Apr. 1.....	14,764	-----	-----	-----	14,764	-----	-----	-----	-----	-----	-----	-----	-----
Apr. 8.....	12,405	-----	-----	-----	12,405	-----	-----	-----	-----	-----	-----	-----	-----
Apr. 15.....	12,169	1,500	-----	-----	10,669	-----	-----	-----	-----	-----	-----	-----	-----
Apr. 22.....	17,437	2,000	10,000	-----	5,437	-----	-----	-----	-----	-----	-----	-----	-----
² Includes bankers' acceptances bought from other Federal Reserve Banks without their indorsement:													
Apr. 1.....	1,562	-----	25	-----	521	-----	-----	-----	1,000	-----	-----	-----	16
Apr. 8.....	262	-----	25	-----	171	-----	-----	-----	50	-----	-----	-----	16
Apr. 15.....	203	-----	25	-----	162	-----	-----	-----	-----	-----	-----	-----	16
Apr. 22.....	25	-----	25	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

LIABILITIES.

Capital paid in:													
Apr. 1.....	101,137	7,838	26,488	8,600	10,880	5,331	4,047	14,172	4,437	3,499	4,488	4,132	7,225
Apr. 8.....	101,226	7,838	26,488	8,600	10,963	5,328	4,049	14,172	4,437	3,500	4,488	4,132	7,231
Apr. 15.....	101,274	7,838	26,488	8,600	10,963	5,372	4,059	14,172	4,437	3,500	4,475	4,132	7,238
Apr. 22.....	101,231	7,838	26,400	8,600	10,955	5,386	4,067	14,202	4,443	3,499	4,475	4,133	7,233
Surplus:													
Apr. 1.....	202,036	15,711	56,414	17,010	20,305	10,561	8,343	28,980	8,346	6,980	9,159	6,033	14,194
Apr. 8.....	202,036	15,711	56,414	17,010	20,305	10,561	8,343	28,980	8,346	6,980	9,159	6,033	14,194
Apr. 15.....	202,036	15,711	56,414	17,010	20,305	10,561	8,343	28,980	8,346	6,980	9,159	6,033	14,194
Apr. 22.....	202,036	15,711	56,414	17,010	20,305	10,561	8,343	28,980	8,346	6,980	9,159	6,033	14,194
Government deposits:													
Apr. 1.....	82,099	6,865	10,096	4,028	6,106	7,793	7,557	13,756	3,141	3,918	5,970	6,637	6,232
Apr. 8.....	48,053	4,741	5,921	2,354	4,404	2,046	5,131	6,047	2,578	4,129	2,446	3,707	4,549
Apr. 15.....	31,117	210	633	2,715	3,075	1,513	1,594	3,648	2,824	2,020	5,156	1,231	6,498
Apr. 22.....	67,483	7,445	18,073	5,488	4,578	4,729	1,430	9,974	3,511	2,320	3,022	3,006	3,907
Due to members—reserve account:													
Apr. 1.....	1,672,402	105,677	659,620	107,870	139,602	55,110	44,598	231,558	61,500	43,755	70,459	44,535	108,118
Apr. 8.....	1,661,938	107,105	631,535	104,043	138,965	56,442	43,222	237,127	63,732	44,714	77,076	45,756	112,221
Apr. 15.....	1,685,503	107,289	661,184	103,666	139,390	54,095	43,867	240,504	62,962	43,785	71,862	45,115	111,784
Apr. 22.....	1,648,858	107,857	638,884	101,218	138,823	53,048	44,632	235,794	61,535	42,920	72,817	44,208	107,122
Other deposits, including foreign government credits:													
Apr. 1.....	34,732	910	15,776	989	743	455	390	2,467	988	492	549	441	10,532
Apr. 8.....	35,325	791	17,432	880	780	457	369	2,315	695	523	493	404	10,177
Apr. 15.....	38,323	1,203	18,466	1,097	1,095	505	389	2,699	836	662	790	555	10,026
Apr. 22.....	33,010	888	13,695	989	927	539	371	3,485	833	562	970	516	9,205
Total deposits:													
Apr. 1.....	1,789,233	113,452	685,492	112,887	146,451	63,358	52,545	247,781	65,629	48,165	76,978	51,613	121,882
Apr. 8.....	1,745,316	112,637	654,888	107,286	144,149	58,945	48,722	245,489	67,005	49,366	80,015	49,867	126,947
Apr. 15.....	1,754,943	108,702	680,283	107,478	143,560	56,113	45,850	246,851	66,622	46,467	87,808	46,901	128,308
Apr. 22.....	1,749,351	116,190	670,652	107,695	144,328	58,316	46,433	249,253	65,879	45,802	76,809	47,760	120,234

RESOURCES AND LIABILITIES OF EACH FEDERAL RESERVE BANK ON FRIDAYS, APR. 1 TO 22, 1921—Continued.

LIABILITIES—Continued.

[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.
Federal Reserve notes in actual circulation:													
Apr. 1.....	2,908,153	258,547	783,461	239,274	285,259	142,953	153,554	476,592	116,103	68,017	93,325	59,215	231,853
Apr. 8.....	2,893,964	257,265	776,791	236,446	286,863	141,016	152,453	478,326	115,111	67,360	92,460	58,607	231,266
Apr. 15.....	2,868,527	256,329	762,173	235,815	283,489	139,678	158,648	473,559	113,756	66,545	90,849	57,461	230,225
Apr. 22.....	2,866,700	259,859	756,071	233,467	280,599	138,832	157,384	473,814	112,183	66,096	90,019	56,844	231,532
Federal Reserve Bank notes in circulation—net liability:													
Apr. 1.....	169,722	15,084	26,544	17,335	20,995	8,658	13,488	28,412	7,037	7,043	11,458	5,496	8,172
Apr. 8.....	167,152	15,204	24,537	16,823	21,111	8,580	13,537	27,516	7,081	7,062	11,316	5,339	8,546
Apr. 15.....	163,187	15,329	23,173	16,117	21,067	8,489	13,311	26,475	7,140	6,985	11,083	5,039	8,379
Apr. 22.....	159,590	15,301	22,056	15,682	21,039	8,300	13,059	25,406	7,055	6,939	11,028	5,594	8,131
Deferred availability items:													
Apr. 1.....	451,270	35,384	87,750	45,814	44,755	33,032	17,314	56,809	28,899	14,066	37,387	19,982	30,078
Apr. 8.....	445,108	33,104	78,078	43,617	42,264	35,215	17,096	53,095	38,109	13,898	38,422	22,414	29,796
Apr. 15.....	507,724	42,233	99,823	51,360	53,123	38,415	18,279	59,483	33,667	14,130	40,519	22,377	34,315
Apr. 22.....	454,238	38,502	84,941	43,323	46,598	34,887	17,907	52,501	29,398	13,704	36,448	24,816	31,213
All other liabilities:													
Apr. 1.....	50,885	2,914	17,766	2,767	3,053	1,847	2,351	9,213	1,767	1,778	2,472	1,630	3,327
Apr. 8.....	52,993	2,964	18,464	2,908	3,233	1,983	2,494	9,376	1,841	1,897	2,578	1,728	3,527
Apr. 15.....	54,833	3,041	19,174	3,184	3,458	2,068	2,579	9,550	1,879	1,960	2,597	1,760	3,583
Apr. 22.....	56,982	3,136	19,696	3,345	3,609	2,201	2,737	9,929	1,980	2,049	2,733	1,808	3,759
Total liabilities:													
Apr. 1.....	5,672,436	448,930	1,683,915	443,687	531,698	265,740	251,642	861,959	232,218	149,548	235,267	148,101	419,731
Apr. 8.....	5,607,795	444,723	1,635,660	432,690	528,888	261,628	246,694	856,954	241,930	150,063	238,438	148,620	421,507
Apr. 15.....	5,652,524	449,183	1,667,528	439,564	535,965	260,696	251,069	859,070	235,847	146,567	236,490	144,303	426,242
Apr. 22.....	5,580,128	456,537	1,636,230	429,122	527,433	258,483	249,930	854,085	229,284	145,069	230,671	146,988	416,296
MEMORANDA.													
Ratio of total reserves to deposit and Federal Reserve note liabilities combined, per cent:													
Apr. 1.....	52.4	60.2	56.7	55.1	66.2	41.2	41.1	40.9	53.1	46.6	43.9	38.5	53.1
Apr. 8.....	53.5	67.6	53.8	58.7	68.6	41.8	42.8	45.6	56.8	45.2	42.8	38.6	53.6
Apr. 15.....	53.7	71.3	53.2	54.8	65.2	41.2	46.6	48.8	58.5	43.3	43.7	38.0	54.6
Apr. 22.....	54.1	71.9	53.9	54.8	67.0	42.6	45.7	48.1	57.0	39.8	42.3	40.6	56.2
Contingent liability as indorser on discounted paper re-discounted with other Federal Reserve Banks:													
Apr. 1.....	14,764											14,764	
Apr. 8.....	12,405											12,405	
Apr. 15.....	12,169											12,169	
Apr. 22.....	17,437					10,000						7,437	
Bankers' acceptances sold to other Federal Reserve Banks without indorsement:													
Apr. 1.....	1,562		537					1,000					25
Apr. 8.....	262		187					50					25
Apr. 15.....	203		178										25
Apr. 22.....	25												25
Contingent liability on bills purchased for foreign correspondents:													
Apr. 1.....	32,373	2,336	12,117	2,560	2,624	1,568	1,152	3,808	1,504	864	1,536	832	1,472
Apr. 8.....	32,378	2,336	12,122	2,560	2,624	1,568	1,152	3,808	1,504	864	1,536	832	1,472
Apr. 15.....	32,369	2,336	12,113	2,560	2,624	1,568	1,152	3,808	1,504	864	1,536	832	1,472
Apr. 22.....	32,370	2,336	12,114	2,560	2,624	1,568	1,152	3,808	1,504	864	1,536	832	1,472

MATURITY DISTRIBUTION OF BILLS AND CERTIFICATES OF INDEBTEDNESS HELD BY ALL 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:						
Apr. 1.....	2,214,595	1,287,221	224,009	393,659	269,649	40,057
Apr. 8.....	2,154,752	1,246,667	217,566	402,366	248,446	39,707
Apr. 15.....	2,104,554	1,231,807	208,163	410,801	207,684	46,099
Apr. 22.....	2,114,256	1,243,261	211,712	412,075	199,475	47,733
Bills bought in open market:						
Apr. 1.....	122,491	42,852	32,125	34,510	13,004	
Apr. 8.....	103,607	35,245	28,108	31,135	9,119	
Apr. 15.....	119,582	57,335	24,860	28,626	8,761	
Apr. 22.....	104,451	50,389	22,921	24,743	6,398	
United States certificates of indebtedness:						
Apr. 1.....	250,358	6,959	4,000	5,108	7,722	226,569
Apr. 8.....	253,678	6,425	4,500	4,563	8,945	229,245
Apr. 15.....	253,699	14,758	2,052	10,625	9,125	217,139
Apr. 22.....	246,702	6,860	1,772	7,097	7,604	223,369

FEDERAL RESERVE NOTES.

FEDERAL RESERVE AGENTS' ACCOUNTS ON FRIDAYS, APR. 1 TO 22, 1921.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
RESOURCES.													
Federal Reserve notes on hand:													
Apr. 1.....	821,271	106,410	268,001	28,540	43,430	28,229	79,476	148,441	26,840	12,765	4,400	29,439	45,300
Apr. 8.....	814,484	104,010	268,000	28,540	42,270	25,689	75,805	153,200	28,320	11,890	4,600	28,859	45,301
Apr. 15.....	802,823	104,210	268,000	28,540	41,630	24,089	63,565	154,540	28,320	12,130	3,740	28,759	45,300
Apr. 22.....	806,642	100,610	268,000	24,420	38,770	25,108	78,815	155,060	27,520	11,700	4,600	28,339	43,700
Federal Reserve notes outstanding:													
Apr. 1.....	3,263,111	271,565	918,095	263,943	315,146	149,221	159,045	520,640	139,099	70,336	102,204	63,847	289,970
Apr. 8.....	3,246,061	270,436	920,431	261,043	313,895	147,162	160,206	514,014	138,509	69,896	101,318	62,709	286,442
Apr. 15.....	3,224,111	270,561	901,637	259,103	310,508	146,242	169,767	513,745	136,904	68,827	100,536	61,859	284,422
Apr. 22.....	3,198,002	273,049	887,757	257,259	309,287	145,982	166,861	511,845	134,669	68,275	100,006	60,606	282,406
Collateral security for Federal Reserve notes outstanding:													
Gold and gold certificates—													
Apr. 1.....	233,853	5,600	176,925	.....	23,775	.....	3,500	.....	6,110	13,052	.....	4,891	.....
Apr. 8.....	233,852	5,600	176,924	.....	23,775	.....	3,500	.....	6,110	13,052	.....	4,891	.....
Apr. 15.....	233,852	5,600	176,924	.....	23,775	.....	3,500	.....	6,110	13,052	.....	4,891	.....
Apr. 22.....	233,853	5,600	176,925	.....	23,775	.....	3,500	.....	6,110	13,052	.....	4,891	.....
Gold redemption fund—													
Apr. 1.....	106,157	15,388	7,190	13,006	17,783	3,877	2,401	15,121	2,475	2,158	3,487	4,701	18,570
Apr. 8.....	120,988	21,859	16,670	13,106	17,572	2,277	3,392	14,655	4,164	2,843	3,801	4,983	15,666
Apr. 15.....	111,570	19,184	16,153	12,166	16,145	2,037	4,713	14,085	4,559	3,014	2,160	4,033	13,321
Apr. 22.....	104,409	16,572	15,599	11,203	15,864	1,797	3,557	14,786	3,524	3,232	2,729	4,360	11,186
Gold settlement fund—Federal Reserve Board—													
Apr. 1.....	960,335	115,000	116,000	107,389	155,000	46,500	49,500	160,645	49,331	10,200	33,360	6,234	111,176
Apr. 8.....	952,109	130,000	106,000	115,389	155,000	43,500	48,000	150,644	47,230	10,200	31,360	9,234	105,552
Apr. 15.....	1,001,136	140,000	106,000	117,389	155,000	40,500	56,000	163,645	56,731	10,200	32,360	9,234	114,077
Apr. 22.....	983,554	150,000	106,000	104,389	155,000	44,500	53,000	155,644	53,631	6,200	30,360	7,234	117,596
Eligible paper—Amount required—													
Apr. 1.....	1,962,766	135,577	617,980	143,548	118,588	98,844	103,644	344,874	81,183	44,926	65,357	48,021	160,224
Apr. 8.....	1,939,112	112,977	620,837	132,548	117,548	101,385	105,314	348,715	81,005	43,801	66,157	43,601	165,224
Apr. 15.....	1,877,553	105,777	602,560	129,548	115,588	103,705	105,554	336,015	69,504	42,561	66,016	43,701	157,024
Apr. 22.....	1,876,186	100,877	589,233	141,667	114,648	99,685	106,804	341,415	71,404	45,791	66,917	44,121	153,624
Excess amount held—													
Apr. 1.....	315,696	21,483	18,953	2,324	44,448	17,037	20,790	94,328	8,666	23,727	33,187	13,741	17,012
Apr. 8.....	277,427	17,160	32,948	5,040	39,012	15,149	13,805	58,569	4,869	27,467	33,571	19,169	10,668
Apr. 15.....	296,452	8,980	57,792	19,332	52,991	7,909	7,455	43,234	10,660	28,167	29,926	17,611	12,395
Apr. 22.....	289,299	12,575	61,933	4,296	47,745	11,065	10,196	41,372	9,817	27,810	30,150	20,317	12,023
Total resources:													
Apr. 1.....	7,663,189	671,023	2,123,144	558,750	718,170	343,708	418,356	1,284,049	313,704	177,164	241,995	170,874	642,252
Apr. 8.....	7,584,033	662,042	2,141,810	553,666	709,072	335,162	410,022	1,239,797	310,207	179,149	240,807	173,446	628,853
Apr. 15.....	7,547,497	654,312	2,129,066	566,078	715,637	324,482	410,554	1,225,264	312,788	177,951	234,738	170,088	626,539
Apr. 22.....	7,491,945	659,283	2,105,447	543,234	705,089	328,137	422,733	1,220,122	306,675	176,060	234,762	169,868	620,535
LIABILITIES.													
Net amount of Federal Reserve notes received from Comptroller of the Currency:													
Apr. 1.....	4,084,382	377,975	1,186,096	292,483	358,576	177,450	238,521	669,081	165,939	83,101	106,604	93,286	335,270
Apr. 8.....	4,060,545	374,446	1,188,431	287,583	356,165	172,851	236,011	667,214	166,829	81,786	105,918	91,568	331,743
Apr. 15.....	4,026,934	374,771	1,169,637	287,643	352,138	170,331	233,332	668,285	165,224	80,957	104,276	90,618	329,722
Apr. 22.....	4,004,644	373,659	1,155,757	281,679	348,057	171,090	245,676	666,905	162,189	79,975	104,606	88,945	326,106
Collateral received from Federal Reserve Bank:													
Gold—													
Apr. 1.....	1,300,345	135,988	300,115	120,395	196,558	50,377	55,401	175,766	57,916	25,410	36,847	15,826	129,746
Apr. 8.....	1,306,949	157,459	299,594	128,495	196,347	45,777	54,892	165,299	57,504	26,095	35,161	19,108	121,218
Apr. 15.....	1,346,558	164,784	299,077	129,555	194,920	42,537	64,213	177,730	67,400	26,266	34,520	18,158	127,398
Apr. 22.....	1,321,816	172,172	298,524	115,592	194,639	46,297	60,057	170,430	63,265	22,484	33,089	16,485	128,782
Eligible paper—													
Apr. 1.....	2,278,462	157,060	636,933	145,872	163,036	115,881	124,434	439,202	89,849	68,653	98,544	61,762	177,236
Apr. 8.....	2,216,539	130,137	633,785	137,538	156,560	110,534	119,119	407,284	85,874	71,268	99,728	62,770	175,892
Apr. 15.....	2,174,005	114,757	600,352	148,880	168,579	111,614	113,009	379,249	80,164	70,728	95,942	61,312	169,419
Apr. 22.....	2,165,485	113,452	651,166	145,963	162,393	110,750	117,000	382,787	81,221	73,601	97,067	64,438	165,647
Total liabilities:													
Apr. 1.....	7,663,189	671,023	2,123,144	558,750	718,170	343,708	418,356	1,284,049	313,704	177,164	241,995	170,874	642,252
Apr. 8.....	7,584,033	662,042	2,141,810	553,666	709,072	335,162	410,022	1,239,797	310,207	179,149	240,807	173,446	628,853
Apr. 15.....	7,547,497	654,312	2,129,066	566,078	715,637	324,482	410,554	1,225,264	312,788	177,951	234,738	170,088	626,539
Apr. 22.....	7,491,945	659,283	2,105,447	543,234	705,089	328,137	422,733	1,220,122	306,675	176,060	234,762	169,868	620,535

INTERDISTRICT MOVEMENT OF FEDERAL RESERVE NOTES DURING THREE MONTHS ENDING MAR. 31, 1921.

[In thousands of dollars.]

Federal Reserve Bank from which received or to which returned.	Boston.		New York.		Philadelphia.		Cleveland.		Richmond.		Atlanta.		Chicago.	
	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.
Boston.....			12,897	23,791	1,700	1,757	1,012	945	1,226	1,341	775	1,089	1,480	1,551
New York.....	22,397	12,742			23,647	14,281	17,893	5,378	8,453	4,827	8,478	5,543	16,231	6,705
Philadelphia.....	1,755	1,687	14,353	21,809			4,307	3,531	3,376	3,618	1,024	1,311	1,785	1,616
Cleveland.....	1,169	997	7,666	17,286	5,308	4,234			4,719	2,713	1,389	2,670	8,727	7,033
Richmond.....	1,318	1,240	4,833	8,988	3,634	3,451	2,694	3,342			3,926	2,742	1,458	1,112
Atlanta.....	1,111	755	5,672	9,678	1,314	1,008	2,748	965	2,742	3,920			3,462	1,497
Chicago.....	1,691	1,461	6,618	17,496	1,512	1,734	7,101	5,770	1,101	1,467	1,449	3,413		
St. Louis.....	368	211	1,822	2,197	540	265	2,505	666	566	397	2,024	3,954	10,763	4,326
Minneapolis.....	120	150	571	1,607	114	129	310	298	76	100	103	233	3,903	4,633
Kansas City.....	227	305	1,085	2,254	259	437	679	568	208	916	422	719	3,916	3,287
Dallas.....	223	398	1,460	2,181	261	388	552	374	280	660	1,413	2,429	1,569	913
San Francisco.....	830	353	3,577	4,818	660	328	1,247	358	405	199	703	521	4,693	2,361
Total:														
Jan. 1 to Mar. 31, 1921.....	31,209	20,329	60,557	115,105	38,952	28,012	41,051	22,195	23,152	20,188	21,703	24,621	57,990	35,094
Jan. 1 to Mar. 31, 1920.....	20,080	17,731	54,912	77,681	29,113	22,080	25,923	15,684	17,762	17,366	15,921	19,868	45,941	31,055
Jan. 1 to Mar. 31, 1919.....	11,816	22,275	59,635	62,806	17,071	26,909	22,779	17,649	18,773	23,430	12,995	15,745	34,432	28,435
Jan. 1 to Mar. 31, 1918.....	3,619	5,281	20,767	21,629	6,734	10,628	6,357	2,443	5,309	3,000	4,456	6,721	8,653	8,715

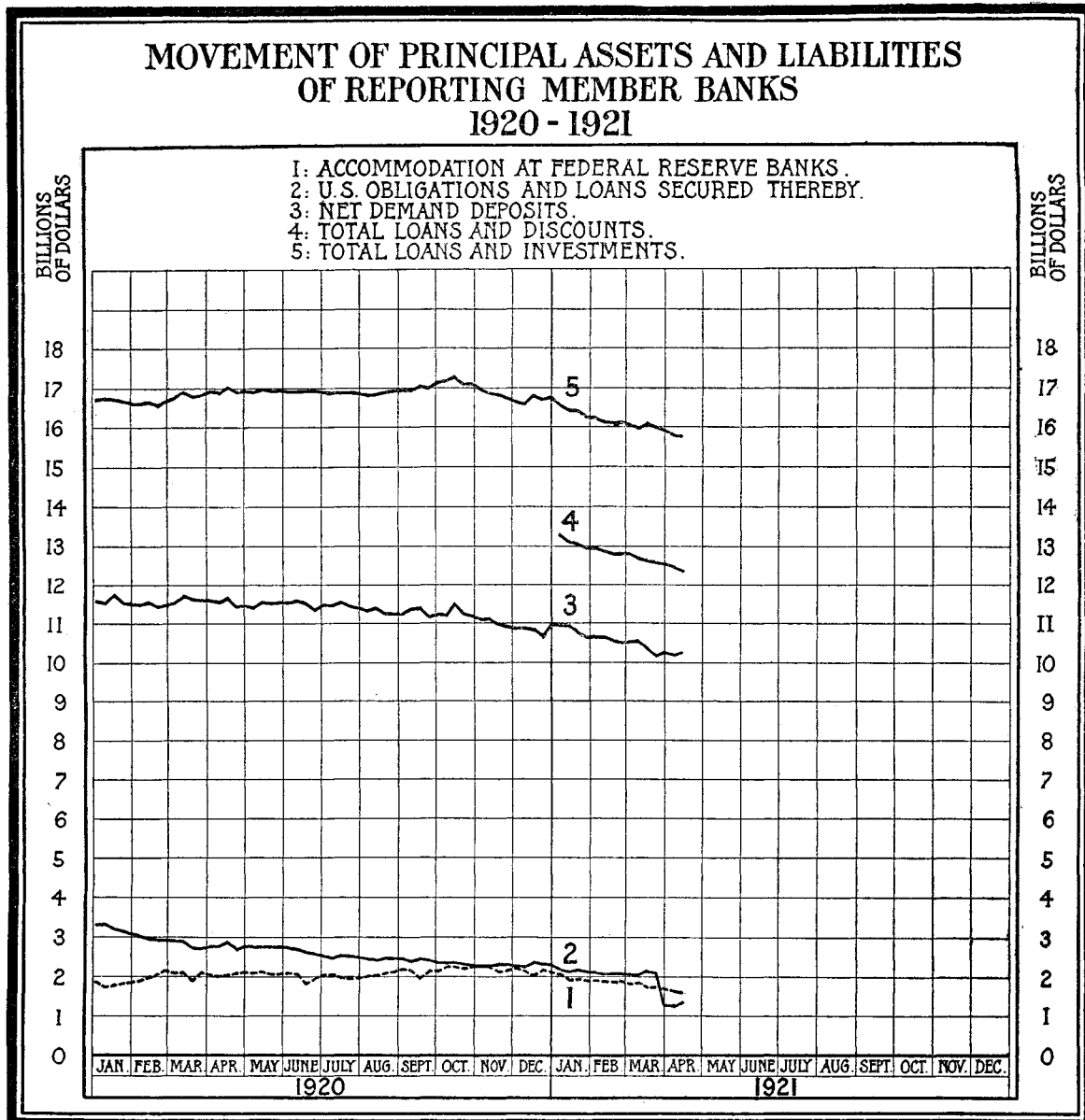
Federal Reserve Bank from which received or to which returned.	St. Louis.		Minneapolis.		Kansas City.		Dallas.		San Francisco.		Total.	
	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.	Re- ceived.	Re- turned.
Boston.....	211	374	152	115	309	229	451	220	407	849	20,617	32,261
New York.....	2,000	1,795	1,616	588	1,922	1,063	1,935	1,424	4,391	3,551	108,966	57,897
Philadelphia.....	269	532	129	107	437	261	393	257	325	655	28,153	38,417
Cleveland.....	1,489	2,362	419	307	771	671	539	501	512	1,259	32,708	40,033
Richmond.....	401	555	98	73	926	208	615	278	194	418	20,127	22,437
Atlanta.....	3,980	1,941	235	97	731	425	2,293	1,461	528	717	21,816	22,464
Chicago.....	4,250	10,550	4,640	4,223	3,266	3,777	951	1,462	2,337	4,316	34,929	55,669
St. Louis.....			462	227	3,037	1,974	1,892	1,367	729	781	24,708	16,365
Minneapolis.....	215	461			593	842	100	188	1,293	1,529	7,401	10,170
Kansas City.....	2,050	3,019	842	667			1,775	2,078	1,720	2,327	13,183	16,577
Dallas.....	1,382	1,890	221	96	2,259	1,782			2,314	1,213	11,937	12,354
San Francisco.....	806	714	1,467	1,451	2,326	1,722	1,189	1,675			17,903	14,530
Total:												
Jan. 1 to Mar. 31, 1921.....	17,063	24,193	10,281	7,951	16,577	12,957	12,163	10,911	14,750	17,615	345,448	339,174
Jan. 1 to Mar. 31, 1920.....	15,743	23,667	11,184	6,737	13,975	12,467	8,595	6,725	12,802	14,575	271,951	265,636
Jan. 1 to Mar. 31, 1919.....	12,071	17,087	9,926	5,733	13,700	6,675	5,892	5,017	7,426	10,988	226,516	212,749
Jan. 1 to Mar. 31, 1918.....	3,063	7,684	3,455	523	12,425	2,526	3,124	2,832	2,696	1,688	80,658	73,670

CONDITION OF MEMBER BANKS IN LEADING CITIES.

Credit liquidation as indicated by reductions in loans and discounts of the member banks in leading cities reporting weekly to the Federal Reserve Board, continued uninterruptedly for the four weeks ending April 15. Total loans of these banks were \$12,365,000,000 on that date, compared with \$12,630,000,000 four weeks earlier, indicating a reduction in loans

of \$265,000,000 for the period. Commensurate decreases in deposit liabilities and in accommodation at the Federal Reserve Banks are noted.

Following is a chart showing changes in the principal assets and liabilities of member banks for 1920 and 1921 to date. Also a tabular summary for the most recent five weeks.



MOVEMENT OF PRINCIPAL ASSETS AND LIABILITIES OF REPORTING MEMBER BANKS.

[In millions of dollars.]

	March 18.	March 25.	April 1.	April 8.	April 15.
Number of reporting banks.....	824	823	822	821	820
Loans and discounts: ¹					
Secured by United States Government obligations.....	761	760	755	752	740
Secured by stocks and bonds (other than United States Government obligations).....	3,015	3,011	3,028	2,982	2,961
All other.....	8,854	8,828	8,776	8,731	8,664
Total loans and discounts ¹	12,630	12,599	12,559	12,465	12,365
United States bonds.....	866	875	871	872	874
United States Victory notes.....	192	192	190	191	191
United States certificates of indebtedness.....	339	275	231	218	287
Other bonds, stocks, and securities.....	2,049	2,042	2,052	2,031	2,039
Total loans and discounts, and investments ¹	16,076	15,983	15,903	15,777	15,756
Reserve balance with Federal Reserve Bank.....	1,252	1,260	1,263	1,252	1,270
Cash in vault.....	321	315	300	317	308
Net demand deposits.....	10,376	10,186	10,271	10,204	10,263
Time deposits.....	2,926	2,932	2,925	2,923	2,924
Government deposits.....	348	329	326	304	329
Bills payable and rediscounts with Federal Reserve Bank, total.....	1,719	1,764	1,685	1,630	1,581
Secured by United States Government obligations.....	769	772	709	696	694
All other.....	950	992	976	934	887
Ratio of accommodation at Federal Reserve Banks to total loans and investments.....	10.7	11.0	10.6	10.3	10.0

¹ Including bills rediscounted with Federal Reserve Bank.

Liquidation is shown for all classes of loans—those secured by United States Government obligations declined from \$761,000,000 on March 18 to \$740,000,000 on April 15; those secured by stocks and bonds declined from \$3,015,000,000 to \$2,961,000,000, and all other loans, representing largely commercial paper, show a reduction from \$8,854,000,000 to \$8,664,000,000. This reduction of \$190,000,000 in commercial loans constitutes over 70 per cent of the total loan liquidation for the four weeks.

Member bank holdings of United States bonds fluctuated somewhat from week to week and stood at \$874,000,000 on April 15, compared with \$866,000,000 four weeks earlier. Holdings of Victory notes remained practically constant throughout the period, while Treasury certificates on hand followed the usual course by showing reductions for the three weeks after the allotment of the March 15 issue and an increase on April 15 when a new issue was floated. For the period as a whole, Treasury certificates show a reduction of \$52,000,000. Comparatively slight fluctuations in holdings of other bonds, stocks, and securities resulted in a reduction of \$10,000,000 for the four weeks under review. As a consequence of all these changes, total loans and investments of all reporting banks show an uninterrupted decline for each week of the period under review and stood on April 15 at \$15,756,000,000, or \$320,000,000 below the March 18 amount. For the six months period since October 15, when reporting member bank loans and investments stood at the peak figures of \$17,284,000,000, the ag-

gregate reduction under this head amounts to \$1,528,000,000, or approximately at the rate of \$60,000,000 per week.

Accommodation of member banks at the Federal Reserve Banks shows a decline for the four-week period from \$1,719,000,000 to \$1,581,000,000, and the ratio of accommodation declined from 10.7 to 10.0 per cent. For the member banks in New York City a total reduction of \$155,000,000 in loans and investments is shown between March 18 and April 15. At the same time their accommodation at Federal Reserve Banks declined from \$651,000,000 to \$552,000,000, and the ratio of accommodation declined from 12.4 to 10.8 per cent.

Government deposits, which amounted to \$348,000,000 on March 18, the first Friday after the Treasury transactions in connection with the March 15 income-tax payments, declined to \$304,000,000 on April 8, but increased to \$329,000,000 by April 15, largely as a result of the allotment on that date of a new issue of Treasury certificates. Other demand deposits (net) showed considerable fluctuations for the period, but stood on April 15 about \$113,000,000 below the March 18 amount. A decrease of \$2,000,000 in time deposits is noted for the period. Reserve balances of member banks with the Federal Reserve Banks showed comparatively slight changes, the April 15 amount being \$18,000,000 in excess of the figure for March 18. Cash in vault declined from \$321,000,000 at the beginning to \$308,000,000 at the end of the review period.

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES, ON FRIDAYS FROM MAR. 25 TO APR. 15, 1921.

1. ALL REPORTING MEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Number of reporting banks:													
Mar. 25.....	823	49	113	58	88	84	43	113	37	35	82	52	69
Apr. 1.....	822	49	112	58	88	84	43	113	37	35	82	52	69
Apr. 8.....	821	49	112	58	88	83	43	113	37	35	82	52	69
Apr. 15.....	820	49	112	58	88	83	43	113	37	35	81	52	69
Loans and discounts, including bills rediscounted with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	759,917	44,993	339,078	71,866	62,434	27,869	24,691	92,724	22,623	13,428	22,727	7,906	29,578
Apr. 1.....	755,451	44,419	337,568	68,829	63,165	28,577	24,037	92,922	23,667	13,243	22,206	7,730	29,088
Apr. 8.....	752,056	40,136	338,736	68,113	63,504	28,417	23,964	92,561	23,480	13,166	22,570	7,789	29,620
Apr. 15.....	740,055	39,364	333,484	68,340	63,479	26,990	22,848	90,105	23,596	13,231	21,762	7,627	29,229
Secured by stocks and bonds (other than United States Government obligations)—													
Mar. 25.....	3,011,152	194,086	1,222,797	203,704	347,657	112,505	57,626	438,842	120,765	49,833	75,326	37,631	150,380
Apr. 1.....	3,027,935	194,103	1,242,761	206,921	347,898	116,664	56,186	432,181	120,993	48,223	73,945	37,456	150,604
Apr. 8.....	2,981,939	189,674	1,233,643	204,335	347,786	112,361	55,460	426,308	120,513	48,695	74,730	37,606	150,828
Apr. 15.....	2,960,944	186,802	1,220,512	202,885	349,049	112,174	55,485	426,961	121,516	48,695	74,730	37,639	148,713
All other—													
Mar. 25.....	8,827,750	652,102	3,087,365	409,463	707,938	334,210	323,617	1,353,775	335,175	220,141	399,334	222,707	781,923
Apr. 1.....	8,775,553	650,530	3,055,694	406,774	699,223	335,069	318,942	1,354,552	330,417	222,453	398,804	221,141	781,954
Apr. 8.....	8,730,694	644,495	3,039,621	398,608	689,626	336,380	314,322	1,337,979	328,774	239,764	398,047	221,995	781,083
Apr. 15.....	8,663,590	637,175	3,012,644	402,159	690,062	335,307	313,285	1,321,327	322,528	236,762	396,823	217,919	777,599
Total loans and discounts, including bills rediscounted with Federal Reserve Bank—													
Mar. 25.....	12,598,819	891,181	4,649,240	685,033	1,118,029	474,584	405,934	1,885,341	478,563	283,402	497,387	268,244	961,881
Apr. 1.....	12,558,939	889,052	4,636,023	682,524	1,110,286	480,310	399,165	1,879,655	475,077	283,919	494,955	266,327	961,646
Apr. 8.....	12,464,689	874,305	4,612,000	671,056	1,100,916	477,158	393,746	1,856,848	472,767	281,625	495,347	267,390	961,531
Apr. 15.....	12,364,589	863,341	4,566,640	673,384	1,102,590	474,471	391,618	1,838,393	467,640	279,688	488,098	263,185	955,541
United States bonds:													
Mar. 25.....	874,856	33,025	301,369	43,716	97,440	65,625	39,618	77,455	28,884	16,690	35,745	37,301	97,988
Apr. 1.....	870,776	33,041	300,557	44,068	97,141	60,571	39,570	77,628	28,667	16,684	35,988	37,487	99,374
Apr. 8.....	871,735	32,993	304,606	44,144	95,908	60,587	39,758	76,891	28,226	16,795	35,192	36,726	99,909
Apr. 15.....	874,117	33,183	305,293	44,456	97,407	60,904	39,498	77,150	28,221	16,684	34,554	37,016	99,751
United States Victory notes:													
Mar. 25.....	192,687	6,024	83,121	10,099	20,523	7,702	3,045	34,923	2,309	1,247	3,660	2,028	18,006
Apr. 1.....	190,199	6,024	82,889	10,072	20,466	7,711	3,094	33,346	2,221	1,243	3,179	1,895	18,059
Apr. 8.....	191,377	6,028	82,303	10,119	20,277	7,719	3,105	34,846	2,105	1,238	3,083	1,835	18,719
Apr. 15.....	190,801	6,028	82,521	10,025	20,356	7,193	3,142	34,373	2,189	1,209	2,957	1,831	19,067
United States certificates of indebtedness:													
Mar. 25.....	274,846	18,049	142,739	23,444	19,070	6,963	1,943	31,016	2,673	3,234	5,335	1,940	18,440
Apr. 1.....	231,381	11,046	131,452	14,793	16,059	6,138	1,915	26,055	1,152	1,602	3,778	1,720	15,671
Apr. 8.....	218,334	10,347	121,625	15,881	13,773	4,479	1,841	27,362	735	952	4,425	1,708	15,206
Apr. 15.....	286,526	17,486	142,894	21,846	20,824	7,156	2,221	39,671	1,671	4,408	6,399	2,303	19,647
Other bonds, stocks and securities:													
Mar. 25.....	2,041,780	122,627	735,002	156,058	285,022	48,717	33,704	339,070	65,877	19,483	54,218	10,552	171,450
Apr. 1.....	2,051,418	123,807	738,506	156,322	281,663	52,100	36,395	341,921	65,519	19,659	53,351	10,731	171,444
Apr. 8.....	2,030,769	123,868	729,029	155,665	281,946	48,941	36,123	339,950	65,690	19,351	52,771	10,965	166,470
Apr. 15.....	2,039,525	124,733	738,008	156,172	280,857	48,993	35,831	340,432	66,775	19,374	46,460	9,099	172,791
Total loans and discounts, and investments, including bills rediscounted with Federal Reserve Bank:													
Mar. 25.....	15,982,988	1,070,906	5,911,471	918,350	1,540,084	603,591	484,244	2,367,805	578,306	324,056	596,345	320,065	1,267,765
Apr. 1.....	15,902,713	1,062,970	5,889,427	907,779	1,525,615	606,330	480,139	2,358,605	572,636	323,107	591,251	318,160	1,266,194
Apr. 8.....	15,776,904	1,047,541	5,849,563	896,865	1,512,820	598,884	474,573	2,335,897	569,523	319,961	590,818	318,624	1,261,835
Apr. 15.....	15,755,648	1,044,771	5,835,356	905,883	1,522,034	598,717	472,310	2,330,019	566,496	321,363	578,468	313,434	1,266,797
Reserve with Federal Reserve Bank:													
Mar. 25.....	1,259,573	73,128	586,301	63,648	97,035	32,072	20,430	175,695	40,232	19,145	43,403	22,289	77,195
Apr. 1.....	1,263,106	72,211	606,488	69,713	93,169	33,348	27,516	169,572	40,138	19,475	39,885	20,794	70,797
Apr. 8.....	1,251,801	74,080	577,214	65,061	94,215	35,035	25,190	175,433	42,323	20,384	46,942	21,704	74,220
Apr. 15.....	1,269,570	73,450	606,053	65,425	93,695	32,227	26,657	177,934	40,838	18,786	40,474	21,241	72,790
Cash in vault:													
Mar. 25.....	314,764	21,904	104,255	16,834	29,403	14,834	10,983	52,520	8,847	7,372	13,330	10,076	24,406
Apr. 1.....	300,469	21,256	98,068	15,770	28,626	14,049	10,780	51,401	8,473	6,508	12,309	9,965	23,264
Apr. 8.....	316,684	21,846	105,236	15,953	29,508	14,479	11,962	54,471	9,019	7,101	12,943	9,985	24,181
Apr. 15.....	307,943	20,874	104,734	15,931	28,563	15,515	10,224	51,486	8,428	6,576	12,270	10,071	23,271
Net demand deposits:													
Mar. 25.....	10,185,727	705,606	4,545,463	623,764	854,366	317,251	229,905	1,257,524	308,782	185,240	384,085	202,611	571,130
Apr. 1.....	10,270,573	713,447	4,663,402	631,704	845,926	316,352	231,423	1,229,868	311,837	182,673	379,199	198,721	566,021
Apr. 8.....	10,204,045	714,821	4,569,574	644,358	840,537	316,313	228,159	1,249,808	314,376	180,502	380,871	200,003	564,723
Apr. 15.....	10,263,390	727,492	4,607,862	632,188	832,766	312,329	231,598	1,279,796	315,677	179,512	378,529	200,299	565,342
Time deposits:													
Mar. 25.....	2,932,472	168,464	459,604	38,951	432,936	117,509	143,189	658,010	143,336	69,778	101,240	59,868	539,587
Apr. 1.....	2,925,227	168,432	452,560	39,620	433,368	118,486	142,355	657,258	143,138	69,513	101,201	60,040	539,256
Apr. 8.....	2,923,013	168,934	460,233	39,409	424,659	119,500	141,761	656,424	143,190	69,432	100,608	60,223	538,640
Apr. 15.....	2,923,718	167,685	452,130	40,950	425,754	119,002	142,285	653,115	143,450	69,293	103,598	60,570	545,886

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES, ON FRIDAYS FROM MAR. 25 TO APR. 15, 1921—Continued.

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

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
Government deposits:													
Mar. 25.....	328,613	24,750	170,639	36,560	29,851	8,214	2,323	26,125	6,437	4,156	4,091	1,835	13,632
Apr. 1.....	325,765	24,749	170,639	35,935	29,938	8,147	2,060	25,010	6,527	4,156	4,091	1,835	12,678
Apr. 8.....	304,287	23,324	162,094	34,123	28,169	7,768	1,961	18,707	6,200	3,949	3,740	1,784	12,468
Apr. 15.....	329,192	26,442	167,211	36,725	28,030	8,343	2,943	25,635	8,080	7,086	4,088	2,464	12,145
Bills payable with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	573,124	30,289	256,003	45,662	33,473	25,531	27,110	69,098	19,226	5,180	19,552	9,537	32,463
Apr. 1.....	526,021	25,026	224,015	44,101	35,121	28,014	26,628	66,523	17,165	4,551	17,993	9,288	27,596
Apr. 8.....	499,317	20,898	213,357	40,440	33,538	24,566	24,831	66,124	16,557	4,563	18,515	8,182	27,746
Apr. 15.....	503,256	14,173	223,120	42,207	37,062	24,736	25,346	63,556	16,079	4,248	16,880	6,119	29,730
All other—													
Mar. 25.....	3,993				36	130	90	2,800	190	367		100	280
Apr. 1.....	4,668				36		95	3,500		357		100	580
Apr. 8.....	6,195				36		95	650	4,137	357		100	820
Apr. 15.....	1,685						278	130		357		100	820
Bills rediscounted with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	198,649	18,294	94,710	35,334	7,189	3,268	8,558	18,852	3,742	781	4,001	586	3,334
Apr. 1.....	183,338	17,253	84,128	31,216	7,038	3,562	8,228	19,181	5,026	547	3,469	755	2,935
Apr. 8.....	197,061	14,632	102,338	30,476	6,592	3,775	7,895	17,991	4,675	527	3,625	889	3,646
Apr. 15.....	190,802	12,265	100,311	30,573	6,758	2,832	7,140	17,208	4,856	531	4,093	863	3,372
All other—													
Mar. 25.....	988,420	75,477	307,428	42,399	65,954	40,008	33,614	223,306	42,513	25,944	44,276	17,348	70,153
Apr. 1.....	971,286	79,238	277,098	41,716	66,809	41,679	33,688	235,425	37,666	27,028	40,990	17,293	72,656
Apr. 8.....	928,003	64,611	292,931	25,474	66,422	42,338	31,257	209,606	35,776	28,920	40,824	16,911	72,933
Apr. 15.....	885,169	55,804	280,510	35,968	75,410	41,021	27,350	185,550	30,508	27,849	39,689	17,498	68,012

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

[In thousands of dollars.]

Number of reporting banks:													
Mar. 25.....	286	26	72	44	9	10	8	52	13	10	19	8	15
Apr. 1.....	285	26	71	44	9	10	8	52	13	10	19	8	15
Apr. 8.....	285	26	71	44	9	10	8	52	13	10	19	8	15
Apr. 15.....	284	26	71	44	9	10	8	52	13	10	18	8	15
Loans and discounts, including bills rediscounted, with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	553,372	38,794	313,365	68,719	17,411	6,442	3,814	66,514	13,577	8,246	6,785	2,164	12,541
Apr. 1.....	553,228	38,156	312,000	65,687	17,448	6,412	3,673	65,769	14,969	8,206	6,819	1,992	12,097
Apr. 8.....	550,745	33,977	313,065	64,962	17,472	6,419	3,652	66,694	14,815	8,241	6,821	2,008	12,619
Apr. 15.....	540,881	32,753	308,055	65,203	17,745	6,358	3,691	63,434	15,004	8,410	5,872	1,900	12,456
Secured by stocks and bonds (other than United States Government obligations)—													
Mar. 25.....	2,098,604	149,283	1,062,760	184,709	135,488	15,625	9,539	317,285	87,648	32,706	23,374	9,051	66,136
Apr. 1.....	2,112,481	149,282	1,081,193	187,929	135,644	15,489	9,576	312,004	87,456	31,206	27,737	9,191	65,774
Apr. 8.....	2,073,367	145,603	1,073,825	185,234	134,795	15,422	9,042	306,478	87,281	12,212	27,874	9,390	66,221
Apr. 15.....	2,056,612	143,165	1,061,236	183,806	134,471	15,412	9,203	308,039	88,750	13,310	24,942	9,414	64,864
All other—													
Mar. 25.....	5,810,968	511,769	2,773,443	372,576	278,617	69,383	57,257	861,567	211,904	96,216	139,410	58,564	380,262
Apr. 1.....	5,777,019	511,893	2,743,151	370,748	279,090	69,816	53,791	862,235	207,608	96,896	141,059	58,442	381,690
Apr. 8.....	5,751,077	506,429	2,727,043	363,009	277,008	69,921	54,371	849,622	207,059	114,797	142,432	58,662	380,724
Apr. 15.....	5,692,739	498,568	2,700,146	366,703	275,555	70,178	54,200	839,364	201,028	113,673	140,933	54,441	377,950
Total loans and discounts, including bills rediscounted with Federal Reserve Bank—													
Mar. 25.....	8,467,944	699,846	4,149,568	626,004	431,516	91,450	70,610	1,245,366	313,129	137,168	174,569	69,779	458,939
Apr. 1.....	8,442,728	699,331	4,136,344	624,364	432,782	91,717	67,040	1,240,009	310,033	136,308	175,615	69,625	459,561
Apr. 8.....	8,375,189	686,009	4,113,933	613,205	429,275	91,762	67,065	1,222,794	309,155	135,250	177,127	70,050	459,564
Apr. 15.....	8,290,232	674,486	4,069,437	615,712	427,771	91,948	67,094	1,210,837	304,782	135,393	171,747	65,755	455,270
United States bonds:													
Mar. 25.....	434,371	9,723	258,022	32,314	8,789	7,264	4,421	19,867	13,713	4,441	12,205	8,084	55,528
Apr. 1.....	435,479	9,738	256,997	32,263	8,831	7,263	4,362	19,899	13,602	4,420	12,511	8,111	57,477
Apr. 8.....	436,991	9,740	260,549	32,339	7,613	7,263	4,362	19,812	13,184	4,433	11,774	7,686	58,231
Apr. 15.....	440,733	9,863	261,094	32,548	8,730	7,260	4,360	20,192	13,087	4,413	11,286	9,593	58,307

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES, ON FRIDAYS FROM MAR. 25 TO APR. 15, 1921—Continued.

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Total.	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.
United States Victory Notes:													
Mar. 25.....	106,926	533	73,172	6,816	2,195	181	65	12,877	431	461	1,195	31	8,969
Apr. 1.....	105,742	532	72,957	6,784	2,194	181	65	12,219	416	473	750	31	8,140
Apr. 8.....	106,533	536	72,349	6,838	2,128	181	65	13,010	413	473	668	31	8,841
Apr. 15.....	106,778	536	72,579	6,743	2,028	181	65	12,909	499	473	534	31	10,200
United States certificates of indebtedness:													
Mar. 25.....	197,238	8,573	136,580	21,587	1,492	288	225	12,182	2,106	1,805	1,506	1,170	9,724
Apr. 1.....	162,694	2,823	125,810	12,991	967	287	225	9,121	758	498	768	1,005	7,441
Apr. 8.....	154,289	3,289	116,412	14,188	802	287	225	9,551	390	482	634	995	7,034
Apr. 15.....	198,487	9,369	136,537	19,773	2,800	413	225	14,911	913	2,339	1,141	1,361	8,705
Other bonds, stocks, and securities:													
Mar. 25.....	1,121,154	47,910	559,099	125,895	67,956	4,101	3,196	146,613	41,845	8,368	18,414	4,232	93,525
Apr. 1.....	1,127,186	49,437	564,161	126,014	67,163	4,022	3,220	146,622	41,799	8,452	17,895	4,429	93,972
Apr. 8.....	1,110,003	49,453	555,555	125,518	67,385	4,114	3,221	143,963	41,432	8,299	16,968	4,447	89,648
Apr. 15.....	1,119,868	50,238	565,417	126,189	66,709	4,125	3,226	145,378	42,069	8,284	11,074	2,405	94,757
Total loans and discounts, and investments, including bills rediscounted with Federal Reserve Bank:													
Mar. 25.....	10,327,633	766,585	5,176,441	812,616	511,948	103,284	78,517	1,436,905	371,224	152,243	207,889	83,296	626,685
Apr. 1.....	10,273,829	761,861	5,156,269	802,421	511,937	103,470	74,912	1,427,869	366,608	150,151	207,539	83,201	627,591
Apr. 8.....	10,183,005	749,027	5,118,798	792,088	507,208	103,607	74,938	1,409,130	364,574	148,937	207,171	83,209	624,318
Apr. 15.....	10,156,098	744,492	5,105,064	800,962	508,038	103,927	74,970	1,404,227	361,350	150,902	195,792	79,135	627,239
Reserve with Federal Reserve Bank:													
Mar. 25.....	915,112	58,756	539,619	57,824	26,842	5,672	3,633	126,402	30,038	8,584	15,189	5,668	36,885
Apr. 1.....	930,502	57,032	563,146	62,601	28,591	5,737	3,945	121,119	29,189	8,917	14,206	5,363	30,656
Apr. 8.....	910,951	58,589	533,576	59,670	26,737	5,824	4,025	125,199	30,616	10,733	18,563	5,420	31,999
Apr. 15.....	929,071	58,523	558,668	59,110	26,192	5,995	3,699	127,796	30,029	8,820	13,587	5,039	31,613
Cash in vault:													
Mar. 25.....	181,909	13,321	92,258	13,690	6,909	1,196	1,909	31,306	4,077	2,441	3,402	1,908	9,492
Apr. 1.....	172,604	12,771	86,837	13,084	7,153	1,160	1,975	29,649	3,866	2,012	3,144	1,795	9,158
Apr. 8.....	181,457	13,187	92,715	12,952	7,304	1,189	1,939	31,263	4,137	2,417	3,201	1,819	9,334
Apr. 15.....	178,875	12,761	92,869	13,147	7,405	1,093	1,868	29,895	3,864	2,133	3,058	1,840	8,942
Net demand deposits:													
Mar. 25.....	7,082,263	547,168	4,063,690	541,548	205,377	50,130	35,477	885,903	213,362	85,234	139,732	55,424	259,218
Apr. 1.....	7,176,034	550,835	4,178,969	549,597	208,241	48,416	36,238	855,044	215,530	84,491	138,265	54,276	256,312
Apr. 8.....	7,115,514	553,615	4,085,548	562,126	208,153	48,036	35,452	876,117	215,982	84,739	137,905	54,625	253,214
Apr. 15.....	7,164,112	566,194	4,118,470	551,368	201,823	49,116	37,255	894,000	216,603	84,429	136,329	55,029	253,496
Time deposits:													
Mar. 25.....	1,365,683	64,025	297,158	27,067	232,612	23,252	21,667	313,991	82,451	27,498	11,554	7,629	256,779
Apr. 1.....	1,360,168	64,027	289,931	27,666	233,648	23,319	21,688	314,611	82,445	27,210	11,603	7,699	256,321
Apr. 8.....	1,358,670	63,707	297,871	27,453	225,201	23,321	21,377	314,370	82,528	27,074	11,628	7,555	256,605
Apr. 15.....	1,361,704	63,343	289,681	28,809	227,239	23,217	21,829	313,150	82,282	27,055	15,038	7,600	262,461
Government deposits:													
Mar. 25.....	264,424	19,899	165,208	35,402	5,168	1,297	251	14,157	5,002	2,139	3,352	1,459	11,090
Apr. 1.....	262,243	19,898	165,208	34,777	5,207	1,227	240	13,098	5,002	2,139	3,352	1,459	10,636
Apr. 8.....	249,091	18,904	156,940	33,024	4,968	1,227	211	12,445	4,751	2,033	3,041	1,427	10,100
Apr. 15.....	264,442	21,288	162,875	35,600	5,343	930	247	16,357	6,424	3,450	3,303	1,923	8,502
Bills payable with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	382,197	26,226	233,609	41,571	2,749	5,433	705	21,618	12,493	2,030	11,005	1,600	23,158
Apr. 1.....	336,073	21,911	201,745	40,954	2,000	6,512	705	20,856	10,004	999	9,357	1,250	19,180
Apr. 8.....	321,090	18,285	191,100	37,394	5,100	6,201	855	19,952	10,148	999	10,227	1,550	19,481
Apr. 15.....	324,538	11,233	199,601	39,561	5,300	5,473	705	21,596	9,597	887	8,818	980	20,787
All other—													
Mar. 25.....	2,800	.....	.....	.....	.....	.....	.....	2,800	.....	.....	.....	.....	.....
Apr. 1.....	3,500	.....	.....	.....	.....	.....	.....	3,500	.....	.....	.....	.....	.....
Apr. 8.....	4,787	.....	.....	.....	.....	.....	.....	650	4,137	.....	.....	.....	.....
Apr. 15.....	130	.....	.....	.....	.....	.....	.....	130	.....	.....	.....	.....	.....
Bills rediscounted with Federal Reserve Bank:													
Secured by United States Government obligations—													
Mar. 25.....	164,272	17,773	92,678	35,165	1,368	.....	798	11,135	1,770	489	1,113	93	1,890
Apr. 1.....	149,497	16,882	82,163	31,047	1,189	.....	745	11,087	3,380	493	1,212	105	1,194
Apr. 8.....	163,864	14,261	100,386	30,307	657	.....	723	10,314	3,161	478	1,335	112	2,130
Apr. 15.....	158,504	11,894	98,427	30,404	854	.....	602	9,393	3,176	488	1,149	105	2,012
All other—													
Mar. 25.....	721,541	75,117	279,103	40,246	52,271	8,361	4,597	146,447	26,618	19,044	20,528	5,298	43,911
Apr. 1.....	703,275	78,843	249,089	39,350	53,002	8,524	5,242	158,487	21,520	18,991	19,721	5,336	45,170
Apr. 8.....	662,975	64,430	265,175	23,510	49,849	9,520	5,231	130,263	20,856	21,090	18,622	5,651	45,778
Apr. 15.....	629,993	55,519	253,857	34,555	55,917	9,085	4,338	113,847	16,460	20,213	18,422	5,830	41,950

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES, ON FRIDAYS FROM MAR. 25 TO
APR. 15, 1921—Continued.

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES.

[In thousands of dollars.]

	Total.	New York. ¹	Cleve- land. ²	Rich- mond. ³	Atlan- ta. ⁴	Chica- go. ⁵	St. Louis. ⁶	Minne- apolis. ⁷	Kansas City. ⁸	Dallas. ⁹	San Fran- cisco. ¹⁰
Number of reporting banks:											
Mar. 25.....	216	11	40	18	21	13	20	5	29	14	45
Apr. 1.....	216	11	40	18	21	13	20	5	29	14	45
Apr. 8.....	216	11	40	18	21	13	20	5	29	14	45
Apr. 15.....	216	11	40	18	21	13	20	5	29	14	45
Loans and discounts, including bills rediscounted with Federal Reserve Bank:											
Secured by United States Govern- ment obligations—											
Mar. 25.....	113,772	9,547	34,363	7,471	14,150	11,558	8,004	62	10,540	2,214	15,863
Apr. 1.....	113,637	9,396	34,813	7,560	13,723	12,262	7,659	64	10,139	2,152	15,869
Apr. 8.....	112,606	9,219	34,899	7,646	13,544	11,350	7,633	62	10,315	2,051	15,887
Apr. 15.....	111,902	9,051	34,731	7,290	13,008	12,165	7,564	60	10,281	2,063	15,694
Secured by stocks and bonds (other than United States Government obligations)—											
Mar. 25.....	490,012	57,722	154,742	28,716	36,370	61,745	30,523	510	29,298	15,226	75,160
Apr. 1.....	487,750	57,063	154,318	28,475	35,931	61,099	30,926	509	28,568	15,152	75,739
Apr. 8.....	487,210	55,986	154,727	28,316	35,870	61,130	30,624	509	29,549	14,894	75,605
Apr. 15.....	483,993	54,813	157,264	28,317	35,434	60,341	30,162	507	27,431	14,836	74,888
All other—											
Mar. 25.....	1,580,600	108,978	288,068	97,572	190,585	185,820	110,607	9,220	154,622	66,091	369,037
Apr. 1.....	1,566,362	109,546	279,082	96,660	189,041	185,650	110,281	9,257	152,881	66,081	367,883
Apr. 8.....	1,553,728	108,939	273,097	96,006	185,423	186,888	108,792	9,260	150,873	66,117	368,333
Apr. 15.....	1,550,820	110,381	274,182	97,131	183,998	181,605	108,779	9,276	151,251	66,130	368,087
Total loans and discounts, including bills rediscounted with Federal Reserve Bank—											
Mar. 25.....	2,184,384	176,247	477,173	133,759	241,105	259,123	149,134	9,792	194,460	83,531	460,060
Apr. 1.....	2,167,749	176,005	468,213	132,695	238,695	253,981	148,866	9,830	191,588	83,385	459,491
Apr. 8.....	2,153,544	174,144	462,723	131,968	234,837	259,368	147,049	9,831	190,737	83,062	459,825
Apr. 15.....	2,146,715	174,245	466,177	132,738	232,440	254,111	146,505	9,843	188,963	83,034	458,659
United States bonds:											
Mar. 25.....	219,228	14,889	64,843	13,907	27,908	21,873	13,246	714	12,895	13,668	35,285
Apr. 1.....	220,253	15,017	64,529	14,805	27,915	22,725	13,140	714	12,986	13,718	34,704
Apr. 8.....	219,204	15,533	64,633	14,569	27,846	21,866	13,116	714	12,948	13,466	34,513
Apr. 15.....	218,630	15,766	64,868	14,968	27,830	21,862	13,211	715	12,872	12,362	34,176
United States Victory notes:											
Mar. 25.....	50,901	1,994	15,371	3,182	2,363	15,866	1,829	58	1,042	798	8,398
Apr. 1.....	49,693	1,972	15,295	3,187	2,412	15,005	1,756	57	1,043	660	8,301
Apr. 8.....	50,255	1,969	15,221	3,188	2,423	15,862	1,643	47	1,021	623	8,258
Apr. 15.....	50,443	1,975	15,430	3,041	2,460	15,861	1,641	56	1,039	619	8,321
United States certificates of indebted- ness:											
Mar. 25.....	42,930	2,036	13,678	2,447	1,650	10,933	489	10	2,580	509	8,598
Apr. 1.....	36,546	1,614	11,228	1,846	1,624	9,478	318	10	1,807	477	8,144
Apr. 8.....	35,757	1,588	9,802	1,953	1,550	10,343	269	10	2,633	477	8,132
Apr. 15.....	50,495	2,253	15,121	2,423	1,930	12,962	753	10	3,941	681	10,421
Other bonds, stocks, and securities:											
Mar. 25.....	576,127	77,548	182,035	21,312	26,230	146,153	20,806	785	25,722	3,104	72,432
Apr. 1.....	575,412	77,096	179,661	21,340	29,130	146,404	20,464	774	25,451	3,082	72,010
Apr. 8.....	575,940	76,699	179,977	21,611	29,033	146,823	21,000	792	25,530	3,139	71,396
Apr. 15.....	576,858	76,935	179,702	21,536	28,802	146,826	21,429	791	25,162	3,245	72,430
Total loans and discounts, and invest- ments, including bills rediscounted with Federal Reserve Bank:											
Mar. 25.....	3,073,570	272,714	753,100	174,607	269,256	453,948	185,504	11,359	236,699	101,610	584,773
Apr. 1.....	3,049,653	271,704	738,926	173,873	269,776	452,593	184,544	11,385	232,880	101,322	582,650
Apr. 8.....	3,034,700	269,933	732,356	172,289	265,689	454,262	183,077	11,394	232,869	100,767	582,064
Apr. 15.....	3,043,141	271,174	741,298	174,706	263,462	451,622	183,539	11,415	231,977	99,941	584,007
Reserve with Federal Reserve Bank:											
Mar. 25.....	195,963	16,633	53,587	10,880	20,628	23,344	9,479	660	16,355	7,370	37,027
Apr. 1.....	182,994	15,813	47,556	11,374	19,019	20,701	10,018	769	14,854	6,725	36,165
Apr. 8.....	194,494	16,428	50,263	12,074	16,465	24,707	10,951	683	16,863	7,544	38,511
Apr. 15.....	190,715	18,027	51,430	10,534	18,305	21,355	9,988	583	16,268	6,907	37,318
Cash in vault:											
Mar. 25.....	60,003	2,362	13,465	4,431	6,230	7,750	3,981	254	5,714	2,826	12,990
Apr. 1.....	57,995	2,343	12,876	4,198	6,334	7,821	3,773	247	5,337	2,812	12,254
Apr. 8.....	62,599	2,475	13,357	4,306	7,178	9,236	4,038	248	5,869	2,823	13,069
Apr. 15.....	60,638	2,334	12,608	6,530	5,878	8,184	3,782	253	5,430	3,006	12,633
Net demand deposits:											
Mar. 25.....	1,622,249	154,142	479,119	101,632	153,635	157,817	86,579	5,024	142,384	61,794	280,123
Apr. 1.....	1,611,320	157,278	468,542	99,986	154,569	159,264	87,089	5,159	140,432	60,994	278,007
Apr. 8.....	1,613,702	157,371	464,950	102,110	151,858	159,047	89,020	5,031	142,012	61,013	281,290
Apr. 15.....	1,619,017	155,967	463,614	97,925	153,410	171,454	89,804	5,079	140,190	60,684	280,890
Time deposits:											
Mar. 25.....	916,161	69,501	118,244	20,109	83,360	214,723	51,170	3,177	61,999	24,260	269,618
Apr. 1.....	915,763	69,740	117,962	21,438	82,788	213,449	50,936	3,162	62,194	24,365	269,729
Apr. 8.....	913,755	69,484	117,982	21,471	82,578	212,447	50,929	3,155	61,900	24,547	268,762
Apr. 15.....	912,929	69,758	117,360	21,337	82,823	211,070	51,462	3,153	61,243	24,345	270,378
Government deposits:											
Mar. 25.....	37,735	3,062	21,602	2,604	1,601	5,100	1,435	.....	124	322	1,885
Apr. 1.....	37,623	3,062	21,652	2,604	1,349	5,100	1,525	.....	124	322	1,885
Apr. 8.....	35,445	2,908	20,305	2,442	1,283	4,845	1,449	.....	117	306	1,790
Apr. 15.....	40,400	1,978	23,083	4,038	2,212	4,050	1,656	.....	192	435	2,756

PRINCIPAL RESOURCES AND LIABILITIES OF MEMBER BANKS IN LEADING CITIES, ON FRIDAYS FROM MAR. 25 TO APR. 15, 1921—Continued.

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES—Continued.

[In thousands of dollars.]

	Total.	New York. ¹	Cleveland. ²	Richmond. ³	Atlanta. ⁴	Chicago. ⁵	St. Louis. ⁶	Minneapolis. ⁷	Kansas City. ⁸	Dallas. ⁹	San Francisco. ¹⁰
Bills payable with Federal Reserve Bank:											
Secured by United States Government obligations—											
Mar. 25.....	129,564	15,421	29,018	8,093	22,974	31,959	6,170	72	5,126	3,240	7,491
Apr. 1.....	128,340	13,610	30,484	9,573	22,692	30,396	6,573	122	5,294	2,995	6,601
Apr. 8.....	120,226	13,869	26,485	7,174	21,218	31,870	5,821	72	5,037	2,170	6,510
Apr. 15.....	123,087	14,691	30,316	8,407	21,898	28,178	5,969	72	4,821	1,395	7,340
All other—											
Mar. 25.....	845			130	90		190	75		100	260
Apr. 1.....	830				95			75		100	560
Apr. 8.....	1,070				95			75		100	800
Apr. 15.....	1,253				278			75		100	800
Bills rediscounted with Federal Reserve Bank:											
Secured by United States Government obligations—											
Mar. 25.....	24,833	1,143	5,509	2,124	5,623	5,502	1,972		1,350	313	1,297
Apr. 1.....	23,991	1,112	5,508	1,935	5,463	5,613	1,646		777	337	1,600
Apr. 8.....	23,366	1,096	5,630	2,206	5,160	5,360	1,514		767	289	1,344
Apr. 15.....	23,079	1,053	5,625	1,791	4,683	5,475	1,680		1,239	299	1,234
All other—											
Mar. 25.....	137,990	15,591	10,389	14,194	17,500	21,782	15,178	482	13,659	6,291	22,924
Apr. 1.....	137,007	14,556	10,077	15,675	17,424	21,325	15,677	440	11,721	6,267	23,845
Apr. 8.....	134,665	12,709	11,791	14,498	14,674	24,805	14,196	475	12,036	5,863	23,618
Apr. 15.....	128,253	15,826	13,129	13,948	12,631	18,765	13,408	475	11,550	5,728	22,793

¹ Buffalo.

² Cincinnati and Pittsburgh.

³ Baltimore.

⁴ New Orleans, Jacksonville, Nashville, and Birmingham.

⁵ Detroit.

⁶ Louisville, Memphis, and Little Rock.

⁷ Helena.

⁸ Omaha, Denver, and Oklahoma City.

⁹ El Paso and Houston.

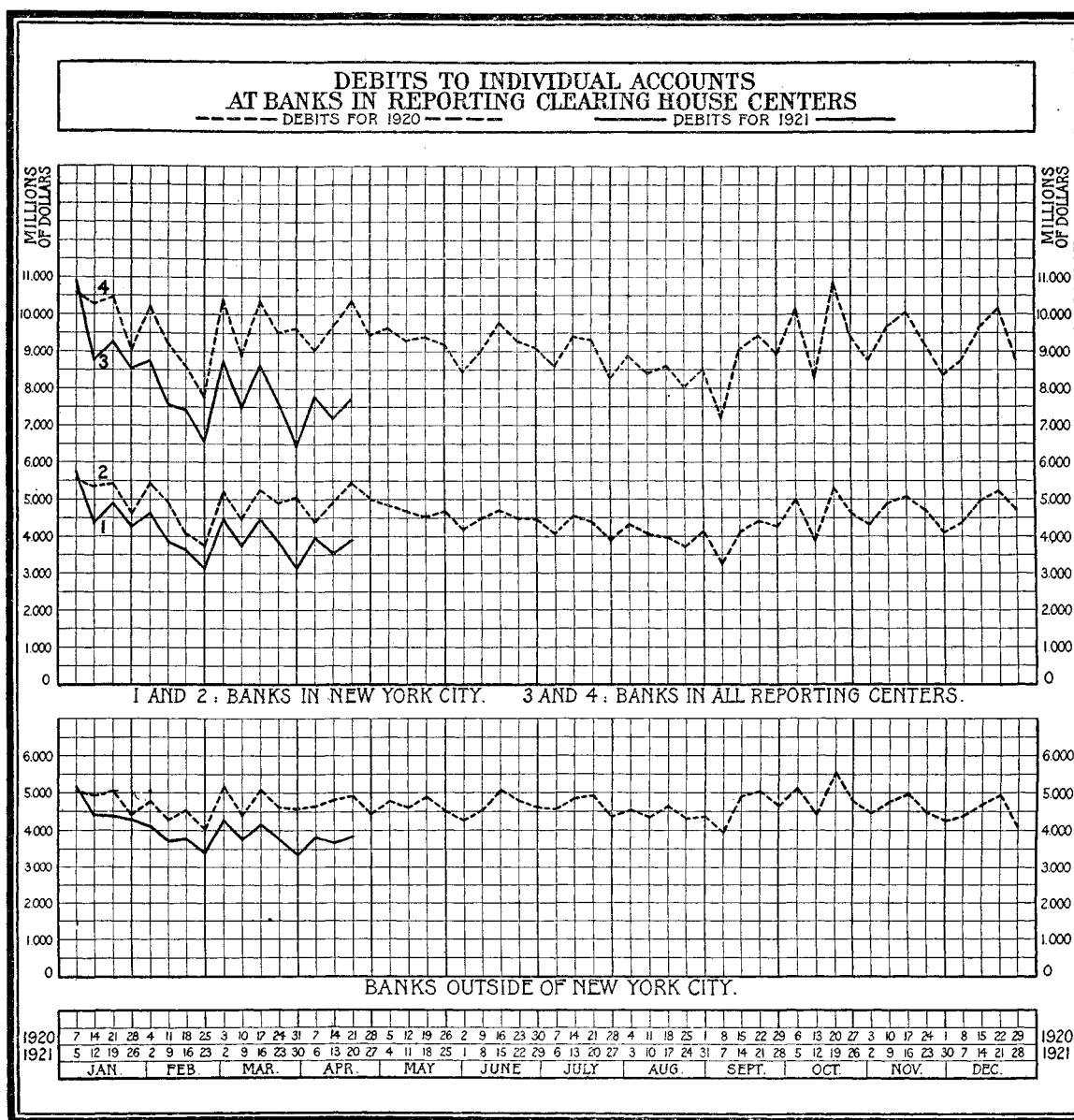
¹⁰ Spokane, Portland, Seattle, Salt Lake City, and Los Angeles.

BANK DEBITS.

Debits to individual accounts, as indicators of the volume of the Nation's business, show an upward tendency for the four-week period ending April 20. The first of the four weeks saw a material reduction in debits, namely, from \$7,538,000,000 to \$6,393,000,000, but this reduction was due in part to the observance of Good Friday on March 25 as a holiday in some of the Federal Reserve districts. The debits rose for the following week to \$7,696,000,000, apparently as the consequence of end-of-month and end-of-quarter payments. After a drop to \$7,106,000,000 for the week ending April 13, debits rose again to \$7,648,000,000 for the last week of the period. Fluctuations of debits in New York City were parallel to those in all reporting centers, a 10 per cent increase for the most recent week being attributable in part to

the larger volume of stock exchange transactions during that week.

Comparison of the movement of debits for the four weeks under review with that for the corresponding period of 1920 is vitiated by the fact that March 31, with its heavy end-of-month and end-of-quarter payments, was included in 1920 in the first week of the period, while in the current year it is included in the second week. Outside of this fortuitous difference, the general trend for the period is similar for the two years. It is noteworthy, however, that for the last four weeks this year's totals were below last year's by 25 per cent, on the average, while for the immediately preceding four weeks the difference between the two years was 18 per cent, so that the indications are that the relative volume of business this year, as compared with last year, is smaller in the more recent period than four weeks earlier.



DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE BANKS.

SUMMARY BY FEDERAL RESERVE DISTRICTS.

[In thousands of dollars.]

Federal Reserve district.	Number of centers included.	1921 Week ending—				1920 Week ending—			
		Mar. 30.	Apr. 6.	Apr. 13.	Apr. 20.	Mar. 31.	Apr. 7.	Apr. 14.	Apr. 21.
Boston.....	14	333,877	400,228	357,480	373,078	467,392	448,994	542,868	538,772
New York.....	7	3,250,158	4,116,027	3,657,732	4,037,761	5,196,609	4,534,986	5,036,351	5,599,701
Philadelphia.....	10	319,689	404,289	354,470	366,353	420,302	425,577	432,958	454,879
Cleveland.....	13	392,661	432,208	440,795	419,867	502,297	516,029	585,948	551,119
Richmond.....	7	137,947	160,439	142,707	155,472	172,583	185,544	186,362	194,823
Atlanta.....	15	154,735	194,975	166,696	182,766	258,038	265,557	274,054	267,001
Chicago.....	22	787,512	828,870	863,310	935,028	1,162,638	1,144,788	1,100,768	1,224,250
St. Louis.....	5	152,171	171,541	177,110	187,447	227,260	252,450	247,843	258,752
Minneapolis.....	12	101,077	136,323	127,901	130,211	154,446	160,427	177,597	171,787
Kansas City.....	15	207,590	249,706	228,681	234,850	323,191	311,283	303,195	299,812
Dallas.....	13	124,963	135,654	125,638	132,469	152,700	158,108	156,589	149,009
San Francisco.....	20	430,520	465,948	463,230	493,087	505,325	532,800	553,114	572,328
Total.....	153	6,392,900	7,696,208	7,105,750	7,648,389	9,542,781	8,936,543	9,597,147	10,282,323

NOTE.—Figures for the following centers, while shown in the body of the statement, are not included in the summary, complete data for these centers not being available for each week under review: Harrisburg, Pa.; Johnstown, Pa.; Reading, Pa.; Cincinnati, Ohio; Greenville, S. C.; Huntington, W. Va.; Washington, D. C.; Wilmington, N. C.; Moline, Ill.; East St. Louis and National Stock Yards, Ill.; Springfield, Ill.; Quincy, Ill.; Springfield, Mo.; Atchison, Kans.

DATA FOR EACH REPORTING CENTER.

[In thousands of dollars.]

	1921. Week ending—				1920. Week ending—			
	Mar. 30.	Apr. 6.	Apr. 13.	Apr. 20.	Mar. 31.	Apr. 7.	Apr. 14.	Apr. 21.
District No. 1—Boston:								
Bangor.....	3,327	3,772	3,488	3,514	3,611	3,637	2,941	3,363
Boston.....	1,216,886	1,247,472	1,227,689	1,236,767	305,993	268,705	366,899	351,982
Do.....	278,073	322,534	297,681	309,106				
Fall River.....	5,036	6,431	5,194	5,419	9,778	10,135	11,131	7,842
Hartford.....	16,623	27,209	20,216	24,622	22,173	27,891	24,084	29,655
Holyoke.....	2,709	3,547	2,775	2,843	3,625	4,020	3,770	3,941
Lowell.....	3,989	4,525	4,482	4,158	5,429	5,899	6,061	5,693
Manchester.....	4,006	5,180	4,178	4,290	5,123	5,854	4,947	5,918
New Bedford.....	4,740	5,338	5,365	5,319	8,983	9,283	10,672	10,763
New Haven.....	13,027	18,345	15,963	17,422	18,245	20,281	19,401	20,763
Portland.....	6,929	9,099	7,202	8,217	7,520	8,421	7,790	8,266
Providence.....	27,831	31,595	28,458	31,816	37,815	38,576	41,185	46,953
Springfield.....	11,263	14,712	12,448	11,398	14,606	18,022	15,814	17,799
Waterbury.....	4,314	6,715	5,127	5,311	6,732	8,316	7,602	7,080
Worcester.....	13,192	16,488	14,895	13,982	17,979	19,854	19,671	18,754
District No. 2—New York:								
Albany.....	24,058	28,106	22,879	21,397	18,309	22,647	25,511	26,943
Binghamton.....	3,198	4,287	3,979	4,131	4,211	4,831	4,840	4,512
Buffalo.....	48,897	62,730	56,856	60,527	64,718	72,388	64,994	64,474
New York.....	3,133,090	3,967,755	3,527,728	3,900,096	5,060,233	4,370,498	4,885,191	5,445,515
Passaic.....	4,014	4,511	4,592	5,149	5,313	5,739	5,741	5,207
Rochester.....	24,774	33,121	28,194	31,971	28,165	36,648	33,752	33,517
Syracuse.....	12,127	15,517	13,594	14,490	15,660	22,325	16,322	18,932
District No. 3—Philadelphia:								
Altoona.....	3,187	2,842	3,124	3,442	2,701	2,688	3,413	3,399
Chester.....	4,127	5,585	4,220	4,920	5,076	5,348	5,213	5,903
Harrisburg.....	5,750	7,931	6,811	5,965				
Johnstown.....	5,047	6,254	5,049	5,042				
Lancaster.....	5,790	16,677	5,946	5,819	8,672	15,202	7,553	8,030
Philadelphia.....	258,762	324,790	290,116	304,044	350,158	342,739	363,227	384,984
Reading.....	5,979	8,393	8,755	8,108				
Scranton.....	14,823	14,376	16,310	12,184	14,644	16,589	15,907	13,642
Trenton.....	9,753	11,290	10,555	11,512	11,313	13,450	11,385	12,000
Wilkes-Barre.....	8,721	8,702	8,070	8,958	9,125	8,257	8,002	8,494
Williamsport.....	3,719	4,611	4,369	3,763	4,059	4,752	4,837	4,268
Wilmington.....	6,705	8,921	7,235	7,615	8,829	9,605	8,240	8,987
York.....	4,102	6,495	4,525	4,096	4,725	6,747	5,181	5,222
District No. 4—Cleveland:								
Akron.....	12,365	16,379	15,008	14,774	19,386	23,018	33,735	34,126
Cincinnati.....	54,758	70,138	72,842	65,451				
Cleveland.....	120,419	138,965	146,850	133,617	173,856	187,312	220,767	181,603
Columbus.....	28,427	28,785	35,874	31,635	26,370	29,311	35,181	29,426
Dayton.....	11,879	13,532	13,128	12,358	12,112	13,582	12,863	12,148
Erie.....	5,898	6,752	6,267	6,256	7,151	6,596	7,795	8,575
Greensburg.....	3,949	3,825	3,865	4,007	4,446	3,643	4,624	4,843
Lexington.....	5,101	5,221	4,181	4,492	5,653	6,154	5,783	5,687
Oil City.....	1,995	2,604	2,397	2,822	2,728	3,467	2,800	3,524

¹ Debits of banks which submitted reports in 1920.

DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE BANKS—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1921. Week ending—				1920. Week ending—			
	Mar. 30.	Apr. 6.	Apr. 13.	Apr. 20.	Mar. 31.	Apr. 7.	Apr. 14.	Apr. 21.
District No. 4—Cleveland—Continued.								
Pittsburgh.....	158,945	161,736	159,922	162,134	190,172	179,150	189,366	206,669
Springfield.....	3,960	4,887	4,693	4,101	3,162	3,185	4,158	3,450
Toledo.....	20,852	25,107	26,273	25,160	30,127	34,010	37,419	37,027
Wheeling.....	8,140	9,901	8,150	8,696	10,114	9,724	11,104	10,511
Youngstown.....	10,731	14,514	14,217	9,885	17,020	16,847	20,883	13,520
District No. 5—Richmond:								
Baltimore.....	85,685	99,691	90,569	93,404	98,509	109,341	107,842	109,649
Charleston.....	4,723	7,263	5,571	6,387	11,290	11,445	9,332	9,500
Charlotte.....	4,974	5,756	5,048	6,006	8,776	8,737	9,560	10,844
Columbia.....	4,374	4,949	4,490	4,378	7,469	6,853	7,760	7,665
Greenville, S. C.....	2,283	3,177	3,981	3,069				
Huntington.....	5,130	5,413	4,908	5,461				
Norfolk.....	12,607	14,152	11,058	12,751	18,413	18,458	19,037	20,516
Raleigh.....	4,200	4,000	4,100	3,800	3,900	4,900	5,800	6,120
Richmond.....	21,384	24,628	21,871	28,746	24,226	25,780	27,031	30,529
Washington.....	29,572	40,155	36,319	37,649				
Wilmington.....	4,714	6,132	5,048	5,902				
District No. 6—Atlanta:								
Atlanta.....	20,055	25,174	22,544	25,588	33,040	34,742	34,894	38,472
Augusta.....	4,079	4,947	5,032	5,032	12,388	12,704	12,921	10,670
Birmingham.....	12,535	15,641	12,640	15,756	15,773	17,033	15,722	17,680
Chattanooga.....	7,508	8,411	8,952	10,146	9,893	12,116	11,920	13,432
Jacksonville.....	10,189	14,159	12,293	12,863	13,966	16,131	14,808	15,826
Knoxville.....	5,559	6,816	5,416	6,421	6,620	7,445	7,371	7,691
Macon.....	3,486	4,491	3,417	4,022	7,961	8,237	8,144	8,113
Mobile.....	5,918	6,256	4,669	6,519	10,292	9,996	9,036	10,066
Montgomery.....	3,004	3,612	2,886	4,216	5,223	5,776	5,364	6,144
Nashville.....	17,797	20,390	19,484	20,354	25,804	27,129	28,775	29,722
New Orleans.....	48,220	63,158	51,623	52,614	83,684	82,610	93,192	76,939
Pensacola.....	1,120	1,607	1,466	1,644	2,241	2,204	2,577	2,563
Savannah.....	8,498	11,619	8,781	10,099	22,718	19,471	20,387	20,631
Tampa.....	5,635	6,868	6,272	6,192	6,648	8,114	6,847	7,106
Vicksburg.....	1,132	1,266	1,306	1,300	1,787	1,849	2,006	1,916
District No. 7—Chicago:								
Bay City.....	2,588	2,781	2,328	2,308	3,707	4,094	4,020	3,839
Bloomington.....	2,481	2,983	3,203	2,564	3,775	4,253	3,681	2,922
Cedar Rapids.....	10,561	13,965	11,034	10,520	9,580	12,141	9,683	10,553
Chicago.....	521,575	514,728	553,907	593,607	766,881	720,501	679,290	737,506
Decatur.....	6,211	8,712	6,665	6,215	8,339	12,157	8,779	8,887
Decatur.....	3,158	4,451	3,043	3,388	5,094	4,693	3,990	4,322
Des Moines.....	16,766	17,837	19,173	19,753	24,039	28,402	27,495	25,772
Detroit.....	86,123	101,273	103,257	128,265	146,054	141,422	149,304	206,456
Dubuque.....	2,883	3,410	2,826	3,163	3,146	3,015	4,152	3,595
Flint.....	3,623	4,210	4,509	5,426	10,476	14,198	7,719	12,868
Fort Wayne.....	5,970	7,273	7,206	7,699	7,516	7,461	8,866	8,218
Grand Rapids.....	16,017	15,346	18,252	18,756	18,867	25,553	19,617	24,820
Indianapolis.....	26,495	30,632	30,905	31,708	36,414	36,529	40,488	39,653
Jackson.....	3,243	3,125	3,195	3,549	2,707	3,231	4,138	5,579
Kalamazoo.....	3,630	4,354	4,094	4,289	5,627	5,427	5,545	5,730
Lansing.....	4,003	4,801	5,236	5,415	6,982	5,678	7,518	6,937
Milwaukee.....	41,577	51,313	50,404	56,265	59,882	69,387	70,630	74,045
Moline.....	2,002	2,540	2,478	2,211				
Peoria.....	7,173	8,676	7,982	8,477	11,683	11,432	10,773	10,805
Rockford.....	4,652	6,034	5,468	5,124	6,817	7,522	6,667	6,639
Sioux City.....	11,139	13,249	11,332	9,586	17,696	19,163	19,702	16,181
South Bend.....	5,118	6,481	5,890	6,155	2,984	3,129	3,739	3,987
Springfield, Ill.....	5,960	7,108	5,737	5,867				
Waterloo.....	2,526	3,186	3,401	2,796	4,372	5,400	5,063	4,936
District No. 8—St. Louis:								
East St. Louis and National Stock Yards.	7,418	8,030	8,535	8,914				
Evansville.....	4,407	4,344	5,243	5,343	5,596	5,316	6,023	5,536
Little Rock.....	8,622	9,015	9,545	10,489	10,031	10,239	10,611	9,247
Louisville.....	19,690	23,513	21,718	24,472	32,234	35,809	37,596	38,792
Do.....	25,419	31,039	28,945	31,271				
Memphis.....	17,110	16,247	20,808	20,858	34,988	35,042	37,263	38,771
Quincy.....	2,443	3,546	2,474	2,447				
St. Louis.....	1102,342	1118,422	1119,796	1126,285	144,411	163,044	155,850	166,406
Do.....	113,525	131,389	134,832	140,306				
Springfield, Mo.....	2,435	3,239	3,102	2,876				
District No. 9—Minneapolis:								
Aberdeen.....	1,456	1,374	1,000	1,588	1,573	1,592	1,861	1,722
Billings.....	1,400	1,632	1,632	1,884	2,442	2,521	2,515	2,710
Duluth.....	11,109	14,453	15,266	15,159	16,423	15,120	20,346	20,371
Fargo.....	2,042	2,788	2,511	2,405	2,866	3,391	4,103	3,477
Grand Forks.....	997	1,269	1,236	1,071	1,583	2,109	2,113	1,987
Great Falls.....	1,457	1,723	1,647	1,752	2,297	1,593	2,017	2,317
Helena.....	1,467	2,483	1,922	2,201	2,081	2,741	2,449	2,014
Minneapolis.....	54,499	72,067	68,831	67,118	76,032	81,474	94,960	85,287
St. Paul.....	20,453	30,115	26,903	30,160	38,339	37,995	36,627	41,084
Sioux Falls.....	3,719	4,817	3,961	3,991	7,412	7,616	6,808	7,462
Superior.....	1,458	1,997	1,913	2,088	2,072	2,135	2,425	2,024
Winona.....	1,020	1,272	1,079	794	1,326	1,540	1,373	1,332

¹ Debits of banks which submitted reports in 1920.

DEBITS TO INDIVIDUAL ACCOUNTS AT CLEARING-HOUSE BANKS—Continued.

DATA FOR EACH REPORTING CENTER—Continued.

[In thousands of dollars.]

	1921. Week ending—				1920. Week ending—			
	Mar. 30.	Apr. 6.	Apr. 13.	Apr. 20.	Mar. 31.	Apr. 7.	Apr. 14.	Apr. 21.
District No. 10—Kansas City:								
Atchison.....	1,200	1,240	1,300	980				
Bartlesville.....	2,021	2,589	2,774	2,480	4,011	3,541	3,953	3,370
Cheyenne.....	1,686	1,821	1,912	1,727	2,430	2,433	1,672	1,720
Colorado Springs.....	2,131	2,580	2,552	2,182	3,191	3,370	3,775	3,378
Denver.....	28,413	36,000	29,106	31,073	51,021	47,583	44,005	38,461
Joplin.....	1,824	2,259	2,198	2,173	4,037	3,719	4,846	4,478
Kansas City, Kans.....	3,325	3,137	3,357	3,223	4,537	3,907	4,436	3,866
Kansas City, Mo.....	59,107	75,066	67,872	69,143	85,050	86,146	73,934	71,394
Muskogee.....	3,892	4,402	3,599	3,486	6,013	6,336	5,861	5,655
Oklahoma City.....	17,621	22,060	19,989	20,365	19,769	21,718	21,322	23,048
Omaha.....	38,877	42,867	40,395	44,029	66,459	57,801	59,116	66,248
Pueblo.....	4,335	5,631	4,812	4,556	4,823	5,055	5,771	3,213
St. Joseph.....	14,486	15,350	15,631	13,990	23,088	21,815	21,674	24,679
Topeka.....	2,537	4,639	3,983	4,099	5,571	6,499	6,918	6,021
Tulsa.....	19,467	21,134	21,266	22,238	31,281	26,856	31,460	29,434
Wichita.....	7,868	9,551	10,235	10,282	11,910	14,304	14,452	14,847
District No. 11—Dallas:								
Albuquerque.....	804	1,788	1,599	1,145	1,763	1,968	1,752	2,359
Austin.....	2,465	2,900	3,039	2,480	2,815	3,387	4,060	3,077
Beaumont.....	2,848	3,322	2,350	3,600	4,339	5,859	5,478	4,594
Dallas.....	29,621	32,838	29,936	33,779	39,172	42,146	42,887	41,337
El Paso.....	7,405	7,444	7,795	7,534	9,467	9,538	9,660	9,584
Fort Worth.....	20,410	19,120	21,500	19,400	23,198	24,422	25,004	22,533
Galveston.....	17,674	21,570	17,090	16,451	7,935	9,546	8,413	7,785
Houston.....	26,822	26,065	22,620	28,566	38,819	33,441	32,563	32,600
San Antonio.....	5,910	6,879	7,144	7,007	7,779	8,875	8,367	7,152
Shreveport.....	5,840	7,270	7,940	6,275	9,874	10,951	9,612	8,981
Texarkana, Tex.....	1,023	1,490	1,539	1,652	1,818	1,912	3,090	3,062
Tucson.....	1,269	1,302	1,471	1,385	1,596	1,563	1,773	1,684
Waco.....	2,872	3,666	3,015	3,195	4,125	4,470	3,900	4,351
District No. 12—San Francisco:								
Berkeley.....	2,252	2,973	2,750	2,838	2,194	2,727	2,591	2,854
Boise.....	1,862	2,610	3,195	2,644	2,975	3,365	3,260	2,240
Fresno.....	8,738	9,739	9,401	9,838	9,205	8,752	10,519	8,633
Long Beach.....	5,204	6,321	5,389	6,088	5,167	5,853	5,619	6,167
Los Angeles.....	92,979	100,682	94,970	103,232	89,409	101,971	96,025	99,255
Oakland.....	18,293	18,412	18,069	18,643	19,510	19,709	20,423	19,523
Ogden.....	3,011	3,620	3,076	2,995	4,043	1,948	4,324	3,344
Pasadena.....	5,001	6,781	5,942	5,727	5,605	5,897	5,975	6,988
Portland.....	30,882	39,382	43,505	37,283	43,778	50,636	51,538	52,561
Reno.....	2,180	2,656	2,568	2,745	2,821	2,922	3,124	2,001
Sacramento.....	10,524	11,493	11,826	12,681	12,183	13,420	14,105	14,723
Salt Lake City.....	14,895	15,624	18,059	16,513	18,914	20,192	16,464	19,429
San Diego.....	7,300	8,329	8,911	8,726	8,011	8,484	8,076	9,109
San Francisco.....	171,072	175,258	167,823	198,664	198,401	196,897	208,344	233,741
San Jose.....	3,591	4,304	4,533	5,180	4,526	5,374	4,943	4,648
Seattle.....	29,402	30,720	33,520	33,407	47,318	49,205	61,888	50,480
Spokane.....	9,234	10,341	12,497	10,856	11,661	13,229	14,254	14,758
Stockton.....	3,742	4,753	6,434	4,629	4,973	6,526	5,700	4,588
Tacoma.....	8,248	9,657	8,773	8,182	11,325	11,587	12,529	13,807
Yakima.....	2,101	2,293	1,991	2,216	3,306	4,076	3,412	3,479

FEDERAL RESERVE CLEARING SYSTEM.

OPERATIONS FROM MAR. 16 TO APR. 15, 1921.

[All figures shown in thousands.]

Federal Reserve Bank or branch.	Items drawn on banks located in own district.				Items drawn on Treasurer of United States.		Total items handled, exclusive of duplications.		Items forwarded to other Federal Reserve Banks and their branches.		Items forwarded to parent bank or to branch in same district.		Total items handled, including duplications.	
	In Federal Reserve Bank or branch city.		Outside Federal Reserve Bank or branch city.											
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.
Boston.....	751	537,596	3,300	380,428	144	28,838	4,195	946,792	161	55,327	-----	-----	4,356	1,002,119
New York.....	1,531	1,750,426	4,451	966,784	1,105	190,580	7,087	2,907,790	1,019	507,711	24	6,320	8,130	3,421,821
Buffalo.....	204	88,737	413	50,829	15	2,846	632	142,412	159	28,398	45	22,311	836	193,121
Philadelphia.....	1,792	766,885	2,163	246,240	211	43,125	4,166	1,056,250	702	184,793	-----	-----	4,928	1,241,013
Cleveland.....	413	217,342	1,243	163,448	80	7,330	1,736	388,120	45	29,009	38	12,991	1,819	430,120
Cincinnati.....	201	134,316	818	84,061	60	7,829	11,086	1,227,582	12	23,434	12	3,711	1,110	254,727
Pittsburgh.....	496	292,669	911	104,282	53	9,426	1,460	406,377	71	39,532	29	6,364	1,560	452,273
Richmond.....	118	118,918	1,911	260,502	57	8,382	2,086	387,802	157	58,708	58	11,503	2,301	458,013
Baltimore.....	250	157,245	675	77,899	62	17,274	987	252,418	79	29,892	73	8,223	1,132	290,533
Atlanta.....	119	56,097	335	43,338	34	6,333	489	105,768	47	16,499	42	6,405	578	128,672
Birmingham.....	142	26,990	143	8,399	12	1,296	297	36,685	18	10,122	31	31,384	346	78,191
Jacksonville.....	58	23,051	166	18,384	9	1,638	233	43,073	2	416	36	13,022	271	56,511
Nashville.....	53	29,625	198	23,021	17	2,053	268	54,699	43	7,450	11	1,641	322	63,690
New Orleans.....	66	47,182	113	13,721	36	7,420	215	68,323	49	12,886	6	762	270	82,071
Chicago.....	1,081	642,427	3,722	352,689	451	65,557	5,254	1,060,673	339	34,266	8	2,085	5,601	1,097,024
Detroit.....	302	148,337	408	44,827	35	4,375	745	197,539	8	7,699	5	2,301	758	207,539
St. Louis.....	304	228,547	1,383	89,645	138	15,039	1,825	333,221	26	4,260	8	1,150	1,859	338,641
Little Rock.....	48	23,889	287	17,098	8	1,153	343	42,140	9	1,706	24	3,125	376	40,971
Louisville.....	102	60,364	429	25,534	31	3,057	562	88,955	13	1,872	3	285	578	81,112
Memphis.....	71	25,674	165	9,482	10	2,103	246	37,259	2	682	4	442	252	38,383
Minneapolis.....	252	125,220	1,451	88,629	50	5,930	1,753	219,779	190	36,679	6	817	1,949	256,775
Helena.....	41	9,430	188	11,452	3	547	232	21,429	7	2,041	2	2,025	241	25,495
Kansas City.....	251	261,535	2,495	111,915	106	9,983	2,852	383,433	269	51,329	77	13,456	3,198	448,218
Denver.....	76	45,510	341	19,985	21	3,037	438	68,532	75	18,310	52	12,611	565	99,453
Oklahoma City.....	68	55,429	947	77,084	7	1,022	11,022	133,535	44	8,263	15	8,895	1,081	150,693
Omaha.....	109	57,477	609	41,825	44	3,158	1,763	102,955	41	6,281	19	5,883	823	115,119
Dallas.....	148	61,014	1,570	195,392	30	3,980	1,748	260,386	77	18,525	64	7,098	1,889	286,009
El Paso.....	45	10,373	135	11,030	18	2,654	198	24,037	14	6,148	4	733	216	30,933
Houston.....	75	40,370	325	35,008	55	3,062	455	78,430	21	3,214	6	1,859	482	82,994
San Francisco.....	194	115,750	528	35,225	77	89,104	799	240,079	28	4,499	43	6,846	870	251,424
Los Angeles.....	354	114,785	903	72,540	33	19,380	1,290	206,705	111	17,569	56	13,456	1,457	237,730
Portland.....	66	33,559	217	12,601	18	8,273	301	54,423	5	1,653	29	3,880	335	59,966
Salt Lake City.....	45	22,730	366	28,138	12	3,318	423	54,186	12	11,586	13	7,342	448	73,114
Seattle.....	102	35,670	216	17,562	24	11,081	342	64,313	16	4,839	39	5,720	397	74,922
Spokane.....	39	17,100	175	10,158	9	994	223	28,252	10	2,094	16	6,404	249	36,750
Total:														
Mar. 16 to Apr. 15, 1921.....	9,967	6,382,199	33,701	3,746,158	3,085	600,167	146,751	10,724,392	3,941	1,247,842	898	229,941	51,590	12,202,175
Feb. 16 to Mar. 15, 1921.....	8,049	5,576,684	28,493	3,310,584	1,937	528,946	138,486	9,417,648	3,528	1,080,836	789	200,431	42,803	10,698,915
Mar. 16 to Apr. 15, 1920.....	7,982	8,512,045	28,225	5,055,423	2,193	882,375	138,407	14,451,712	3,810	1,818,617	856	318,048	43,073	16,588,377

¹ Includes items drawn in banks in other Federal Reserve districts forwarded direct to drawee bank.

NOTE.—Number of business days in period for Philadelphia, Pittsburgh, Baltimore, Jacksonville, Nashville, New Orleans, Detroit, St. Louis, Little Rock, Louisville, Memphis, Minneapolis, and Salt Lake City was 26, for other Federal Reserve bank and branch cities, 27 days.

NUMBER OF MEMBER AND NONMEMBER BANKS IN EACH FEDERAL RESERVE DISTRICT, APR. 15, 1921 AND 1920.

Federal Reserve district.	Member banks ¹		Nonmember banks.			
			On par list.		Not on par list. ¹	
	1921	1920	1921	1920	1921	1920
Boston.....	436	432	256	253	.....	.....
New York.....	788	770	327	320	.....	.....
Philadelphia.....	700	684	447	419	.....	.....
Cleveland.....	877	856	1,082	1,079	.....	.....
Richmond.....	615	595	1,057	763	542	749
Atlanta.....	486	426	411	445	1,167	1,130
Chicago.....	1,430	1,385	4,261	4,231	.....	.....
St. Louis.....	577	555	2,515	2,514	170	174
Minneapolis.....	1,012	943	2,797	2,913	53	.....
Kansas City.....	1,093	1,055	3,393	3,368	.....	.....
Dallas.....	856	773	1,247	1,248	.....	.....
San Francisco.....	856	772	999	939	.....	104
Total.....	9,726	9,246	18,792	18,492	1,932	2,157

¹ Incorporated banks other than mutual savings banks.

GOLD SETTLEMENT FUND.

INTER FEDERAL RESERVE BANK TRANSACTIONS FROM MAR. 18 TO APR. 21, 1921.

[In thousands of dollars.]

Federal Reserve Bank.	Transfers.		Daily settlements.		Changes in ownership of gold through transfers and settlements.		Balance in banks' fund at end of period.
	Debit.	Credit.	Total debits.	Total credits.	Decrease.	Increase.	
Boston.....	34,500	2,499	430,656	502,374	-----	39,717	50,104
New York.....	23,001	125,000	1,756,242	1,695,534	-----	41,291	62,739
Philadelphia.....	11,000	4,001	650,438	639,871	17,566	-----	46,909
Cleveland.....	70,500	36,079	527,263	537,021	24,663	-----	72,715
Richmond.....	7,000	24,000	567,323	541,600	8,728	-----	22,614
Atlanta.....	6,000	3,000	201,834	213,571	-----	8,737	15,221
Chicago.....	48,000	7,000	781,201	819,188	3,013	-----	107,506
St. Louis.....	6,000	3,000	439,121	438,837	3,284	-----	18,971
Minneapolis.....	5,500	1,000	130,130	119,813	14,817	-----	7,738
Kansas City.....	10,000	2,000	352,241	349,939	10,302	-----	23,663
Dallas.....	50,578	40,500	189,096	186,138	-----	964	5,101
San Francisco.....	-----	10,000	234,448	216,112	8,336	-----	33,867
Total, five weeks ending—							
April 21, 1921.....	258,079	258,079	6,259,998	6,259,998	90,709	90,709	469,148
Mar. 17, 1921.....	148,380	148,380	6,323,085	6,323,085	-----	-----	516,972
Apr. 22, 1920.....	661,270	661,270	8,584,231	8,584,231	-----	-----	368,504
Mar. 18, 1920.....	416,266	416,266	8,503,649	8,503,649	-----	-----	388,384

GOLD AND SILVER IMPORTS AND EXPORTS.

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

Country.	Imports.						Exports.					
	During 10 days ending Mar. 20, 1921.	During 11 days ending Mar. 31, 1921.	During month of March, 1921.	During 11 days ending Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1920.	During 10 days ending Mar. 20, 1921.	During 11 days ending Mar. 31, 1921.	During month of March, 1921.	During 10 days ending Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1920.
Austria.....		\$5,000	\$5,000		\$9,000							
Belgium.....					38,391							
Denmark.....			53,437		89,922							
France.....	\$14,216,082	27,019,290	41,241,531	\$3,416,747	62,937,143	\$19,804						
Germany.....	2,629	903	3,532		3,593							\$10,000
Greece.....		158,499	168,035		956,211							201,339
Italy.....					11,265	40,000						
Netherlands.....	188,046	558,774	938,752	4,165,177	5,722,306	1,161,428						
Portugal.....					7,691	7,317						
Russia in Europe.....					85,000							
Spain.....		129,614	138,957		418,915							
Sweden.....	664,600	164,356	4,678,956	4,737,870	9,416,826							
Turkey in Europe.....	17,488		17,488		238,488							
United Kingdom—England.....	6,526,179	7,575,282	24,075,538	4,369,040	55,532,348	48,348,362						13,235
Total Europe.....	21,615,024	35,611,718	71,321,226	16,688,834	135,462,099	49,576,911						224,574
Bermuda.....		600	600		600							
British Honduras.....					20							
Canada.....	22,550	10,264,511	19,825,753	51,133	20,603,468	18,481,988	\$137,902	\$22,825	\$247,341	\$18,141	\$653,489	1,864,394
Costa Rica.....	8,949	490	37,963	2,036	172,254	84,292						
Guatemala.....		13,000	13,000	21,000	158,106							
Honduras.....	22,942	597	35,123	10,377	131,194	54,788						19,000
Nicaragua.....	9,824	25,854	69,860	12,742	203,998	289,129						
Panama.....	231	37,164	362,838	20,845	523,687	30,160						
Salvador.....		31,008	82,776	29,000	283,376	101,221						
Mexico.....	122,930	129,424	445,388	110,192	1,556,428	1,143,741	173,417	42,040	300,187	28,402	3,126,387	11,534,429
Cuba.....		278	2,601		9,553	3,058			50,000		200,000	
British West Indies.....	61,000	1,120	133,920	600	165,708	1,374						
Virgin Islands of the United States.....												10,000
Dominican Republic.....												16,000
Dutch West Indies.....	269,726	226,067	509,803	249,386	2,025,128							
Total North America.....	518,152	10,730,113	21,517,302	509,912	25,833,500	20,189,771	311,319	64,865	597,528	46,543	3,979,876	13,443,823
Argentina.....		77,016	162,016	84,866	314,403	23,270						63,645,000
Bolivia.....		71	606		1,166	5,532						
Brazil.....					8,552	4,435					24,300	220,000
Chile.....	6,062	20,013	28,864		52,835	118,629						400,000
Colombia.....	229,891	84,735	1,122,867	270,835	4,070,587	12,392						700,000
Ecuador.....				67,204	210,466	124,874						130,000
British Guiana.....					7,408	22,060						
Dutch Guiana.....					21,104							
Peru.....	46,880	12,553	92,234	3,104	269,706	189,302						
Uruguay.....	58,393	468,471	769,832	618,317	1,857,481							10,850,000
Venezuela.....	1,517	69,710	86,379	2,827	302,329	1,170						184,000
Total South America.....	342,743	732,569	2,262,798	1,047,153	7,116,037	501,664					24,300	76,129,000
China.....		1,596,727	2,653,169		9,660,719							15,833,895
British India.....	346,614	571,994	2,058,308	194,129	8,274,262							2,716,713
Straits Settlements.....												6,116,454
Dutch East Indies.....	81,856		81,856	46,758	204,063	2,265,474					60,000	5,542,149
Hongkong.....					2,845,545		26,700	55,900	111,840	2,400	455,120	18,009,422
Japan.....					2,208,234							6,762,067
Turkey in Asia.....		137,611	145,664	5,220	150,894							
Total Asia.....	428,470	2,306,332	4,938,997	246,107	23,343,707	2,265,474	26,700	55,900	111,840	2,400	515,120	54,980,700
Australia.....	1,216,625		1,216,625		3,900,287							
New Zealand.....		202,834	202,834	20,900	529,180	346,398						
Tahiti.....									300		300	
Philippine Islands.....	38,581	263	74,253	23,000	282,996	220,370						
Abyssinia.....	19,625		19,625	800	20,425							
British West Africa.....												26,038
British South Africa.....		51,823	51,823		51,823							
Portuguese Africa.....	51,313		51,313		166,328	37,727						
Total, all countries.....	24,230,533	49,635,652	101,656,796	18,536,706	196,706,382	73,133,315	338,019	120,765	709,668	48,943	4,519,596	144,804,135
Excess of imports or exports.....	23,892,514	49,514,887	100,947,128	18,487,763	192,186,786							71,665,820

¹ Includes: Ore and base bullion, \$15,325,000; United States mint or assay office bars, \$428,000; other refined bullion, \$154,470,000; United States coin, \$5,836,000; foreign coin, \$20,648,000.

² Includes: Domestic exports—Ore and base bullion, \$23,000; United States mint or assay office bars, \$295,000; other refined bullion, \$35,000; coin, \$3,888,000. Foreign exports—Coin, \$279,000.

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

Country.	Imports.						Exports.					
	During 10 days ending Mar. 20, 1921.	During 11 days ending Mar. 31, 1921.	During month of March, 1921.	During 10 days ending Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1920.	During 10 days ending Mar. 20, 1921.	During 11 days ending Mar. 31, 1921.	During month of March, 1921.	During 10 days ending Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1921.	From Jan. 1 to Apr. 10, 1920.
France.....		\$3,200	\$11,841	\$102	\$74,364	\$12,142						
Germany.....	\$5,287	10,369	15,924		39,072							
Greece.....		6,179	22,144		209,799							
Netherlands.....			805		369							
Portugal.....		5,923	5,923		9,830	4,375						
Spain.....		295	436		15,270							
United Kingdom—England.....				936	25,326	34,967	\$333,384	\$287,230	\$765,413		\$3,742,028	\$308,241
Total, Europe.....	5,287	30,966	56,268	1,038	374,466	51,853	333,384	287,230	765,413		3,742,028	308,241
British Honduras.....						30,220						
Canada.....	132,623	248,694	451,034	37,229	1,341,725	1,298,100	83,774	60,097	224,771	\$79,087	797,940	4,282,198
Costa Rica.....	460	7	2,080	173	6,363	10,496						
Guatemala.....					15	19,980		500	500		500	500
Honduras.....	42,979	24,373	67,368	78,946	383,480	739,155					800	348,800
Nicaragua.....	15,173		15,191	17,878	83,423	278,655						
Panama.....	992		996	48	5,120	28,252					226,000	431,000
Salvador.....		922	3,922		6,081	3,358,361			50,000		50,000	
Mexico.....	668,345	802,244	2,375,308	564,262	9,567,607	21,828,063	66,268	27,915	112,677	37,378	784,786	1,511,607
Cuba.....		2,847	2,847	83	7,430	26,673	9,750		9,750		298,771	169,917
British West Indies.....					122	6,918		1,200	1,200	390	88,840	14,585
Virgin Islands of United States.....												10,000
Dominican Republic.....												128,000
Dutch West Indies.....	98	178	276	154	720							
French West Indies.....												
Haiti.....						20						4,000
Total, North America.....	860,670	1,079,265	2,919,022	698,773	11,402,088	27,624,893	159,792	89,712	398,898	116,855	2,247,637	6,900,607
Argentina.....		997	997	955	7,326	8,941			450		450	891
Bolivia.....		58,716	74,296		125,442	639,535						
Brazil.....			39,850		40,271	270						803
Chile.....	91,863	42,154	145,693		745,392	977,471						
Colombia.....	1,554	752	27,377	6,008	59,539	57,247					239,500	
Ecuador.....				3,204	15,400	12,544						
Dutch Guiana.....					42							624
Peru.....	184,747	238,717	539,115	65,264	1,402,158	3,136,056						
Venezuela.....		35	66	54	400							10,000
Total, South America.....	278,164	341,371	827,394	75,485	2,395,970	4,832,064			450		239,950	12,318
China.....	552	541	2,107		3,689	11,974	266,864	55,525	322,389		2,351,843	38,547,382
British India.....				40	40		408,086	145,000	553,086		1,515,985	223,211
Dutch East Indies.....	38,419	21,572	59,991	68,836	212,288	1,628,686						
French East Indies.....												3,525,672
Hongkong.....					192	1,650	121,647	179,167	415,639		3,413,970	11,911,750
Japan.....							462,650		462,650	22,882	1,574,477	
Total, Asia.....	38,971	22,113	62,098	68,876	216,209	1,642,310	1,259,247	379,692	1,753,764	22,882	8,856,275	54,208,015
Australia.....					1,860							
New Zealand.....		45	131	33	164	3,463						
Philippine Islands.....	77	3	569	500	4,951	6,789						
Abyssinia.....	31		31		31							
British West Africa.....												3,080
British South Africa.....		3,280	3,280		3,760							
Portuguese Africa.....	3,254		3,254		14,251	7,604						
Total, all countries.....	1,186,454	1,477,043	3,872,047	844,705	14,413,748	34,168,976	1,752,423	756,634	2,918,525	139,737	15,085,890	61,432,261
Excess of imports or exports.....		720,409	953,522	704,968			565,969				672,142	27,263,285

¹ Includes: Ore and base bullion, \$12,108,000; refined bullion, \$1,636,000; United States coin, \$252,000; foreign coin, \$418,000.

² Includes: Domestic exports—Ore and base bullion, \$1,000; United States Mint or Assay Office bars, \$152,000; other refined bullion, \$8,522,000; coin, \$754,000. Foreign exports—Ore and base bullion, \$2,000; refined bullion, \$4,166,000; coin, \$1,489,000.

DISCOUNT AND INTEREST RATES.

In the following table are presented actual discount and interest rates prevailing during the 30-day period ending April 15, 1921, in the various cities in which the several Federal Reserve Banks and their branches are located. A complete description of the several types of paper for which quotations are given will be found in the September, 1918, and October, 1918, FEDERAL RESERVE BULLETINS. Quotations for new types of paper will be added from time to time as deemed of interest.

Comparison with rates prevailing during the period ending March 15, 1921, shows no marked changes in rates. There is a tendency to decrease in the rates for bankers' acceptances, both indorsed and unindorsed, but for other types of paper such increases and decreases as have occurred are approximately equal in number. With the exception of bankers' acceptances, present rates as a whole continue higher for all types of paper than those prevailing during the same period of 1920.

DISCOUNT AND INTEREST RATES PREVAILING IN VARIOUS CENTERS DURING 30-DAY PERIOD ENDING APR. 15, 1921.

District.	City.	Prime commercial paper.				Interbank loans.	Bankers' acceptances, 60 to 90 days.		Collateral loans—stock exchange or other current.			Cattle loans.	Secured by warehouse receipts, etc.	Ordinary loans to customers secured by Liberty bonds and certificates of indebt- edness.
		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. 7 3/4 6 1/2 7	H. L. C. 8 6 1/2 7 1/2	H. L. C. 7 5 7 1/2 7 1/2	H. L. C. 8 7 1/2 7 1/2 7 1/2	H. L. C. 7 6 6 1/2	H. L. C. 6 1/2 5 1/2 5 1/2	H. L. C. 6 1/2 5 1/2 5 1/2	H. L. C. 7 7 7 7	H. L. C. 8 6 1/2 7	H. L. C. 8 6 1/2 7 1/2	H. L. C.	H. L. C.	H. L. C. 7 6 6 1/2
No. 2....	New York ¹	8 6 7	8 6 7	7 7 7	7 7 1/2 7 1/2	8 5 1/2 7	7 5 1/2 5 1/2 6 1/2	7 5 1/2 5 1/2 6 1/2	8 4 6 -7	8 6 6 -7	7 6 7			7 4 1/2 6
	Buffalo.....	7 5 7	7 6 7	8 7 1/2 8	8 7 1/2 8	8 6 6 -7	6 1/2 6 1/2 6 1/2	7 6 6 1/2	7 6 6 1/2	7 6 6 1/2	7 6 6 1/2			7 6 7
No. 3....	Philadelphia.....	6 6 6	6 6 6	8 7 1/2 8	8 7 1/2 8	6 6 6	6 1/2 6 1/2 6 1/2	6 1/2 6 1/2 6 1/2	6 6 6	6 6 6	6 6 6			6 6 6
No. 4....	Cleveland.....	7 6 7	7 6 7	7 7 7	7 7 7	7 6 6	6 1/2 5 1/2 5 1/2	6 1/2 5 1/2 5 1/2	8 6 7	8 6 7	8 6 7			7 6 7
	Pittsburgh.....	6 6 6	6 6 6	7 7 7 7 1/2	7 7 7 7 1/2	6 6 6	6 1/2 5 1/2 5 1/2	6 1/2 5 1/2 5 1/2	6 6 6	6 6 6	6 6 6			6 6 6
	Cincinnati.....	7 6 6 6 1/2	7 6 6 6 1/2	7 6 1/2 6 1/2	7 6 6 1/2 7	7 6 6	6 5 1/2 5 1/2 6	6 5 1/2 5 1/2 6	6 6 6	6 6 6	6 6 6			6 6 6
No. 5....	Richmond.....	6 6 6	6 6 6			6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6			6 6 6
	Baltimore.....	6 6 6	6 6 6			6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6			6 6 6
No. 6....	Atlanta.....	8 6 8	8 6 8			8 6 7	8 7 8	8 7 8	8 6 7	8 6 7	8 6 7			8 6 7
	Birmingham.....	8 6 7-8	8 6 7-8	8 8 8	8 8 8	8 6 6 -7	5 1/2 5 1/2 5 1/2	5 1/2 5 1/2 5 1/2	8 6 7-8	8 6 7-8	8 6 7-8			8 6 7
	Jacksonville.....	8 6 7	8 7 8	8 7 8	8 7 8	8 6 7	8 8 8	8 8 8	8 6 8	8 6 8	8 7 8			8 7 8
	New Orleans.....	8 7 7 1/2-8	8 7 7 1/2-8	8 7 7 1/2	8 7 7 1/2	8 7 7 1/2	8 7 7 1/2	8 6 6 1/2-8 1/2	8 6 7 1/2-8	8 7 7 1/2-8	8 7 7 1/2-8			8 6 1/2 7 1/2-8
	Nashville.....	8 6 7	8 6 7			8 6 6			8 6 7	8 6 7	8 6 7			7 6 6
No. 7....	Chicago.....	7 6 1/2 7	7 6 1/2 7			9 7 7	5 1/2 5 1/2 5 1/2	6 6 6	7 6 1/2 7	7 6 1/2 7	7 6 1/2 7	7 7 7	7 6 1/2 7	7 5 6 1/2-7
	Detroit.....	7 7 7	7 7 7			7 6 1/2 7			7 7 7	7 7 7	7 7 7			7 6 1/2 7
No. 8....	St. Louis.....	8 6 1/2 7	8 6 1/2 7			7 6 1/2 7	6 1/2 5 1/2 6	6 5 1/2 6	8 6 1/2 7	7 1/2 6 1/2 7	7 1/2 6 1/2 7			7 6 7
	Louisville.....	7 6 6	7 6 6	8 7 1/2 7 1/2	8 7 1/2 7 1/2	6 6 6			7 6 6	7 6 6	7 6 6			6 6 6
	Memphis ²													
	Little Rock.....	8 7 8	8 7 8			7 7 7			8 7 8	8 7 8	8 7 8			8 7 8
No. 9....	Minneapolis.....	7 1/2 7 1/2 7 1/2	8 7 1/2 7 1/2	7 1/2 7 1/2 7 1/2	8 1/2 8 8	8 7 7 1/2	5 1/2 5 1/2 5 1/2	5 1/2 5 1/2 5 1/2	8 7 8	8 7 8	8 7 8			7 1/2 7 7
	Helena.....	10 7 8	10 8 8			8 6 8			10 7 8	10 7 8	10 6 10	10 8 9	10 8 8	10 8 8
No. 10....	Kansas City.....	8 6 7	7 1/2 6 7	7 1/2 6 7 1/2	7 1/2 6 7 1/2	8 6 7			8 6 7	8 6 7	8 6 7			8 6 6 -7
	Omaha.....	8 1/2 7 8	8 1/2 7 8			9 7 8			8 7 8	8 7 8	9 7 8	8 7 7 1/2		8 7 8
	Denver.....	8 6 7	8 6 7	8 7 1/2 8	8 7 1/2 8	8 7 7			8 6 7	8 6 7	8 6 7			8 6 7
	Oklahoma City.....	9 6 8	9 6 8	8 6 8	8 6 8	10 6 7			10 6 8	10 6 8	10 8 10	8 7 7 1/2		10 6 8
No. 11....	Dallas.....	7 6 1/2 7	7 7 7	8 8 8	8 8 8	7 6 7	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 7 8	8 7 7 1/2	8 7 7 1/2	8 6 1/2 8
	El Paso.....	10 7 8	10 8 8	8 8 8	8 8 8	7 6 7	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 6 1/2 7 1/2	8 6 1/2 7 1/2			8 6 1/2 8
	Houston.....	8 6 7	7 1/2 6 1/2 7			7 6 7	7 7 7	7 6 6 1/2	8 6 7	8 6 7	8 6 7			8 6 7
No. 12....	San Francisco.....	7 6 6 1/2	7 6 6 1/2	7 1/2 7 1/2 7 1/2	7 1/2 7 1/2 7 1/2	7 6 6 1/2	6 1/2 6 6 1/2	7 6 6 1/2	7 6 6 1/2	7 6 6 1/2	7 6 6 1/2			7 6 6 1/2
	Portland.....	8 6 6	8 6 6 1/2	8 7 1/2 8	8 7 1/2 8	7 6 7	7 5 6 1/2		8 6 7	8 6 7	8 6 7			8 6 7
	Seattle.....	8 6 1/2 8	8 7 7	8 7 1/2 8	8 7 1/2 8	8 7 7			7 7 7	8 6 1/2 8	8 6 1/2 8			8 6 8
	Spokane.....	8 7 8	8 7 7			7 6 1/2 7			8 7 8	8 7 8	8 7 8			8 7 8
	Salt Lake City.....	8 7 1/2 8	8 7 1/2 8			8 8 8			8 7 8	8 7 8	8 7 8			8 8 8
	Los Angeles.....	8 6 7	8 6 7	8 6 7 1/2	8 5 1/2 7 1/2	8 5 7	7 5 1/2 6	7 5 1/2 5 1/2	8 6 7	8 6 7	8 6 7			8 6 7

¹ Rates for demand paper secured by prime bankers' acceptances, high 7, low 5 1/2.

² No report.

MONEY HELD OUTSIDE THE UNITED STATES TREASURY AND THE FEDERAL RESERVE SYSTEM, APR. 1, 1921.

	General stock.	Held in the United States Treasury as assets of the Government. ¹	Held by or for Federal Reserve Banks and agents.	Held outside United States Treasury and Federal Reserve System.	Amount per capita outside United States Treasury and Federal Reserve System.
Gold coin (including bullion in Treasury)	\$3,001,487,915	\$425,716,950	² \$1,607,219,944	\$395,577,262	.....
Gold certificates.....	.....	.....	362,379,242	210,594,517	.....
Standard silver dollars.....	272,112,326	28,593,704	³ 30,882,045	47,199,256	.....
Silver certificates.....	.....	.....	93,147,799	70,699,174	.....
Subsidiary silver.....	271,111,530	8,443,724	.....	262,667,806	.....
Treasury notes of 1890.....	.....	.....	.....	1,590,348	.....
United States notes.....	346,681,016	3,875,677	⁴ 91,142,502	251,662,837	.....
Federal Reserve notes.....	3,265,571,195	7,591,552	324,443,805	2,933,535,838	.....
Federal Reserve bank notes.....	192,991,400	5,855,737	20,562,970	166,572,693	.....
National bank notes.....	732,818,484	16,868,625	4,965,536	710,984,323	.....
Total:					
Apr. 1, 1921.....	8,082,773,866	496,945,969	2,534,743,843	5,051,084,054	\$46.91
Mar. 1, 1921.....	8,084,936,396	493,976,120	2,385,101,578	5,205,858,698	48.41
Feb. 1, 1921.....	8,171,237,897	499,358,809	2,438,773,422	5,233,105,666	48.73
Jan. 1, 1921.....	8,372,970,904	494,296,257	2,377,972,494	5,500,702,153	51.29
July 1, 1920.....	7,887,181,586	485,057,472	2,021,271,614	5,380,852,500	50.19
Jan. 1, 1920.....	7,961,320,139	604,888,833	2,044,422,303	5,312,009,003	49.81
July 1, 1919.....	7,588,473,771	578,848,043	2,167,280,313	4,842,345,415	45.00
Jan. 1, 1919.....	7,780,793,606	454,948,160	2,220,705,767	5,105,139,679	47.83
July 1, 1918.....	6,742,225,784	356,124,750	2,018,361,825	4,367,739,209	41.31
Jan. 1, 1918.....	6,256,198,271	277,043,358	1,723,570,291	4,255,584,622	40.53
July 1, 1917.....	5,480,009,884	253,671,614	1,280,880,714	3,945,457,556	37.88

¹ Includes reserve funds held against issues of United States notes and Treasury notes of 1890 and redemption funds held against issues of national bank notes, Federal Reserve notes, and Federal Reserve Bank notes, but excludes gold and silver coin and bullion held in trust for the redemption of outstanding gold and silver certificates and Treasury notes of 1890.

² Exclusive of amounts held with United States Treasurer in gold redemption fund against Federal Reserve notes, and of gold held with foreign agencies but inclusive of balances in gold settlement fund standing to the credit of the Federal Reserve Banks and agents.

³ Includes subsidiary silver.

⁴ Includes Treasury notes of 1890.

DISCOUNT RATES OF THE FEDERAL RESERVE BANKS.

DISCOUNT RATES APPROVED BY THE FEDERAL RESERVE BOARD UP TO MAY 1, 1921.

Federal Reserve Bank.	Paper maturing within 90 days.				Bankers' acceptances maturing within 3 months.	Agricultural and live-stock paper maturing after 90 days, but within 6 months.
	Secured by—		Trade acceptances.	Commercial paper n. e. s.		
	Treasury certificates of indebtedness.	Liberty bonds and Victory notes.				
Boston.....	6	6	6	6	.....	6
New York.....	6	6	7	7	6	7
Philadelphia.....	¹ 6	5½	6	6	6	6
Cleveland.....	6	6	6	6	6	6
Richmond.....	6	6	6	6	6	6
Atlanta.....	6	5½	7	7	6	7
Chicago.....	6	6	7	7	6	7
St. Louis.....	6	5½	6	6	5½	6
Minneapolis.....	5½	6	6½	7	6	7
Kansas City.....	¹ 6	6	6	6	5½	6
Dallas.....	6	6	7	7	6	7
San Francisco.....	6	6	6	6	6	6

¹ Discount rate corresponds to interest rate borne by certificates pledged as collateral.

NOTE.—Rates shown for St. Louis and Kansas City are normal rates, applying to discounts not in excess of a basic line fixed for each member bank by the Federal Reserve Bank. Rates on discounts in excess of the basic line are subject to a ¼ per cent progressive increase for each 25 per cent by which the amount of accommodation extended exceeds the basic line, except that the maximum rate charged by the Kansas City bank does not exceed 12 per cent.

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