

(The article on the last page describes the replacing of worn currency through the Reserve Banks)

# MONTHLY REVIEW

## Of Credit and Business Conditions

### In the Second Federal Reserve District

By the Federal Reserve Agent, Federal Reserve Bank, New York

New York, August 1, 1922

#### Credit Conditions

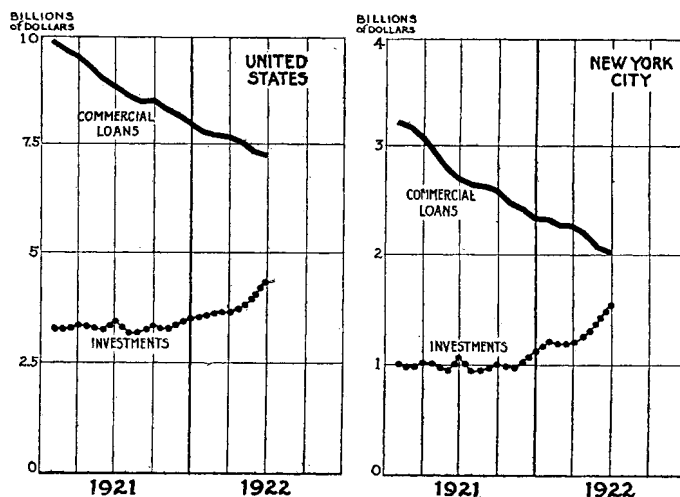
**T**HE volume of investments held by the banks, both in New York City and in other principal cities of the country, has been increasing for several months and is in contrast with the volume of commercial loans of the same banks, which has been decreasing ever since the maximum of expansion was reached in the autumn of 1920. These divergent movements are usual at times such as the present, and have been observed in previous periods of recovery from business inaction, as for instance in 1879, in 1893-4, and in 1907-8.

It will be recalled that, in the early stages of the recent period of commercial liquidation, funds released from employment were used by the banks to reduce and in many cases ultimately to extinguish their indebtedness to the Reserve Banks. New York City member banks, for example, which on November 5, 1920 were borrowing \$890,000,000 from the New York Reserve Bank, on May 31, 1922 were borrowing less than \$6,000,000. As the banks progressively reduced this debt, their investments in United States Government securities tended to increase, and by the end of last year were rising more rapidly, at a rate which has been maintained with little interruption since. In the early spring of 1922 their holdings of other fixed-term investments, including corporate bonds and stocks, also began to increase.

The diagrams on this page compare the downward movement of commercial loans with the upward movement of investments held by member banks in principal cities throughout the country including New York City, and in New York City alone. The lines showing investments reflect holdings both of United States Government and other securities. While the commercial loans of such banks throughout the country declined

\$3,421,000,000 in the last nineteen months, their investments during the same period rose about \$1,000,000,000, of which about \$300,000,000 was in other than Government securities; and while the commercial loans of member banks in New York City declined \$1,565,000,000 their investments rose over \$500,000,000, of which over \$70,000,000 was in other than Government securities.

The decline in commercial loans began in October 1920, some four months after commodity prices began to fall, and has already continued six months after commodity prices began again to rise. Just as the fall in prices required increased borrowing on the part of many business men, so the rise in prices has permitted the continued liquidation of loans in spite of the greater business activity which has been developing concurrently. The increase in the volume of investments held by the banks arises largely from the obvious tendency of bank funds, pending a recurrence of commercial demand, to seek employment elsewhere. It is reported to



Changes in Commercial Loans and Total Investments of Reporting Member Banks in the United States and in New York City

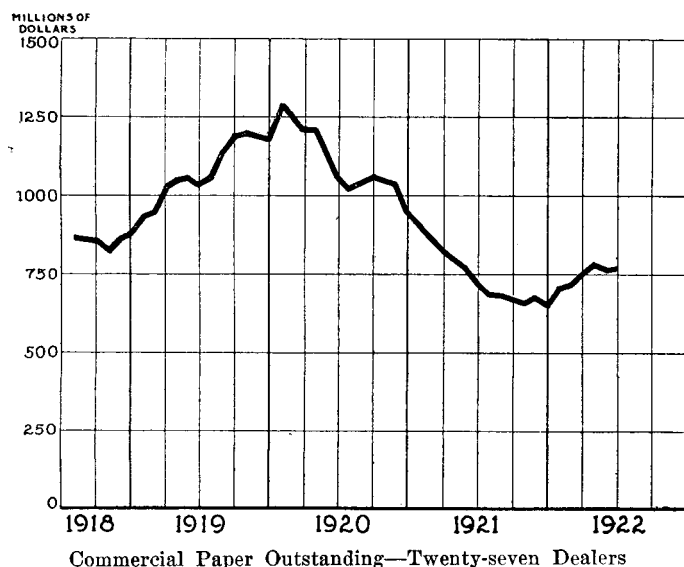
this bank that at this time investment buying of bonds is concentrated chiefly on either the long or the very short maturities. Presumably the banks, in order to conserve their power to meet the needs of their customers as they develop, are taking the shorter maturities.

Such fluctuations in money rates as have taken place in the past month have been closely related to the flow of funds in or out of this district. At this season of the year the main movement is away from New York, registering the rising need for funds in the agricultural sections of the country. Aside, however, from rates for Stock Exchange call money, which have tended to reflect hour to hour movements, there have been few changes in money rates from a month ago, and at the close of the month the rates in the open market are nearly the same as in June.

### Bill Market

A period of slack demand for bankers bills when money rates were firm early in July was followed by more active trading after money conditions eased near the middle of the month. Dealers' offering rates were maintained during July at the 3 per cent. level established in June except for a few days shortly after the middle of the month when several dealers quoted  $2\frac{7}{8}$  per cent. on the shorter maturities. Bid rates ranged from  $3\frac{1}{4}$  to 3 per cent. but the prevailing rate was  $3\frac{1}{8}$  per cent.

Acceptances drawn to finance the importation of raw sugar were again most numerous of the month's offerings of import bills and those drawn against coffee and silk were next in importance. Of export bills those financing the movement of cotton were in largest volume.



### Commercial Paper

There was no further decline in the prevailing rate for commercial paper during the first three weeks of July, but evidence of a downward tendency was contained in a wider acceptance of the 4 per cent. rate, and the sale of a small amount of exceptionally prime paper for the first time this year at  $3\frac{3}{4}$  per cent. Paper of slower moving character continued to be quoted at  $4\frac{1}{4}$ , and in some cases, at  $4\frac{1}{2}$  per cent.

As a rule, dealers reported a good demand in New York City, though buying was centered to a considerable extent in a few institutions. The most notable change occurred in the outside market where there was evidence of a broadening demand at prevailing rates. This was in contrast with conditions a month ago when the reduction of rates to 4 per cent. was almost entirely the reflection of buying by the New York institutions. The supply of prime paper appears to have shown a real increase during July, and this fact has helped to increase distribution.

The accompanying diagram of outstanding commercial paper at monthly intervals indicates a resumption during June of the increase which, up to May, has been in progress since the first of the year.

### Stock Market Money Rates

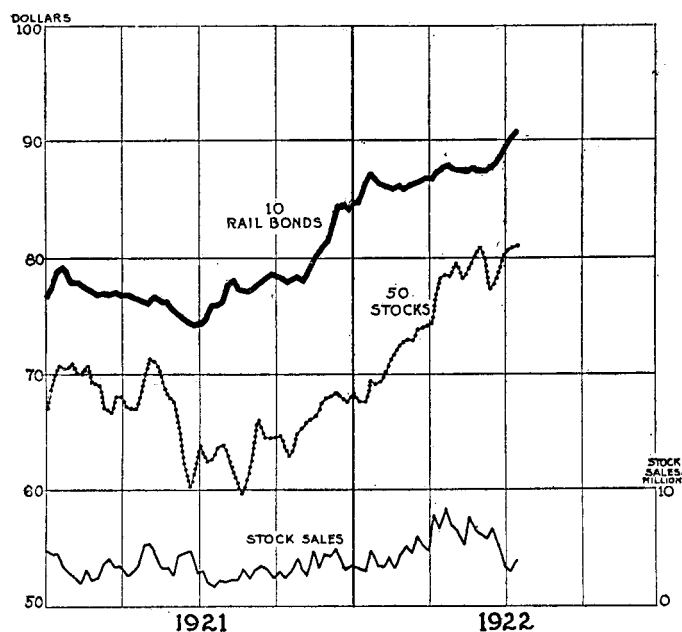
Between June 20 and July 20, call money rates ranged from  $2\frac{3}{4}$  to  $5\frac{1}{2}$  per cent., as in the preceding thirty days. Except for a period over the first of July, when the usual half year financial settlements caused relative firmness, rate fluctuations reflected little more than the movement of funds in and out of this district. Rates at 5 and  $5\frac{1}{2}$  per cent., as at the end of June and early in July, resulted in heavy offerings of call money locally and from out of town, and a decline in the rate by mid-month to  $2\frac{3}{4}$  per cent. At this level, lenders withdrew their funds for employment elsewhere, and there was a reaction again to 5 per cent.

Early in July, time money rates were advanced by  $\frac{1}{4}$  to a range of  $4\frac{1}{4}$  to  $4\frac{1}{2}$  per cent., and business became quiet. Accompanying the later ease in call money, rates were again lowered to  $3\frac{3}{4}$  to  $4\frac{1}{4}$  per cent.

### Stock Market

After the sharp reaction in stock prices during the first part of June, trading became comparatively quiet. Transactions, which had averaged considerably more than a million shares daily since early in April, dropped off to an average of about 650,000 shares in the latter part of June and in July. Prices, however, gradually recovered from the June low points, and by the third week of July both railroad and industrial stock price averages had established new high levels for the year, notwithstanding many unsettling factors in current foreign and domestic news.

Total stock transactions during June were 24,000,000 shares, about 5,000,000 less than in May. Trading continued restricted during July.



Prices of 10 High Grade Railroad Bonds and of 50 Representative Stocks, and Sales of Stocks Each Week on the New York Stock Exchange

## Bond Market

High grade, underlying bonds of American railroads became market leaders in a recovery in bond prices in the latter part of June, and by July 20, an average of ten such issues had risen  $3\frac{3}{4}$  points from the June low point to the highest levels since 1917. By these advances, investment yields in some cases were reduced to approximately  $4\frac{1}{4}$  per cent. High grade public utility and industrial bonds shared to some extent in this strength, but the movement in these groups was less regular and some issues were slow in regaining prices reached in previous months. The changes in several different bond groups, as shown by Wall Street Journal averages, were as follows:

	June Lowest Price	Price July 20	Advance
10 high grade rails.....	87.45 (June 1)	91.24	3.79
10 second grade rails.....	85.21 (June 19)	87.06	1.85
10 public utilities.....	87.22 (June 19)	88.12	.90
10 industrials.....	94.26 (June 19)	95.40	1.14
40 bonds.....	88.60 (June 19)	90.45	1.85

Buoyancy in the high grade railroad group was the result of further ease in the money market, a more discriminating demand on the part of buyers, and a shortage of new issues of the prime character attractive to the most conservative class of investors. A further influence was a certain amount of foreign buying in this market.

Domestic State, county, and municipal bonds were quiet and somewhat lower early in July, apparently due to heavy offerings in recent months. Foreign issues, as

a group, showed further losses between mid-June and mid-July, and especial weakness was manifest at times in French and Belgian issues. Results of economic and political developments abroad, weakness in some of the exchanges, and an incomplete distribution of a number of new issues were depressing factors.

Total transactions in bonds other than United States Government securities on the New York Stock Exchange during June were \$209,000,000, the smallest since February and \$78,000,000 less than the total for April, the month of most active trading this year.

## United States Government Securities

As a further important step in its program for dealing with the maturities of the short dated debt, the Treasury on July 26 announced that approximately half, or nearly \$1,000,000,000, of the outstanding Victory  $4\frac{3}{4}$  per cent. notes were called for redemption on December 15, 1922. The notes called for redemption bear the distinguishing letters "A, B, C, D, E" or "F" prefixed to their serial numbers and can thus be readily distinguished from the notes not affected by the call. Concurrently, as part of the refunding program, the Treasury offered its sixth issue of notes, in the amount of \$300,000,000 or thereabouts, with provision for additional allotments up to a limited amount in exchange for Victory notes. The new notes, dated August 1 and maturing September 15, 1926, bear interest at  $4\frac{1}{4}$  per cent., compared with a rate of  $4\frac{3}{8}$  per cent. for  $3\frac{1}{2}$  years on the preceding issue offered in June.

There was a general advance in Liberty bond prices about the middle of July, and all active issues rose to new high levels for the year. The  $3\frac{1}{2}$ s, and first, second, and fourth  $4\frac{1}{4}$ s reached or exceeded 101. This movement followed a gradual rise during May and June which reflected a growing tendency for banks and other holders of temporarily idle funds to employ their accumulating supplies in the Liberty bond market. At the high prices of the month, investment yields on active issues ranged from 3.38 per cent. on the  $3\frac{1}{2}$ s to approximately 4.05 per cent. on most of the  $4\frac{1}{4}$  per cent. issues.

June trading in Liberty and Victory issues involving \$126,000,000 was the smallest since February, and 41 per cent. smaller than in June last year. The reduction reflects in part a decrease in the floating supply of bonds, due to purchases by investors, and in part the redemption and refunding of Victory notes into notes not traded in on the Stock Exchange.

Offering rates for Treasury certificates and notes in the open market have shown little change in general level for several months. The average for the first three weeks of July ranged from 3.04 per cent. on one to three months' maturities to 3.60 per cent. on ten to twelve months' maturities, and 4.11 per cent. on three-year notes. Victory  $4\frac{3}{4}$  notes, at 100.98, equalled the highest price reached previously in March.

## New Financing

After a quiet period at the end of June, offering of new issues was resumed in moderate volume in July.

Few issues of more than moderate size, however, were sold except to provide funds for calling and refunding bonds of higher interest rate.

Demand continued active for conservatively priced, high grade issues, but buying of more speculative issues for rapid turnover was checked by the price declines occurring in May and June. As a rule, distributors of serial issues found more ready sale for nearest and most distant maturities than for those of intermediate dates.

The yield basis of prime offerings ranged from about  $5\frac{1}{4}$  to  $5\frac{1}{2}$  per cent. While this rate was higher than on some issues in recent months, it was due rather to a desire on the part of dealers to move their issues more promptly than to any firmer tendency of interest rates. Offering rates on prime State and municipal securities were 4 to  $4\frac{1}{4}$  per cent., while near maturities of some issues were quoted under 4 per cent.

Foreign offerings in the first three weeks of July totaled \$34,725,000. Reactionary tendencies in outstanding issues, some of which were not completely distributed, tended to restrict new business. July issues were large enough, however, to bring the total of foreign issues since the first of the year to \$713,276,900, slightly more than total sales of such issues in the whole of 1921.

June offerings of new securities on the New York market amounted to \$628,000,000 which included \$350,000,000 domestic corporation issues, \$154,000,000 domestic State, county, and municipal issues, \$119,000,000 foreign offerings, and a smaller amount of land bank securities. The domestic State, county, and municipal total was the largest since December, and for the six months ended June, their total of \$713,000,000 was the largest ever reported for a corresponding period. June domestic corporation issues fell below those of May, but were otherwise the largest for any month this year.

### Foreign Financing in New York and London

Both in the United States and in the United Kingdom the volume of financing done for other countries has shown a large, and on the whole, steady increase during the past year and a half. In fact in each market sales of foreign issues in the first half of this year practically equal sales for the whole of 1921. The following table shows by half years since the beginning of 1921 the totals of foreign issues sold in the two countries. Figures given represent par value of securities offered. Those for the United Kingdom are totals of issues reported weekly by the Economist.

Period	Sales in N. Y.	Sales in London
1st half, 1921.....	\$291,654,000	\$238,010,000
2nd half, 1921.....	403,550,000	229,810,000
1st half, 1922.....	678,552,000	481,191,000
Total.....	\$1,373,756,000	\$949,011,000

The extent of financing in the London market is noteworthy in view of the fact that in the last 18 months England has exported \$56,805,000 net gold and silver, and has had an import trade balance in merchandise of

\$1,417,367,000, whereas the United States has in the same period received net imports of gold and silver amounting to \$794,615,000, and has had a net export balance of merchandise valued at \$2,376,607,000.

Comparison of the sources of foreign capital flotations in the two countries shows that, broadly speaking, the United States has been engaged in financing chiefly North and South America and Europe, while the United Kingdom has been occupied chiefly with Asia and Australasia, and to a lesser extent with Europe and Africa. The direction of financing in the case of England is largely determined by the location of her colonies. In the New York market, Canada not only has led all other countries with respect to volume of issues sold here, but has led even such large continental divisions as South America and Europe. The accompanying table shows comparatively the sources of issues sold in the last eighteen months in New York and London. About 88 per cent. of all foreign offerings in New York originated in the Americas or in Europe, whereas over 68 per cent. of all foreign offerings in London were of Asia, Australasia, and Africa.

Country	Amount Offered in New York	% of Total	Amount Offered in London	% of Total
Canada and Newfd...	\$397,742,859	29.0	\$3,920,516	0.4
Rest of No. America...	82,225,000	6.0	56,650,961	6.0
South America.....	334,272,466	24.3	80,437,629	8.5
Europe, Eastern.....	50,850,000	3.7	21,961,375	2.3
Europe, Western.....	*345,807,800	25.2	136,228,674	14.3
Dutch East Indies, Philippine & Hawaii	137,600,000	10.0	23,681,526	2.5
Asia, Continental.....	.....	.....	267,234,674	28.2
Africa.....	.....	.....	100,519,605	10.6
Australasia.....	25,258,000	1.8	258,375,834	27.2
Total.....	\$1,373,756,125	100.0	\$949,010,794	100.0

\*(50,000,000 refunding.)

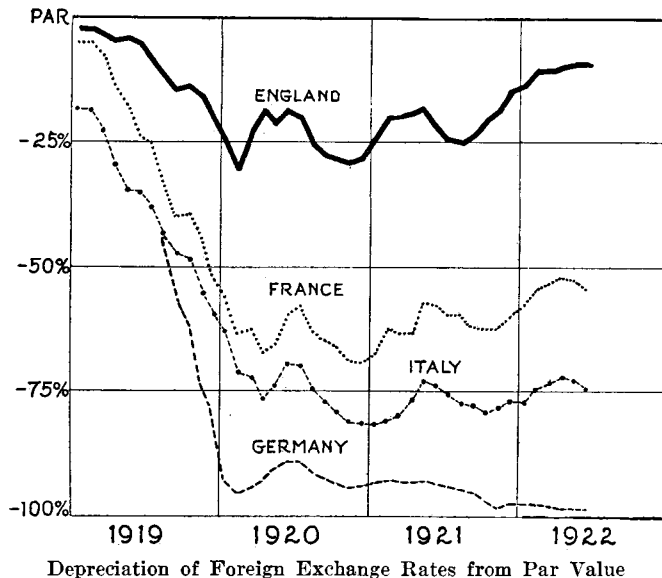
Of issues sold in the United Kingdom, \$598,616,936 or 63 per cent., represented borrowing by British possessions, chiefly Australasia, African possessions, and India and Ceylon.

### Foreign Exchange

German marks sold at less than  $\frac{1}{5}$  of a cent on July 8 after a series of declines which were accompanied by general unsettlement of rates on other centers in Continental Europe. Heavy selling of marks was ascribed partly to uneasiness over the financial position of the German government and partly to preparations by that government for the payment of the reparations instalment due July 15. During the latter part of the month mark exchange was slightly firmer.

Exchange rates on France and Belgium in the first week of July reached the lowest levels since last December but later in the month recovered somewhat. Sterling, however, was firm in a moderately active market. London exchange was in demand by French, Belgian, and Italian interests for the payment of obligations maturing in London and for the usual mid-year interest payments.

The diagram on this page brings up to date a comparison of the movement of exchange rates on four European countries since restrictions were removed in 1919. This diagram shows the seasonal decline which usually occurs in July and succeeding months as a result of buying of American cotton and grain. In recent years, however, the effect of such seasonal operations, formerly well recognized, has been merged with the effects of unsettled political and economic conditions.



Country	July 20 Last	Change from June 20	Per Cent. Depreciation from Par
England.....	4.4519	+ .0069	8.5
France.....	.0839	- .0033	56.5
Italy.....	.0459	- .0032	76.2
Germany.....	.0020	- .0012	99.2
Belgium.....	.0794	- .0038	58.9
Holland.....	.3882	+ .0032	3.4
Switzerland.....	.1918	+ .0030	.6
Spain.....	.1555	0	19.4
Sweden (Stockholm).....	.2595	+ .0048	3.2
Argentina.....	.3595	+ .0041	15.3
Brazil.....	.1348	- .0015	58.4
Japan (Yokohama).....	.4778	- .0012	4.2
China (Hong Kong).....	.5813	+ .0025	*
China (Shanghai).....	.7738	- .0125	*
India.....	.2906	- .0007	40.3
Canada.....	.9903	- .0003	1.0
Bar Silver in New York.....	.7000	- .0063	....

\* Silver Exchange Basis.

## Foreign Trade

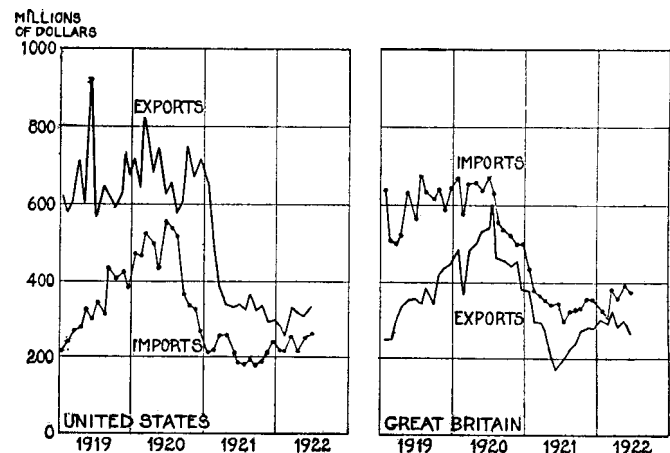
June foreign trade figures reported by the Department of Commerce were at the highest levels of the year. Exports, valued at \$334,000,000, were \$26,000,000 more than in May, and the largest since October. Imports, valued at \$260,000,000, while only \$6,000,000 more than those of May, were the largest since December 1920.

Reports as to new orders during July from houses handling a general assortment of commodities indi-

cated a continued gradual trade expansion. As in several months past, oriental markets during July provided exceptions to the growth in activity, due to political disturbance in China and recent economic unsettlement in Japan. Steel products, in particular, continued to be affected by quiet conditions in these markets, and notwithstanding more general buying elsewhere, steel export orders have been smaller than they were early in the year. South America and Australia are now almost uniformly reported better markets for a variety of goods.

European demand for wheat has continued rather slow, and much of the buying has been of hand-to-mouth character, though around the middle of July, France and Italy bought somewhat more liberally for deferred delivery. It is understood that there is already considerable wheat under contract for summer and fall shipment. Due chiefly to German buying, the export copper market was active until about the middle of July, when a lull appeared.

The accompanying diagram gives little evidence of decisive change in the trade balance of the United States during recent months. While imports have been increasing rather steadily since last summer, there recently has been an increase in exports, so that the export balance has increased rather than decreased. In Great Britain, on the other hand, a decrease in exports and rise in imports for several months have tended to widen the import balance.



United States and British Exports and Imports. (Pounds Converted to Dollars at Current Rates of Exchange)

## Gold Movement

Due chiefly to some resumption of gold imports from England, total gold imports during June rose somewhat above those of April and May to \$12,969,000. The movement, aside from these two months, was, however, the smallest since February 1920.

## World Commodity Prices

The increase in wholesale prices which has been going forward for some months in this country, England, and France, has spread during the past month to Italy and Japan. The increase appears to reflect more active busi-

ness in all of these countries. In the cases of England and France, the percentage of trade union members unemployed has recently been diminished, and pig iron production has been considerably increased. Exactly the same tendencies have been noticeable in Germany, in which continued price inflation accompanies the depreciation of the mark. In Norway, on the other hand, a continued decline in wholesale prices, resulting from the lateness of the period of inflation in that country, has been accompanied by increased unemployment.

The accompanying diagram shows the movement of prices in four countries. For the United States and England the index figures used are those prepared by the Federal Reserve Board for purposes of international comparison. The following table shows the latest available figures for all those countries which publish price indices.

(1913 average = 100 Unless Otherwise Noted)

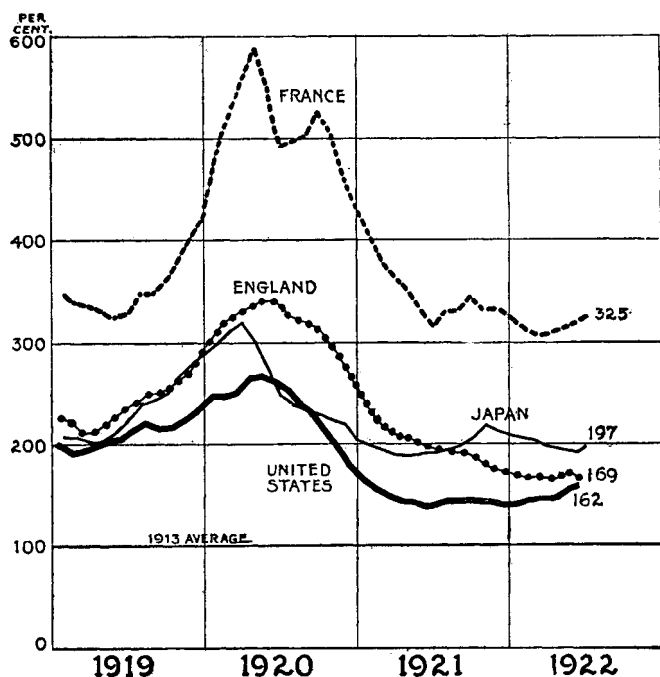
Country	Latest Quotation	PER CENT. CHANGE DURING		
		April	May	June
United States:				
20 basic commodities <sup>1</sup>	139 (July 22)	+ 0.2	+ 5.4	+ 1.8
Dept. of Labor.....	150 (June av.)	+ 0.7	+ 3.5	+ 1.4
Dun's.....	144 (July 1)	+ 1.2	+ 1.1	+ 2.2
Bradstreet's.....	131 (July 1)	+ 1.5	+ 1.7	+ 1.7
Great Britain:				
Economist.....	163 (July 1)	- 0.3	+ 1.9	+ 0.4
Statist.....	159 (July 1)	+ 1.1	+ 0.5	+ 0.1
20 basic commodities <sup>1</sup>	140 (July 22)	+ 0.2	+ 3.3	+ 1.4
France.....	325 (July 1)	+ 2.0	+ 1.0	+ 2.6
Italy.....	537 (July 1)	- 1.2	- 0.6	+ 2.6
Japan.....	197 (June av.)	- 1.5	- 1.6	+ 1.5
Canada.....	166 (June 15)	- 0.2	+ 0.5	- 0.8
Sweden <sup>2</sup> .....	164 (May 15)	+ 0.6	- 0.6	
Australia <sup>3</sup> .....	155 (May av.)	+ 1.4	+ 4.7	
Norway <sup>4</sup> .....	230 (July 1)	- 1.7	- 2.1	- 0.4
Germany <sup>5</sup> .....	7802 (July 1)	+11.4	+ 3.6	+17.2
Denmark <sup>6</sup> .....	179 (June 1)	- 0.6	+ 1.1	
Holland.....	165 (June 1)	- 1.9	+ 3.8	
Peru.....	186 (May 15)	- 1.6	- 0.5	

<sup>1</sup>Computed by this bank. <sup>2</sup>July 1, 1913-June 30, 1914=100. <sup>3</sup>July 1914=100. <sup>4</sup>December 31, 1913-June 30, 1914=100. <sup>5</sup>Middle of 1914=100. <sup>6</sup>July 1912-June 1914=100.

## Domestic Wholesale Prices

Largely as a result of increased coal prices due to the strike and an advance in the cost of building materials, the Department of Labor index of wholesale prices for June was 2 points or 1.4 per cent. higher than the May figure. The price advance which began in January has amounted altogether to nearly 9 per cent.

During most of the six months from January to June, prices of farm products and food advanced steadily, and there were sharp increases in fuel and lighting, metals, and building materials. In the case of the three other groups in the Department of Labor index, chemicals and drugs, house furnishings, and miscellaneous, the



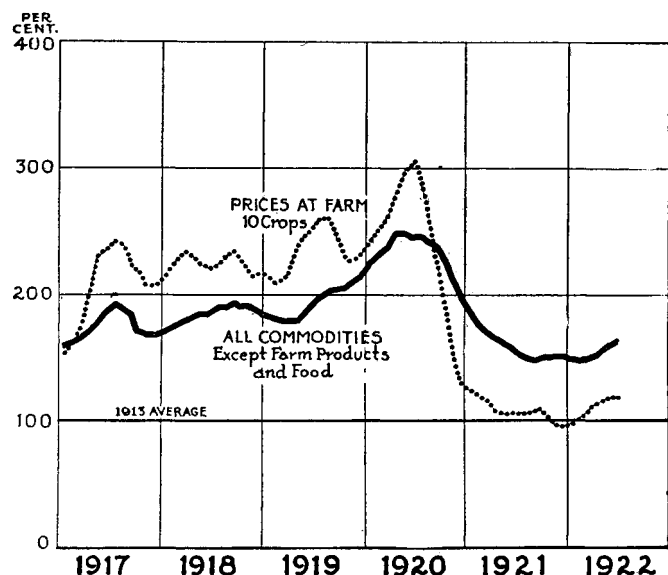
Wholesale Prices in Four Countries. (1913 Average=100 per cent.)

movement was downward. Recent changes are shown in the following table.

(1913 average=100)

Commodity Group	Value of Index				Per Cent. Change	
	June 1921	Jan. 1922	May 1922	June 1922	May to June	Jan. to June 1922
Farm products.....	114	122	132	131	- 0.8	+ 7.4
Foods.....	137	131	138	140	+ 1.4	+ 6.9
Cloths and clothing.....	172	176	175	179	+ 2.3	+ 1.7
Fuel and lighting.....	191	195	216	225	+ 4.2	+15.4
Metals.....	133	112	119	120	+ 0.8	+ 7.1
Building materials.....	163	157	160	167	+ 4.4	+ 6.4
Chemicals and drugs.....	133	124	122	122	0	- 1.6
House furnishing goods..	196	178	176	176	0	- 1.1
Miscellaneous.....	125	117	116	114	- 1.7	- 2.6
All groups.....	142	138	148	150	+ 1.4	+ 8.7

The relation between the movement of prices of farm products and the movement of prices of products other than those of the farm is illustrated in the following diagram drawn from figures computed by the Department of Agriculture. The heavy line shows the Department of Labor index of wholesale prices exclusive of prices of farm products and foods, while the light line shows the prices received at the farm for ten principal crops. The relationship between these two lines at the present time may be expressed in another way by saying that the purchasing power of farm products in terms of other commodities at wholesale is about 28 per cent. less than in 1913. This purchasing power is, however, larger than in December 1921, when it was 38 per cent. less than in 1913.



Prices at the Farm of Ten Principal Crops Compared with Prices of All Commodities in the Department of Labor Index Except Farm Products and Food. (1913 Average=100 per cent.)

### Cost of Living

The cost of living index for a workingman's family prepared by the National Industrial Conference Board does not yet reflect in any large degree the advance in wholesale prices of the past six months. The figure 155.4 for June 15 is only three-tenths of one per cent. higher than that for May 15, an increase due to somewhat higher prices of food. A slight reduction in clothing costs is indicated and other items of the budget remain unchanged.

A quarterly computation of the cost of living made by the Department of Labor for 31 cities throughout the United States shows increases in the cost of living between March and June in 13 cities, decreases in 17, and no change in one. For New York City, increases in food and housing are largely offset by decreases in the cost of clothing, furniture, and miscellaneous items. As a net result the total index shows an increase of about 1 per cent., and is now 71 per cent. above the December 1914, level.

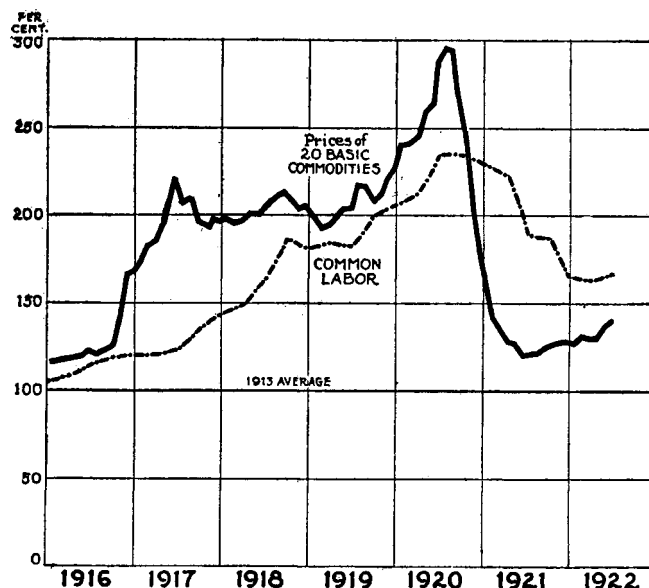
### Wages

The average hiring rate for representative types of common or unskilled male labor in this district advanced from 35.7 cents an hour in April to 36.9 cents in July, according to the index maintained by this bank. It is now 66 per cent. above the 1914 level.

Many large employers reported increases of 3 to 5 cents an hour during the past three months. A number of firms which have not increased wages reported that the labor turnover was large, and others reported that to retain workers it was frequently necessary to increase the rates of pay as soon as newly hired employees became accustomed to their work. These conditions result from an increased demand for workers in construction operations and industrial plants.

The following diagram compares the trend of wage

rates in this district with this bank's index of the prices of twenty basic commodities. These basic materials are among the first to show price changes; similarly the wages of unskilled laborers are among the first to move upward or downward. Prices of raw materials and the wages of common labor are moreover very large elements in the cost of many industrial operations, and changes shown by the diagram indicate changes in important basic costs of manufacture.



Wages of Common Labor Compared with Prices of Basic Commodities. (1913 Average=100 per cent.)

Changes during the past month in wages of skilled, organized workers have been irregular. In some industries, in which there has developed a shortage of skilled artisans, notably in the building trades, there have been a few instances of increases in rates. In other industries there have been further reductions and the resulting tendency has been to bring the relationship between wages of various types of workers somewhat nearer to that which existed prior to the war.

Average weekly earnings of factory workers, as reported by the New York State Department of Labor, increased 1.3 per cent. from \$24.59 in May to \$24.91 in June, due principally to longer working hours in those industries which are now most active.

Following the reduction of wages ordered by the Railroad Labor Board, several hundred thousand railroad employees, largely shop workers, struck on July 1 and are still on strike as this report is prepared. Efforts to adjust the differences between the coal operators and miners have not yet been successful and about 600,000 men are now on strike in the various coal mining regions. The New England cotton mill owners and employees have been unable to reach an agreement and many of the workers are still idle, although recent reports indicate that the workers are returning to the mills in increasing numbers. The Buffalo trolley service has been interrupted by labor troubles and several large shoe factories in Rochester are closed as a result of a strike there.

An agreement of importance was entered into in July between the women's clothing manufacturers and garment workers' unions in New York City. This provides for a continuation of the 44-hour week and a weekly wage scale. The rates of pay will be fixed at a later date by an impartial commission.

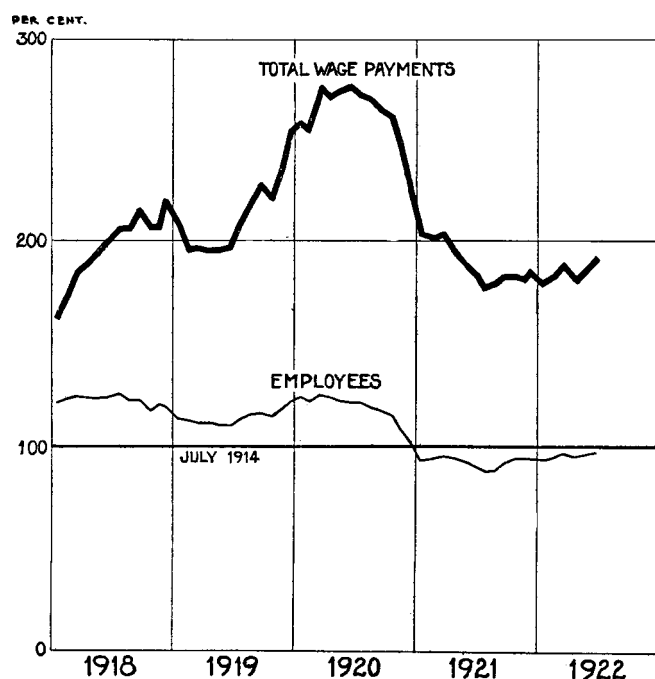
### Savings Bank Deposits

Reporting savings banks in the Second Federal Reserve District show an increase of 2.5 per cent. in aggregate deposits in the month ended July 10, chiefly as a result of the crediting of interest on July 1. Deposits of reporting banks in New York City in most cases made gains slightly larger than the amounts credited as interest. Reporting banks in other cities, however, showed in general such narrow gains as to indicate that without interest payments aggregate deposits would have declined.

### Employment

Unemployment continued to decrease during the past month both in New York State and in the United States as a whole. Idleness through industrial disputes was offset by increased activity in agriculture, and in industrial and mercantile establishments. The New York State Department of Labor reported an increase of 2 per cent. in June in the number of persons employed in the factories of the State, and the United States Employment Service reported a gain of 3.2 per cent. in the number employed in industries in 65 leading cities throughout the country.

The following diagram shows the trend of employment in factories in New York State since 1918, and



Changes in Total Wage Payments in Representative New York State Factories Compared with Changes in the Number of Workers Employed by these Factories. (July 1914 figures=100 per cent.)

shows as well the fluctuations in total wage payments. Such payments reflect not only changes in average rate of pay, but also changes in employment. For both lines the trend has been steadily upward for the past few months. The outstanding increase in employment during June occurred in metal and machinery industries, especially in railroad equipment and repair shops and in plants manufacturing locomotives.

Reports from employment agencies indicate a growing scarcity of unskilled workers. On the other hand, there still are more applicants than positions in the clerical and most of the skilled occupations.

Steady improvement in employment conditions in recent months has been instrumental in lessening the number of cases calling for charitable assistance. The Charity Organization Society of New York City reports 14 per cent. fewer cases under its care than there were a year ago. This percentage decline is exactly the same as that reported by the New York Merchants Association for the total number of unemployed in New York City. The Association estimated the number of unemployed in June this year at 295,000 as compared with 343,000 in October 1921, the first estimate made.

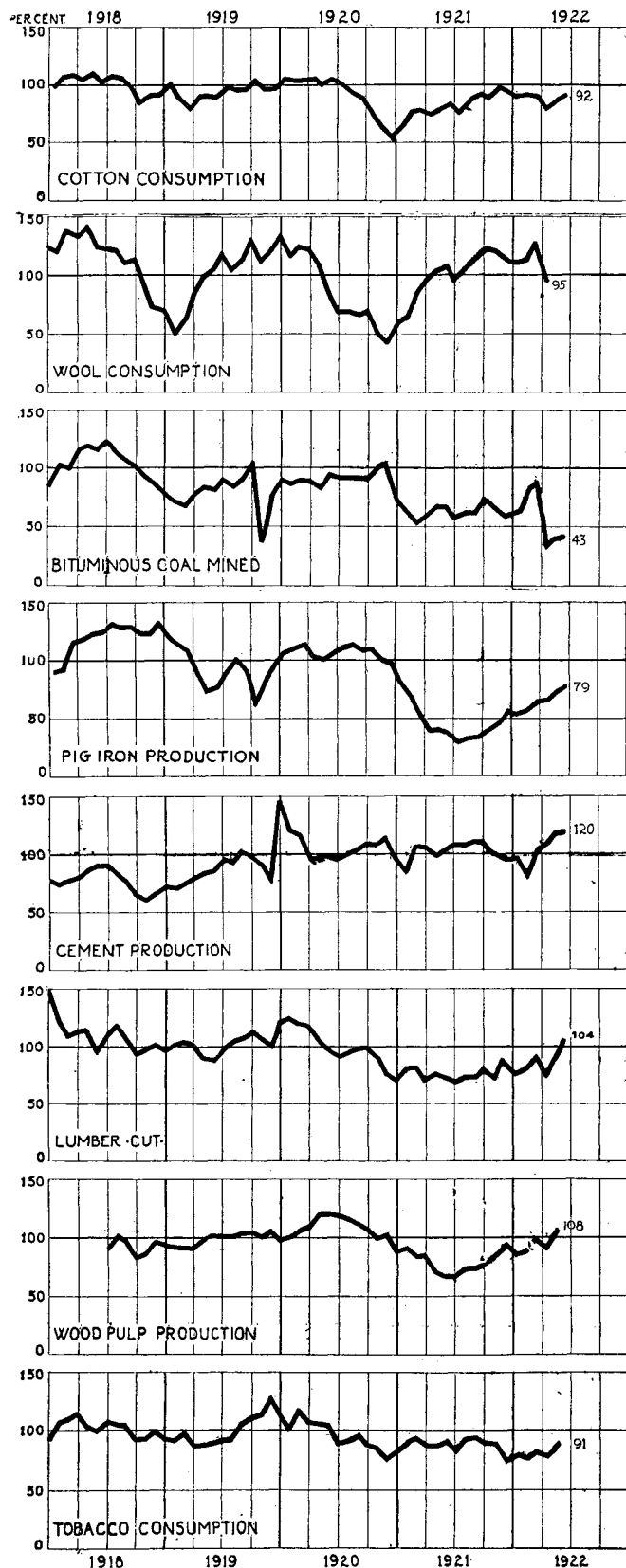
### Immigration

In the fiscal year ended June 30, there were 243,953 immigrants admitted to the United States under the terms of the law passed a little more than a year ago, limiting the number of admissions each year to 3 per cent. of the foreign-born residents of each nationality. Admissions constituted 68.3 per cent. of the number permitted to enter under the terms of the law. The countries of central and southern Europe largely filled their quotas while those of northern Europe sent much less than their allotment.

The following table shows the total number admitted, as compared with the quotas for a number of the principal countries, and shows also in a parallel column the number admitted in the preceding fiscal year.

Country	Legal Quota	Admitted July 1, 1921 to June 30, 1922	Per cent. of Quota Admitted	Admitted July 1, 1920 to June 30, 1921
Hungary.....	5,638	6,035	107.0	7,702
Greece.....	3,294	3,447	104.6	28,502
Poland.....	25,827	26,129	101.2	95,089
Italy.....	42,057	42,149	100.2	222,260
Rumania.....	7,419	7,429	100.1	25,817
Czecho-Slovakia..	14,282	14,248	99.8	40,884
Russia.....	34,284	28,908	84.3	6,398
France.....	5,729	4,343	75.8	9,552
Austria.....	7,451	4,797	64.4	4,947
United Kingdom..	77,342	42,670	55.2	79,577
Norway.....	12,202	5,941	48.7	7,423
Sweden.....	20,042	8,766	43.7	9,171
Germany.....	68,059	19,053	28.0	6,803
All Other.....	33,369	30,038	90.0	261,103
Total.....	356,995	243,953	68.3	805,228





## Production of Basic Commodities

Production figures for June show in general a continued gradual gain. In the case of eight of the eighteen commodities listed in the table below the latest available figures show production above normal. A heavier rate of output of iron and steel in June arises from increased demands for many kinds of iron and steel products, especially for those connected with the manufacture and repair of railroad equipment and those involved in the manufacture of automobiles. Automobile production for June set a new high figure.

Larger cotton consumption reflects the gradual resumption of more active operations in New England mills, which were partially crippled by strikes in April and May. Practically no anthracite coal has been mined for three months, but the production of bituminous from non-union mines was gradually increased up to the beginning of July. Since that time preliminary reports indicate that inadequate car facilities have acted as a deterrent to further expansion in operations. The reduced supply of coal in turn began in July to affect the operations of the iron and steel industry.

An unusually heavy demand for sugar for domestic use and export has been influential in keeping sugar meltings in excess of the normal amount. Total meltings for the half year, January to June, amount to about 3,000,000 tons and more than 450,000 tons have been exported.

The following table shows current production as percentages of estimated normal production. In the calculation of normal production allowance has been made both for year to year growth and seasonal variation.

(Normal Production=100 Per Cent.)

Commodity	Jan.	Feb.	Mar.	Apr.	May	June
Anthracite coal mined.....	78	99	105	0.3p	0.4p	1.0p
Bituminous coal mined.....	64	82	89	34p	41p	43p
Pig iron production.....	55	57	65	67	73	79
Steel ingot production.....	50	58	71	74	81	82
Copper production, mine....	22	33	46	59	68	74
Tin deliveries.....	85	58	103	100	92	90
Crude petroleum production..	108	111	111	109	111p	...
Portland cement production..	97	82	104	111	119	120
Wheat flour production.....	85	105	114	95	100	104
Meat slaughtered.....	89	98	112	96	108	...
Sugar meltings.....	140	129	142	124	146	135
Wool consumption*.....	111	115	128	95	...	...
Cotton consumption.....	91	92	91	80	88	92
Lumber production.....	78	83	93	75	96	104
Wood pulp production.....	85	90	100	92	108	...
Tobacco consumption.....	80	77	83	79	91	...
Paper (total) production*....	86	85	100	89	100	...
Gasoline production.....	93	89	97	95	...	...

\* Seasonal variation not allowed for.

p—Preliminary.

## Commodity Stocks on Hand

The principal changes during June in commodity stocks for which figures are available were reductions in the available stocks of sugar, coffee, wheat, cotton, and Portland cement. In all of these cases, with the possible exception of coffee, the lower stocks are a reflection of heavy consumption in the past few months. Coffee stocks

remain at a low figure largely as the result of restricted imports.

Stocks of flour have recently increased somewhat, while the available supply of tin, lead, paper and paper pulp remains substantially above normal.

The following table shows index figures for stocks on hand on the first day of the month expressed as percentages of normal. In the calculation of normal stocks allowance has been made for year to year growth and for seasonal variations.

(Normal Stocks=100 Per Cent.)

Commodity	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1
Sugar, cane, Atlantic Ports...	57	88	124	89	70	63
Coffee, visible supply.....	77	81	66	58	64	60
Wheat, visible supply.....	83	85	78	83	95	77
Flour in chief centers.....	98	91	85	89	96	103
Cotton.....	93	93	94	91	87	85
Tin, world visible supply...	155	158	145	165	153	171
Lead, bonded.....	154	198	201	189	203	...
Cement, Portland.....	119	114	109	116	105	93 <sup>p</sup>
Paper pulp.....	101	102	112	122	133	...
Paper.....	130	135	142	140	140	...

<sup>p</sup>—Preliminary.

## Volume of Building

Building contract awards in the twenty-seven north-eastern States in June, reported by the F. W. Dodge Co., were about 5 per cent. under the total for May, which was the largest yet reported. The decline was due chiefly to a falling off in the volume of new construction in the Pittsburgh district and in New York City. Contracts awarded during June in New York State and Northern New Jersey were 10 per cent. under the May total, reflecting almost entirely reduced operations in New York City.

## Wholesale Trade

The dollar value of June sales of 122 wholesale dealers in this district was about the same as in June of last year. This is the third month this year that sales have been practically equal to those of the corresponding month of 1921. The value of sales during the first half of the present year was 2 per cent. below sales for January to June 1921. The figures are given by commodities in the table at the bottom of this page, in which 1921 figures are taken as 100 per cent. and sales in other years shown as percentages of 1921 figures.

Both for the month of June and for the half year period, sales of diamonds show the largest gain, but these were influenced by a very large increase in business by one of the reporting firms. In both periods jewelry sales show a decrease.

In June for the first time since the fall of 1920, sales of machine tools were larger than in the corresponding month of the preceding year, reflecting increased activity in industrial plants. The larger volume of building is apparent in the sales of hardware dealers, which increased 12 per cent. over those of June 1921.

Sales of drugs have been consistently above those of last year. Grocery dealers report an increase of 7 per cent. in June sales, the largest gain recorded this year, and probably due, in a measure, to somewhat higher prices.

June sales of clothing, both men's and women's, were somewhat behind those of last June, but manufacturers inform us that orders are beginning to be placed in larger volume as the period of active buying approaches.

Shoe sales, which show a loss of 18 per cent., were adversely affected by a strike in several Rochester factories, the sales of which were greatly reduced.

## Department Store Trade

In June for the third successive month, sales by department and apparel stores in this district exceeded those of the same month last year. The increase was 1

## Wholesale Trade

COMMODITY	Number of Firms Reporting	MONTHLY SALES (In Percentages)					SALES JAN. 1 TO JUNE 30 (In Percentages)			
		June 1919	June 1920	June 1921	June 1922	May* 1922	1919	1920	1921	1922
Diamonds.....	7	475	166	100	345	157	406	315	100	139
Machine Tools.....	4	390	393	100	119	94	260	305	100	58
Hardware.....	11	129	165	100	112	114	118	147	100	96
Drugs.....	6	99	115	100	110	108	103	118	100	111
Groceries.....	42	131	182	100	107	99	123	157	100	98
Clothing.....	22	103	126	100	93	114	106	144	100	107
(a) Women's.....	14	139	103	100	98	109	102	118	100	91
(b) Men's.....	8	90	135	100	91	117	109	165	100	121
Stationery.....	6	113	165	100	93	106	96	129	100	88
Dry Goods.....	8	116	145	100	88	88	87	142	100	94
Jewelry.....	6	205	193	100	85	91	192	239	100	89
Shoes.....	10	137	95	100	82	91	132	175	100	89
Total (weighted).....	122	124	153	100	99	100	108	148	100	98

\* Expressed in percentages of sales in May 1921.

per cent., but this is considered by merchants to indicate better trade conditions as the weather during the month was not conducive to large sales. In New York City there were 19 days of rain in June. Sales were better in New York City than elsewhere in the district and most of the larger stores in up-State cities reported minor declines in the value of sales.

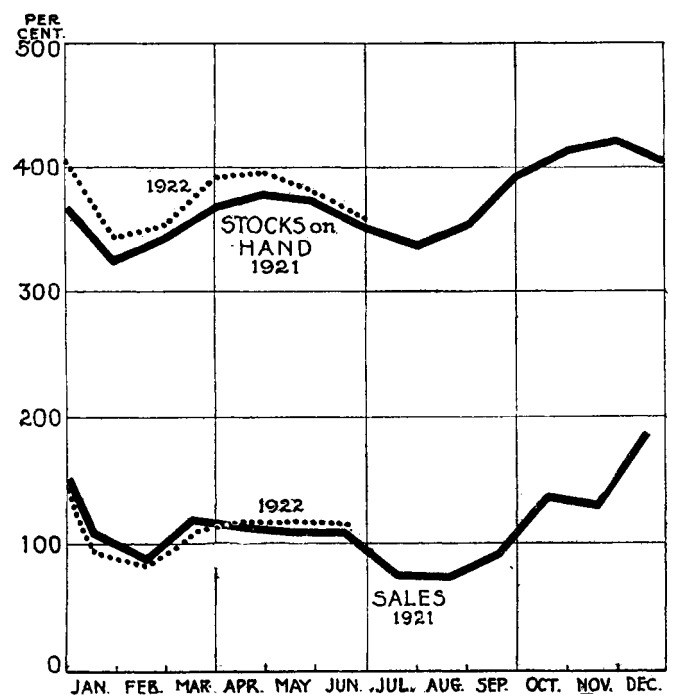
Department store sales have improved steadily since the first of the year and total sales during the first six months of 1922 were, in spite of price changes, only 2 per cent. below those of the first six months of 1921. Sales by the 64 stores that report to this bank were as follows:

	1921	1922
May .....	\$31,694,000	\$32,832,000
June .....	31,631,000	31,946,000
January-June (inclusive) .....	183,377,000	179,553,000

The average amount of each transaction, as reported by stores that maintain such records, was \$1.91 in June 1921, and \$1.86 in June of this year, a decline of 2.6 per cent. The number of transactions, as reported by these stores, increased 4 per cent. this year.

The following diagram compares the sales of department stores during the first six months of the present year with sales of last year. It also compares the value of stocks carried by reporting stores. In each case average monthly sales during 1919 are taken as 100 per cent. and the diagram shows the relation between the sales and stock on hand.

Sales by mail order houses were 10 per cent. larger than last June, a somewhat less favorable report than



Sales and Stocks on Hand of Representative Department Stores in the Second District. (Average Sales in 1919=100 per cent.)

that made during May when the increase was 18 per cent. Detailed sales figures are shown in the following table in percentages.

	MONTHLY SALES JUNE				SALES JAN. 1 TO JUNE 30			
	1919	1920	1921	1922	1919	1920	1921	1922
All Dept. Stores..	84	107	100	101	79	105	100	98
New York....	86	110	100	102	81	109	100	99
Buffalo.....	82	103	100	99	77	97	100	91
Newark.....	78	105	100	96	76	103	100	98
Rochester....	70	98	100	95	70	93	100	94
Syracuse.....	83	110	100	98	78	103	100	93
Bridgeport....	91	116	100	93	84	112	100	90
Elsewhere.....	82	104	100	101	80	101	100	99
Apparel Stores...	83	102	100	105	77	92	100	99
Mail Ord. Houses	118	137	100	110	113	152	100	99

The value of the stock held by the reporting stores on July 1, at the retail price, was \$100,000,000, an increase of 1 per cent. over that held on the same date last year. A small increase in the value of stock during the first six months of this year, coupled with slightly smaller sales, has resulted in a somewhat slower turnover of stock. The annual rate during the first half of the present year has been 3.5 times, as compared with 3.7 times last year. Stores that sell apparel exclusively have a much more rapid rate of stock turnover, and during the first half of the year turned over their stock at the rate of five times a year.

Detailed figures for different localities are shown in the following table in percentages.

	STOCK ON HAND JULY 1 (Retail Price)				ANNUAL RATE OF STOCK TURNOVER (FIRST HALF OF YEAR)			
	1919	1920	1921	1922	1919	1920	1921	1922
All Dept. Stores..	79	120	100	101	3.7	3.2	3.7	3.5
New York....	79	120	100	102	3.8	3.3	3.7	3.5
Buffalo.....	85	114	100	96	2.9	2.6	3.0	2.9
Newark.....	84	135	100	100	3.5	2.8	3.6	3.5
Rochester....	84	145	100	98	3.0	2.3	3.1	3.3
Syracuse.....	82	127	100	85	2.8	2.5	2.9	3.1
Bridgeport....	83	119	100	101	3.0	2.9	3.1	2.7
Elsewhere.....	76	101	100	99	2.2	2.1	2.3	2.1
Apparel Stores...	66	111	100	111	6.5	4.6	5.7	5.0

### Chain Stores Sales

Sales by all chain store systems that report to this bank increased 12 per cent. in June, as compared with last June. The chief increase, amounting to 21 per cent., was shown by grocery firms, due to the opening of new stores. Sales per store show a decline of 7 per cent.

Shoe stores reported sales 7 per cent. less than in June 1921, due to lower prices now prevailing. The total number of pairs of shoes sold by these firms increased about 1 per cent. The average price per pair declined 7.2 per cent. from \$3.87 in June 1921, to \$3.59 in June 1922.

## Replacing Worn Currency Through the Reserve Banks

**T**HERE is at present about \$4,500,000,000 of currency in circulation in the United States. While a considerable part of it at any given moment is in the safes of individuals, business concerns, or banks, yet much of it is in people's pockets or in process of passing from hand to hand, and so is subject to wear. In this country paper money, which forms about four-fifths of our whole supply of currency, is generally preferred above coin because of its lightness and convenience. But paper money wears out rapidly and has to be replaced frequently. The life of a \$5 note, for example, is on the average about ten months, and in New York City is about two months less than the average, owing mainly to the more rapid rate at which it circulates. This same tendency is seen in the higher rate at which bank deposits turn over in New York City than in other parts of the country.

The work of keeping the paper currency in good condition is done very largely by the Federal Reserve Banks, which in the course of their daily business handle all forms of currency and coin, eliminating that which is unfit for further circulation. This service is a large item in their annual costs of operation. Last year, for instance, the supply of currency and coin caused an expenditure at the Federal Reserve Bank of New York amounting to about \$2,875,000, of which somewhat more than one-third represented the cost of printing new Federal Reserve currency to replace worn notes in circulation and to increase supplies unissued and on hand.

### THE PROCESS OF REPLACEMENT

The process of replacement ordinarily works in about this way: When a man has a worn-out bill—whether it be a Federal Reserve note, a Federal Reserve Bank note, a legal tender note, a silver or gold certificate, or a National bank note—he takes it to his bank and receives in return for it a note fit for circulation; or, if he wishes, obtains credit for it in his deposit account. Banks which are members of the Federal Reserve system ordinarily do not keep more currency on hand than they are likely to need for the day-to-day use of their customers. Accordingly, shipments of currency are constantly passing between member banks and their Federal Reserve Banks, and notes unfit for further circulation are usually sent along with shipments of currency, which for the time being may be in excess of requirements. Such a shipment the Federal Reserve Bank places to the credit of the transmitting member bank in its deposit account for use as the member bank desires. A non-member bank may also ship notes directly to the Federal Reserve Bank, receiving payment by draft, or by deposit to its account in its correspondent bank, or in currency as is described below.

Currency received by the Federal Reserve Banks in these ways is first counted and is then sorted according to denomination and kind, and mutilated and badly

worn currency is eliminated. All Federal Reserve notes fit for circulation issued by Reserve Banks other than the one handling them are shipped immediately to the respective issuing banks, inasmuch as no Reserve Bank is permitted under the law to pay out notes of another Federal Reserve Bank. Notes of other types which are fit for use are held in the vaults until needed, and all notes which are unfit for further circulation are canceled and shipped to Washington for redemption.

### ISSUE OF NEW MONEY

Currency is supplied to banks, both member and non-member, in amounts and denominations as they desire. Since much currency fit for further circulation is returned to the Reserve Banks, all shipments of currency cannot be made in new money, the supply of which is apportioned to the banks according to the volume of their business. A member bank draws currency from the Federal Reserve Bank in just the same way that an individual draws currency from his own bank, and such withdrawals are charged to its deposit account. The bank which is not a member of the Federal Reserve system usually pays for a shipment of currency either by check or by sending in unfit currency. At the New York Reserve Bank a supply of approximately \$500,000,000 in paper currency is kept on hand for use when needed, and about as much more currency is available in Washington.

### THE VOLUME OF MONEY HANDLED

The volume of currency handled each year by the Federal Reserve Banks reaches in aggregate a very large figure. In 1921 all twelve Federal Reserve Banks received from member and non-member banks \$7,750,000,000 in paper money and coin. Payments to banks amounted to \$6,490,000,000, and as a net result more than \$1,000,000,000 in paper money and coin was retired from circulation, illustrating the lessened demand on the part of the public for hand-to-hand currency. The share of this work handled in 1921 by the New York Reserve Bank will appear in the following:

About 687,000,000 individual notes were counted.

About 166,000,000 notes aggregating \$771,000,000 were canceled.

There were 175,000 different shipments of currency and coin to and from out-of-town banks.

In carrying forward these operations the Federal Reserve Banks now do much work which the Government formerly performed through the Subtreasuries. On May 29, 1920, an Act of Congress was approved providing for the discontinuance of the Subtreasury system, which was established in 1846, and the transfer of its currency functions to the Federal Reserve Banks. Although this transfer of functions brought about some increase in the cost of carrying on the currency operations of the Reserve Banks, the total cost of maintaining the country's currency was substantially reduced.