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

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REVIEW OF THE MONTH.

Little change has occurred during the month of January in the condition of the Treasury or in its relation to the banking and financial market. Expenditures, exclusive of public debt transactions, for the month amounted to approximately \$348,300,000, while receipts on the same basis were \$255,300,000. General conditions have been carefully reviewed by the Secretary of the Treasury in a statement issued on January 11, in which Mr. Glass set forth in detail the financial condition of the Government. The main point in the statement was his expression of the view that if the present tax level is maintained, while new expenditures are avoided, the turn in the general tide of Government financing has been reached. "As to the future," says the Secretary of the Treasury in the statement referred to,

"it may be stated positively that unless Congress should enter upon new fields of large expenditure, not included in the Treasury's estimates, or should make a reduction in the amount of taxes in addition to the reduction made a year ago upon the recommendation of Secretary McAdoo from about \$6,000,000,000 to about \$4,000,000,000, we may look forward confidently to the retirement of the floating debt out of the taxes provided by existing law and miscellaneous receipts coming within the general head of war salvage (although further issues of tax certificates in diminishing amounts will be necessary from time to time in the intervals between income and profits tax installment payments), and to the gradual reduction of the funded war debt through the operations of the Liberty loan bond purchase fund and sinking fund already created by law. On the other hand, should Congress embark upon new fields of large expenditure or further reduce taxes, it will, as I have already indicated, be clearly necessary to revise the Treasury's plans and call upon the country to finance the resulting deficit by the issue of a new Liberty loan."

Conditions in Treasury financing as they have developed during the past few months, are

outlined by the Secretary of the Treasury, as follows:

"On the basis of Treasury daily statements the Government's gross debt on August 30, 1919, was \$26,596,701,648.01; on December 31 it amounted to \$25,837,078,807.38; a reduction of \$759,622,840.63. Its floating debt (unmatured Treasury certificates of indebtedness) on August 30 was \$4,201,139,050.39; on December 31 it amounted to \$3,578,485,800.37, a reduction of \$622,653,250.02. The portion of the floating debt requiring to be refunded (so-called "loan certificates") on August 30 amounted to \$2,012,387,500; on December 31 it amounted to \$1,326,661,000, a reduction of \$685,726,500."

In the same statement Secretary Glass further makes a brief forecast of the policy to be pursued during January and February. He says that—

"the loan certificates outstanding on December 31 were of issues maturing January 2, January 15, February 2 and February 16, 1920, and have been or will be paid from cash on hand December 31, and from the proceeds of the sale of tax certificates thereafter issued, thus consummating the Treasury's plan for financing the unfunded portion of the war debt in such a way as to avoid any large funding operations."

The Treasury and its requirements (barring unexpected necessities) may thus be considered to have ceased to be the most dominant factor in the financial situation, and consequently the Federal Reserve system is able to give primary consideration to the industrial and commercial requirements of the country.

These needs and requirements are undoubtedly very great. Trustworthy figures compiled for the year 1919 show that the issue of new capital by corporations which came into existence during that year was far greater than in any preceding year. Reports to the Federal Reserve Board from the several districts show that the urgent necessity of enlarging building accommodation both for business establishments and for dwellings is compelling a resumption of construction even at the very high price levels

now prevailing. The requirements of the railroads are estimated by some as high as \$6,000,000,000 for capital expenditure during the next three years, or perhaps \$2,000,000,000 per annum. In many other directions the immediate and demonstrable domestic credit and capital requirements are very large. Associated and contrasted with these are the calls of European nations for financing. What these calls should properly be is a matter as to which difference of opinion exists. It is a fact, however, that our balance of trade for the year 1919 was considerably above \$4,000,000,000, of which amount not less than \$1,750,000,000 was provided for by funds furnished by the Government, leaving more than \$2,000,000,000 which have been cared for through the extension of credit by commercial concerns and through such accommodation as the banks or private investors have extended. Estimates of the amount required by European countries in actual reconstruction work during the coming year vary within wide limits. Very high figures have been stated by some, while less extensive estimates have been put forward by official representatives of several of the principal European nations. The question how nearly adequate domestic credit resources actually are for the meeting of such estimates is perhaps the most fundamental issue upon which a conclusion should be reached. The demands of foreigners are coming at a time when there will be other urgent demands. Capacity to meet these demands and to satisfy them depends entirely upon our surplus of production over consumption. As the Board has repeatedly stated, this is not a time at which it is wise or desirable to increase the quantity of unliquid securities or long term obligations which are held by the banks on investment account. The problem is thus essentially a problem of providing ways and means for the conservation of credit and for the diversion of resources from unnecessary, wasteful, and extravagant uses to those which will most effectually serve the interests of the United States and its industries and of those foreign borrowers whose requirements are considered most urgently necessary.

Some light has been cast upon the amount of aid required to avert starvation in certain parts of Europe during the past month in statements issued by the Secretary of the Treasury and by Mr. Herbert Hoover. Secretary Glass, in a communication to Congress, dated January 7, has commented briefly upon the need to save from starvation certain European countries in the following language:

Foreign conditions and needs. "While it is impossible now to estimate definitely just what will be required, I am of the opinion, from the information so far obtainable, that a minimum of \$125,000,000 and a maximum of \$200,000,000 would suffice to supply the portion of relief to be assumed by this Government, provided Congress should grant the necessary authorization to participate in alleviating this serious and desperate situation.

"As any relief undertaking, so far as concerns the United States, would be primarily a question of supplying food, and as it is advisable that the purchases of food for Europe should be handled and coordinated in such a manner as not to increase the prices of food in the United States, I am recommending that the United States Grain Corporation be empowered to purchase, sell, and deliver food and relief supplies for Europe up to the amount of \$150,000,000, and that for the supplies so furnished credit may be extended by the Grain Corporation."

Mr. Hoover's statement, to which reference has been made, was rather a discussion of the methods properly to be applied in meeting European requirements than a statement of the amount or volume of these requirements themselves, although under the latter head some interesting reflections are offered with respect to the actual necessities of certain of the countries for food and maintenance. Among the salient opinions expressed by Mr. Hoover in this statement, issued under date of January 6, is the suggestion made in speaking of Europe as a whole and in urging that the 70,000,000 people of prosperous nations who have not suffered in the war should also aid in European relief, that—

"if we add bread supply on Government credit to these starving cities, with this and business credits, we would be doing our share of world responsibility. If we do undertake the solution of the bread question by our Govern-

ment, our action would benefit and protect the other nations of Europe from infection of anarchy and chaos."

Taking up the countries of Europe individually, Mr. Hoover says that "the neutral countries have made money from the war, have asked no favors and have given none." Outside of interest to the Allies, Great Britain admits she needs nothing but commercial credits, adds Mr. Hoover, who asserts that she has ample unpledged foreign assets to cover her needs, as has France. Mr. Hoover admits that the position of Italy is difficult, and that some of the larger cities may need breadstuff substance beyond the ability of commercial credits. Germany, he says, could obtain commercial credits if the Reparations Commission would allow her to use her domestic resources and unpledged foreign assets until she gets upon her feet.

Of particular interest in connection with the international financial situation is the positive and unequivocal statement made by the Secretary of the Treasury, under date of January 30, and elsewhere printed in full in this number of the BULLETIN, setting forth, in connection with a proposed international financial conference to be held in Europe, precisely what the attitude and policy of the Treasury, with respect to European economic and financial conditions and needs, are.

Developments during the month of January do not reveal any immediate change in the trade situation which underlies the problem of European financing. Exports continue to move abroad in very large volume. Official figures for the year 1919 show that the actual export balance in favor of the United States was in round numbers \$4,017,400,000. The returns for the month of January are not as yet available, but indicate a continuance, although perhaps in somewhat lesser measure, of this balance in favor of the United States. Recent returns for export trade in the principal European countries, moreover, indicate only a very moderate recovery of the ability to export. Among these countries Great Britain is far in the lead. There has been a material increase in her power to ship a surplus of goods abroad, and

this growth of ability is particularly notable in her business with the United States. France and Italy, likewise, show some improvement in their export relations, but that improvement is thus far only tentative and partial. American banks are not making any considerable commitments in foreign exchange. Export houses accordingly fear that they must reduce their trade or else finance their customers out of their own resources. In some cases it would seem balances are being left abroad unpaid, but subject to an interest allowance granted by the debtor. The shipper of the goods thus cares for the financing of his customer by what is in effect a loan of capital pending the time when exchange conditions become easier. There has, however, been no evidence of such an easing of the exchange outlook. On the contrary, during the past month the downward movement of sterling was resumed, the quotation at one time going as low as \$3.49. German marks have also touched the new low level of 1.09 cents, while other continental exchanges have been weak and declining. The following table carries further the data furnished in the last issue of the BULLETIN, and supplies the quotations for some of the chief foreign currencies during the month of January:

Foreign exchange rates.

	Jan. 3.		Jan. 10.		Jan. 17.	
	High.	Low.	High.	Low.	High.	Low.
England.....	3.79½	3.75½	3.79½	3.73½	3.74½	3.68½
France.....	10.65	10.93	10.78	11.22	11.15	11.63
Italy.....	13.16	13.28	13.24	13.43	13.43	13.70
Spain.....	19.30	19.25	19.05	18.95	19.10	19.00
Argentina.....	43.125	43.125	43.00	43.00	43.125	43.125
Hongkong.....	95.00	94.50	97.00	94.50	100.00	96.00
China (Shanghai).....	166.00	164.00	160.00	160.00	161.00	160.60
Japan.....	50.375	50.125	50.375	50.00	50.00	49.875

	Jan. 24.		Jan. 31.	
	High.	Low.	High.	Low.
England.....	3.68½	3.61½	3.58½	3.50½
France.....	12.07	11.61	13.38	12.54
Italy.....	14.22	13.72	15.62	14.54
Spain.....	19.65	18.60	18.85	18.10
Argentina.....	43.25	43.125	43.25	43.125
Hongkong.....	97.50	94.50	99.00	94.50
China (Shanghai).....	160.00	158.00	163.00	156.00
Japan.....	49.75	49.75	49.75	48.00

The exchange situation thus depicted is an intensification of that which has prevailed during the final quarter of 1919. Save in those cases where the American exporter is able directly or through the assistance of some exceptional condition to finance his customer abroad, they constitute an increasingly difficult barrier to overcome and tend strongly to cut off the shipments of American manufacturers, except in cases where foreign buyers are practically precluded from satisfying their wants with any except American products. The trade balances with Oriental and some South American countries continue to be adverse to us, with corresponding results shown in exchange quotations. A one-sided world trade in which we export a large excess to Europe and import a much more moderate but still considerable excess from other parts of the world, has thus been established. As shown elsewhere, one incident in this situation is proving to be the fairly steady movement of gold out of the United States in settlement of unfavorable trade balances with some non-European countries.

The policy of the United States with respect to European needs for supplies, in so far as governmental action is concerned, has been fully stated by the Secretary of the Treasury and from time to time reviewed in the BULLETIN. It has undergone no alteration in principle, notwithstanding that for humanitarian reasons the Secretary of the Treasury has during the past month recommended to Congress necessary measures involving the sale of perhaps \$150,000,000 worth of supplies on a pure credit basis for use in those portions of Europe which have been more seriously affected by war and the conditions subsequently growing out of it.

The problem of the United States is clearly that of conserving its credit resources and of applying them in those directions where the greatest need for them is recognized. Domestic demand has been competing with export demand. Credits have thus far been arranged which have enabled shipments to Europe to be made. Experience during the past year with its almost unparalleled expan-

sion of banking liabilities, involving in the national institutions alone a growth of over \$2,000,000,000 of deposits, has shown that the process of credit conservation is fully as urgently needed as it was during the war. The situation was characterized by Governor Harding in an address before the Massachusetts Bankers' Association on January 8, as follows:

"Our banking system is therefore passing through a transition period. During this transition period there should be an effective control of credits, gradual liquidation, and such temporary expansion only as may be necessary to meet seasonal requirements or emergencies. There should be a less lavish but more efficient use of capital and credit, extravagance should be discouraged in every way possible, and the production of essential commodities increased. It is important that the world should get back to work, but in order to provide steady employment for the people of our country, it is necessary that there should be a sustained demand for the products of our fields and factories, mines, and forests, and, in order to maintain this steady demand, it is necessary to provide markets abroad for our surplus production."

Working along this line of policy, the Federal Reserve agents in the several districts have in some cases issued to member banks circular letters of suggestion designed to encourage the curtailment of unessential loans and to explain to them the real purpose of variations in the discount rate, while others, although making no public statement, have undertaken to secure the cooperation of member banks through informal conversations and correspondence intended to aid in this process of reducing inflated loans and of confining reserve credit to the financing of necessary business operations. An indication of the need of effective control in the various districts is furnished by letters of recommendation or direction which have been issued by the various Federal Reserve agents, outlining to member banks the general credit policies to be locally pursued. A brief summary of certain of these indications of policy is as follows:

Boston.—Heavy borrowers have been asked to reduce their applications. It has been pointed out to them that the January liquida-

tion has been slight and that unless an actual policy of curtailment is adopted, the pressure for credit will be continuous and increasing in volume.

New York.—The bank in announcing advances in rates, has called attention of borrowers to the fact that as the volume of Government securities falls off, the released credit should be devoted to the reduction of indebtedness of the Federal Reserve Bank.

Richmond.—The attention of borrowers has been called to the fact that liquidation of credit should be begun through the application of income savings to the payment of loans made upon Government securities, while commercial enterprises should and must operate more within their own capital means, and banks must operate more within their own resources.

Cleveland.—The Federal Reserve Bank has announced its intention to supervise and investigate all paper offered for rediscount, in order to make sure that the proceeds are to be used for necessary commercial, industrial, or agricultural purposes.

Minneapolis.—Member banks have been advised that the resources of the system are not to be used to operate in the investment market, or to encourage speculative movements. The Federal Reserve Bank has used every precaution to eliminate such use of its facilities, including under the head of speculation price increases and hoarding of commodities.

San Francisco.—The public has been informed that the country is at present passing through an era of extravagance, and that it is the duty of banks now to exercise their best efforts toward correction of unsound conditions, avoiding especially speculation both in securities and in commodities.

During the month of January the reserve percentage of the Federal Reserve system has continued to fluctuate within narrow limits and has shown but little improvement. Most of the time the percentage has varied between 45 and 46 per cent, but at some of the banks the figures have at times run down very much below this level. The situation was fully stated at a conference of bankers which met

Discount rate situation.

in Washington on January 6 in response to an invitation of the Federal Reserve Board for the purpose of discussing the question of rates of interest to be paid by banks upon deposits made with them by other banks. Subsequent to this session, the New York Clearing House Association on January 16 adopted a rule fixing the maximum rate on such deposits of 2½ per cent, while similar action was recommended at an adjourned session of the Washington conference which took place in Chicago on January 23. The discussions at the conference of January 6, however, did not confine themselves to this important matter of detail but covered the broader question of credit conservation and of the relation of rates of discount thereto. In speaking to the bankers at the session of January 6, Governor Harding expressed his views on the situation in the following language:

“There is no question that the credit structure of this country is expanded. Such a condition is inevitable; there is no blame that should attach to anyone for such a state of affairs, for we have passed through the greatest, most destructive, and most expensive war of all history. All wars are accompanied by increase of taxation. In most of the countries there has been inflation of currency, and in all countries a great expansion of credits.

“While we have turned our backs upon the period of war financing and have directed our steps toward a more normal banking policy, we can not expect this year, nor next, nor in the immediate future, to regain a banking position which would be regarded as normal when judged by prewar standards.

“We can only reach such a position when, as the result of increased production and reduced expenditure on the part of the people and the Government, outstanding obligations of the Government have been very greatly reduced and the remainder has been absorbed by the investing public. The process is one which will require time and patience. But we can formulate our policies now. We must have a definite policy.

“We believe that by calling the attention of the banks of the country to the fact that, after all, the resources of the Federal Reserve Banks are not infinite, and that not only is there a check provided upon rediscounting in the way of advancing rates, but a direct check as outlined in section 4 of the Federal Reserve Act, which, in defining the duties of board directors

of a Federal Reserve Bank, requires them, in granting their loans and discounts and accommodations, subject to the orders of the Federal Reserve Board, to pay due regard to the wants and requirements of every other member bank, to administer the affairs of their bank fairly and impartially, keeping in view the possible requirements of all members; and it follows that should three or four members, or a group of a dozen or so member banks, be permitted, through their very large discounts, to absorb all the loanable funds of a Federal Reserve Bank, it would be impossible to grant reasonable accommodations to all member banks.

“But it is going to be necessary, perhaps, to raise rates beyond their present level. I am not here to make a prophecy nor to outline future policies, but you should all bear in mind that a further rate increase is a contingency which must be reckoned with.”

Acting upon the credit situation as analyzed and observed at the various Federal Reserve Banks, and in accordance with the views of the Board as above set forth, the discount rates at the various institutions have been raised, the action being made public on January 21 and the following days. These increases have raised the rate on commercial paper to a level of 6 per cent, secured paper protected by Liberty bonds and Victory notes being 5½ per cent. In the following table is furnished the revised discount rate schedule of the system as now in effect:

Discount rates of Federal Reserve Banks in effect Feb. 2, 1920.

Federal Reserve Bank—	Discounted bills maturing within 90 days (including member banks' 15-day collateral notes) secured by—			Bankers acceptances discounted for member banks.	Trade acceptances maturing within 90 days.	Agricultural and live-stock paper maturing within 91 to 180 days.
	Treasury certificates of indebtedness.	Liberty bonds and Victory notes.	Otherwise secured and unsecured.			
Boston.....	4½	5½	6	5	6	6
New York.....	4½	5½	6	5	6	6
Philadelphia.....	4½	5½	6	5	6	6
Cleveland.....	4½	5½	6	5	6	6
Richmond.....	4½	5½	6	5	6	6
Atlanta.....	4½	5½	6	5	6	6
Chicago.....	4½	5½	6	5	6	6
St. Louis.....	4½	5½	6	5	6	6
Minneapolis.....	4½	5½	6	5	5½	6
Kansas City.....	4½	5½	6	5	6	6
Dallas.....	4½	5½	6	5	6	6
San Francisco.....	4½	5½	6	5	6	6

NOTE.—Rate on paper secured by War Finance Corporation bonds 1 per cent higher than the rate on commercial paper shown in column 3.

The intent of these advances has already been so fully explained as to necessitate no additional comment. They are, in brief, an effort to restrict the rapid growth of credit, to which attention has been called during recent weeks. The situation which is called forth by this action is illustrated by the following table, which exhibits the growth of bank loans and investments (including amounts discounted and rediscounted with Federal Reserve Banks) on the one hand and of rediscounts and bills payable with Federal Reserve Banks on the other of selected member banks (some 800 in number) of the Federal Reserve System.

[In millions of dollars.]

Date.	Number of banks.	Loans (including rediscounts) and investments of selected member banks.	Rediscounts and bills payable with Federal Reserve Banks.
1919.			
Oct. 31.....	784	16,115	1,698
Nov. 28.....	795	16,156	1,813
Dec. 19.....	796	16,407	1,638
Dec. 26.....	797	16,521	1,833
1920.			
Jan. 2.....	798	16,753	1,870
Jan. 9.....	802	16,868	1,729
Jan. 16.....	803	16,852	1,757
Jan. 23.....	803	16,840	1,824
Jan. 30.....	804	16,762	1,834

It is much to be desired that variations in the discount rate should serve as a sufficient indication to member banks of the policy which must necessarily be pursued in presenting rediscount applications to Federal Reserve Banks. This, however, is not always the case and perhaps is not always possible, even where first consideration is being given to the industrial and commercial requirements of the country and where everything possible is being done to restore the proper balance between the volume of credit and the volume of goods. The process is necessarily more or less gradual and can be completed only when very considerable redemptions of bonds have been made and the remainder thoroughly absorbed by the public. In effecting this object, however, it has been found desirable by Federal Reserve Banks throughout the country to scrutinize with care the rediscount loans

allowed to their several members, and where these were excessive or were being employed for pure profit or for the support of unessential business operations, to recommend to them in some cases limitation of the amount of credit thus extended by them. This is a process which calls for the direct cooperation of the various members in the restriction not only of those loans which are employed in the operations on the securities markets, but also of those which are used in facilitating the carrying of large stocks of commodities which are thus hoarded or withheld from consumption. It is highly important, also, that all long credits granted in connection with exports be kept out of the commercial banks and that so far as practicable the liquid condition of the banks be preserved by restricting their discounts and advances to paper of short maturity growing directly out of agricultural, industrial, or commercial operations.

The unfavorable exchange conditions to

High prices and which reference has already **the foreign ex-** been made have developed with **changes.**

an era of higher prices at home and abroad. In Europe, particularly, prices of commodities drawn from the United States have advanced to excessive figures, because of the added element of cost entailed through the adverse exchange. While exchange rates, as pointed out in previous issues of the BULLETIN, are to be regarded as symptomatic rather than causative in character, in times of transition and readjustment such as the present, it may nevertheless be true that they have a momentary effect in embarrassing and interrupting the course of international trade. The situation lends especial interest to the final report of the committee on currency and foreign exchanges, which was originally constituted in Great Britain in January, 1918, under the chairmanship of the late Lord Cunliffe. This final report is published elsewhere in the present issue of the BULLETIN. The findings do not differ in substance from those of the original or preliminary report; they emphasize the conclusions which were reached in that document. The committee expresses a strong hope that the Government will confine its use of bank loans to

making provision for purely temporary necessities. It recommends a step already noted in a former issue of the BULLETIN that the actual maximum fiduciary circulation in any year shall be made the legal maximum for the following year, subject only to certain emergency provisions. The chancellor of the exchequer, in reply to a question in the House of Commons, has expressed agreement with the committee's view that increased production, cessation of Government borrowing, and decreased expenditure, both public and private, are the first essentials to recovery.

The continuous rise in prices and inflation of credit are arousing more and more anxiety in foreign countries, and particularly in Great Britain. Conservative writers on the subject recommend the early funding of the floating debt, and the issue of fresh currency only upon a basis controlled by the available gold supply. Meanwhile, index numbers representing the level of prices continue to show a rapid upward movement both here and abroad. The index number of the Bureau of Labor Statistics shows for the month of December a further advance in prices amounting to 8 points, while food prices alone appear to be increasing even more rapidly.

Gold imports for the calendar year 1919 totaled 76.5 millions, compared with 62 millions for the calendar year 1918, while gold exports totaled 368.2 millions, compared with 40.9 millions exported in 1918. Net gold exports for 1919 amounted to 291.7 millions, as against 21.1 millions the year before. The 1919 figures are, however, exclusive of 173.4 millions of gold received from the Reichsbank for foodstuffs sold to the German Government. This gold is held at present in London, with the exception of about 42 millions which have been sold by the Federal Reserve Banks and released to foreign interests. Counting the 131.3 millions held on December 31 by the Bank of England for the Federal Reserve Banks as an offset against the net exports above shown, the net loss of gold through transfer abroad is reduced to 160.4 millions. Of the gold imports over three-fourths were received from Canada,

Hongkong, the United Kingdom, and Mexico, while of the gold exports 94.1 millions were consigned to Japan and over 125 millions to the other Far Eastern countries; i. e., China, Hongkong, British India, Straits Settlements, and Dutch East Indies; 56.6 millions to Argentina; 33 millions to other South American countries; 29.8 millions to Spain; and 10.4 millions to Mexico. Net imports of gold since August 1, 1914, were \$765,520,000, 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.....	688,745	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 Jan. 10, 1920.....	492	14,727	¹ 14,235
Total.....	1,853,642	1,088,122	765,520

¹ Excess of exports over imports.

Gold imports for the 10-day period ending January 10 of the present year amounting to \$491,980, were received principally from Canada, Mexico, and Peru. Of the gold exports amounting to \$14,727,348, \$5,934,239 were consigned to China, \$3,706,301 to Japan, \$2,456,675 to Hongkong, and \$1,500,000 to the Straits Settlements, the remainder going principally to Mexico and British India.

Silver imports during 1919 totaled 89.4 millions, compared with 71.4 millions in 1918, while silver exports during 1919 were about 239 millions, compared with 252.8 millions the year before. By far the larger portion of the silver exported in 1919 was consigned to the Far East, British India having received 109.2 millions, China 77.6 millions, and Hongkong 10.2 millions. The three countries named account for over 80 per cent of the total value of silver shipped to foreign destinations during the past calendar year. It is worth noting that silver exports to India, which constituted by far the larger portion of the total foreign silver shipments during 1918 and 1919 to September

10, have practically ceased since and been superseded by large gold shipments to that country during the latter part of the year.

Net exports of silver since August 1, 1914, were \$432,742,000, 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 Jan. 10, 1920.....	4,336	7,706	3,370
Total.....	297,338	730,080	432,742

About one-half of the \$4,336,000 of silver imported during the 10-day period ending January 10, was received from Mexico; Peru, Salvador, Honduras, and Canada furnishing most of the remainder. Of the silver exports, amounting to \$7,706,000, \$4,677,000 were consigned to China and \$2,526,000 to Hongkong.

For the four weeks between December 19, 1919, and January 16, 1920, the banking member banks in the leading cities report further net liquidation of 47.4 millions in United States Government securities, largely Victory notes and Treasury certificates. War paper holdings, less rediscounts, show a decrease of 20.4 millions. This decrease is, however, more than fully offset by an increase for the period of 85.2 millions in loans secured by stocks and bonds, which at the close of the period under review constituted 21.1 per cent of the total loans and investments of the reporting banks. All other loans and investments, composed mainly of ordinary commercial loans, show an even larger growth of 264 millions, 58 per cent of which represents the increase for the banks outside the Federal Reserve Bank cities. Collateral notes of reporting banks held under discount at the Federal Reserve Banks declined in the meantime 44.8 millions, so that

the margin between the loans and investments of the reporting banks and their borrowings from the Federal Reserve Banks shows an increase of 326.3 millions for the period. As against a reduction of 224.8 millions in Government deposits other demand deposits (net) show an increase of 545.3 millions, and reserve balances with the Federal Reserve Banks an increase of 157.1 millions.

Data for the Federal Reserve Banks available for the period between December 26, 1919, and January 23 of the present year indicate a slight downward trend in their assets, both discounted and purchased paper being smaller at the close of the period than four weeks before. Total discounts held by the Federal Reserve Banks declined 41.5 millions, a larger decline in the holdings of war paper being partly offset by an increase in the holdings of ordinary commercial paper. As the result of rate revision and the partial elimination of the differential between 15-day and 90-day paper there is seen an increase of 135.9 millions in the holdings of 90-day paper, and a decline of the proportion of 15-day discounts to total discounts from 68 to 62 per cent. During the period under review the New York bank rediscounted considerable amounts of paper with other Federal Reserve Banks, resulting in an increase by January 16 in the amount of paper held under discount for other Federal Reserve Banks from 40.6 to 119.8 millions. By the following Friday the total had been reduced to 89.1 millions held by five Federal Reserve Banks. As against this large increase in the volume of interbank discounts, holdings of bankers' acceptances purchased from the Bos-

ton and New York banks and reported by six other Federal Reserve Banks show a reduction of 79.4 millions. In accordance with the large increase in member banks' demand deposits the Federal Reserve Banks show an increase from 1,704.5 to 1,817.8 millions in their net deposits. On the other hand, Federal Reserve note circulation declined steadily during the four weeks from 3,057.6 to 2,844.2 millions, or at an average weekly rate of over 53 millions. Losses of 51.8 millions in gold reserves and of 47.6 millions in total cash reserves were caused principally by export withdrawals of gold, also by sales of gold held in London and exchange of gold for other reserve cash. The reserve ratio of the banks at the end of the period—44.8 per cent—shows no change from the ratio reported four weeks before.

Hon. David F. Houston, who since March 6, 1913, has been Secretary of Agriculture, was nominated by the President January 28, 1920, to be Secretary of the Treasury in succession to Hon. Carter Glass. He took the oath of office in his new appointment February 2. Mr. Houston, as one of the three members of the Reserve Bank Organization Committee, had much to do with the inception of the Federal Reserve System. He was a frequent adviser at the time that the Federal Reserve Act was being framed and for many years has been a close student of economics, finance, and banking. As an ex officio member and chairman of the Federal Reserve Board, the new Secretary will have much to do with the shaping of banking policies.

BUSINESS, INDUSTRY, AND FINANCE, JANUARY, 1920.

Reporting heavier trade demands and in many cases greater "prosperity" than ever before in the history of their districts, Federal Reserve agents nevertheless point to shortened lending power, less easy credit and dangers of various kinds growing out of extravagance, excessive prices and overtrading. Labor conditions have been on the whole encouraging and the demand for products strong and active.

Although emphasis is thus placed upon spending power and the volume of business, many countervailing considerations are receiving attention heretofore not granted them. From district No. 1 it is stated that "never in the history of the mercantile life of New England was Christmas trade so enormous, and never was purchasing power exercised with such extravagance." Yet, "in spite of the orgy of spending, the people of New England have put into its savings institutions during the past year approximately \$190,000,000. There is no reason to become pessimistic with respect to existing conditions."

In district No. 3 manufacturing business "continues to be offered in large volume," and although retail trade shows a natural falling off from the holiday level, it is "in excess of last January." "The stores report difficulty in procuring supplies due to the heavy demand. Collections are excellent and cash payments comprise a large part of total receipts."

In district No. 4 the present demand for manufactured products and the present fever of extravagance has not reached its zenith, while foreign trade is rapidly developing.

In district No. 5 "the end of the year brings a repetition of the reports of unprecedented prosperity. Farmers, merchants, manufacturers and bankers have all had record years. Collections were never better and many old accounts have been liquidated."

District No. 6 notes that the "public mind is giving more thought to the economic situation," and yet "there has been little if any slack-

ening in the wholesale or retail trade during January. All lines report very limited stocks on hand and new supplies difficult to obtain."

In district No. 7 "demand for commodities outruns any possibility of providing a supply. The general volume of business in the Middle West continues at a high level. Farming communities continue to enjoy the prosperity which has resulted from several years of very high prices. Nevertheless, there is running through the banking mind in the Middle West the thought that "this country can not long continue the extraordinary volume of foreign exports," while there has been a "rather liberal use of credits in all lines."

District No. 8 finds that "the holiday trade was in many instances unprecedented, while prices continue high, demand for money at a record level, and collections good."

In district No. 9 there is "sufficient work for all who care to work. Factories are running full time and booking all the orders they can fill," and there is a "continuous demand for a larger supply of skilled labor."

District No. 10 reports that 1919 was a record year of business effort and that at the opening of the new year the business situation continues active, while payments for the first week in January are from 10.4 per cent to 12.7 per cent better than in the corresponding week last year. "The tremendous buying power of the people" has continued.

In district No. 12 no strikes or labor disturbances are in progress, bank clearings have increased, retail trade continues active, averaging 45 per cent greater than in December, 1918, and there is a strong demand for all classes of products.

Some districts report that an indication of a limit of buying power is apparently in sight. At Boston the opinion is expressed that increases in rediscount rates are required to check further expansion of unnecessary credits. In Philadelphia it is reported that the present

situation can be remedied chiefly by increased production which is needed. In Cleveland the peak of high prices has not yet been reached, while "the evil effects of underproduction and labor unrest" are present in certain lines. In Richmond "universal criticism of the present extravagance of the public and of inefficiency in production" is wide, but there is "no abatement of these symptoms." In Atlanta "there is great need for universal thrift in order to prevent the conditions which a continuous increase in the price of commodities will bring." In Chicago "there is a terribly curtailed supply of goods" and "a persistent maintenance of the high cost of living." In St. Louis little has been accomplished in fighting the cost of living and it is likely that "little will be accomplished" until individuals stop indulging in extravagance. Banks are besieged by small borrowers who wish to borrow on Liberty bonds. In Kansas City there is a tendency to "defer payment of war obligations, to further inflate credits, and thus prolong the abnormally high prices."

Agricultural operations in most districts are now practically suspended owing to the presence of midwinter conditions which have prevented any change in the productive outlook from manifesting itself, leaving in most places only marketing problems to be dealt with. From Minneapolis, however, it is reported that the outlook is good. The western half of the district has been covered by a good blanket of snow which has disappeared under warm winds, but most of the moisture has gone into the ground. Conditions in the eastern part of the district are very favorable to winter wheat and rye, and while the seed wheat situation seems likely to give some concern, much of the available seed being of doubtful germinating quality, it is believed that the shortage will not be really acute. In the St. Louis district winter wheat acreage has been materially reduced as compared with last year, which, however, was unusually large. In parts of the district the crop has been damaged by excessive rains and sleet. An average

yield in tobacco is expected and about one-quarter of the last cotton crop is still unpicked. In Kansas City the winter wheat area has likewise been reduced, being about 16,500,000 acres as compared with 20,939,000 a year ago, a reduction of 20.6 per cent. There is a tendency on the part of farmers to get back to normal crop growing. The movement of grain to the markets has been in satisfactory volume. On the Pacific coast heavy snows and cold weather in the northwest has brought live stock off the ranges and forced early winter feeding. Winter wheat has been undamaged by the cold and the heavy snows have increased the moisture content of the soil. Fruit trees have suffered some damage. A large movement of canned goods and other products is in progress.

As regards the live-stock situation, receipts of cattle at 15 primary markets during December are reported as 1,650,315 head, corresponding to an index number of 164, as compared with 2,046,664 head during November and 1,706,945 head during December, 1918, the respective index numbers being 203 and 169. Receipts of sheep during December were 1,589,237 head, as compared with 1,114,761 head a year earlier and 1,743,189 head during November, 1919, the respective index numbers being 116, 82, and 128. Receipts of hogs show a change from 3,785,870 head, corresponding to an index number of 172 during December, 1919, to 4,197,313 head, corresponding to an index number of 191 during December, 1918, as compared with 2,715,955 head, corresponding to an index number of 124 during November. From Kansas City it is reported that December, 1919 and December, 1918, receipts of cattle and sheep at the six markets of that district were 6,821,451 and 8,906,561, respectively, while receipts of hogs were 9,777,671, as compared with 10,680,622 in December, 1918. The live-stock markets have been in an unsettled condition throughout the year 1919 and losses at the six markets referred to, as compared with the 1918 record, were 8.2 per cent of cattle and 8.5 per cent of hogs, although

an increase of 17.1 per cent for sheep and calves for 1919 is shown by the reports.

Flour milling has been heavy during the latter part of 1919 and the opening of 1920 in the Kansas City district. At Kansas City flour output equaled 84 per cent of milling capacity, at Omaha it was slightly above 94 per cent capacity, and at interior points it was 80 per cent capacity. This compares with the output of a year ago of 75 per cent capacity at Kansas City, 80 per cent capacity at Omaha, and 72 per cent capacity at interior mills. Car shortage exists in a good many regions, including the flour-producing sections. Nevertheless the output of flour has been larger in many sections during 1919 than in 1918.

Iron and steel production has reached a high record level, but the demand for production is keeping well ahead of supply. Independent producers are regulating their quotations more nearly to conform to the present intensity of demand and advances in operating costs. Steel corporation mills continue to adhere to minimum prices, but they are quoted only to regular customers. Total unfilled orders of the United States Steel Corporation on December 31 were the largest since October 31, 1918, while December showed the greatest single monthly gain in history. This amounted to 1,137,036 tons. Total unfilled orders during the last seven months increased over 4,000,000 tons. Some of the independent mills are in a similar position. Pig-iron production also shows an increase from 2,392,350 tons during November to 2,633,268 tons during December, the respective index numbers being 103 and 114. The Philadelphia district reports a heavy demand for pig iron and foundries are unable to produce in sufficient amounts. Prices are advancing and there are practically no stocks on hand. Steel producers are running at their maximum so far as the material and labor situation will permit. There is a general feeling that the next six months will continue to be marked by business of a very large volume. In district No. 6, industrial plants around Birmingham are working to capacity, with suffi-

cient orders to keep them actively employed for some time to come. Pig iron production was not quite so large in 1919 as in 1918, the decrease being due to difficulty in securing raw material and to inefficiency of labor. There is now a shortage of railroad equipment with which to ship pig iron.

The termination of the coal strike has removed the last obstacle from the path of the miners who wished to return to work, but in spite of this fact and the continuance of a strong foreign demand, the output of coal is limited by the failure of railroad companies to deliver cars to the mines as needed. The car problem must be solved before a material betterment can be expected. In the fourth Federal Reserve district some mines are operating at only 10 per cent of capacity on this account, and 136 mines in the Pittsburgh district report a loss of 200,000 tons of production during the last two weeks in December. In district No. 3 the production of bituminous coal is gradually recovering, but is not yet up to normal, while the car situation is bad. The anthracite industry closed the year with an estimated production of 68,700,000 tons, which is 10,000,000 tons short of the preceding year. The market demands are at the present time absorbing the output of domestic sizes. The output of bituminous coal has, however, shown a steady increase in that district during the past month, the output for December amounting to 1,325,000 tons as compared with 1,000,000 tons in November. In the country as a whole production during December was 36,612,000 tons, corresponding to an index number of 99, as compared with 20,303,000 tons, corresponding to an index number of 55 during November, and 40,184,000 tons, corresponding to an index number of 108, during December, 1918. In anthracite coal shipments during December were 6,138,460 tons, as compared with 5,971,671 tons during November, and 5,736,260 tons during December, 1918, the respective index numbers being 109, 106, and 102. Special comment is offered in some districts with respect to the tremendous increase in the use of

oil as fuel, the production of crude oil being on the increase, while prices are approaching the level where new drilling operations may be expected. From the Kansas City district it is reported that during the 12 months of 1919 the output was 130,000,000 barrels of crude oil, as against 145,000,000 barrels in 1918, the loss in production amounting to 10.1 per cent, due to shortage of labor and materials and scarcity of machinery. During the year, however, it was a fight to develop new production in order to offset the natural decline of production from old wells. The demand for oil at present is so great that the supply is not keeping pace with it and it is expected that during 1920 the development of oil on a larger scale than ever before will be undertaken. For the past December 665 new wells were completed, with 50,425 barrels of daily production.

In wool and textile manufacture there has been some easing of the situation, prices being slightly lower for the medium grades of raw wool, and dealers passing on these inducements to the manufacturer in the belief that the public may be willing to buy less expensive goods. Mills, however, continue to be sold far ahead and particularly the better goods are in very great demand. In the Philadelphia district, however, the demand for the finest grades continues very strong, while the percentage of wools free from defect is comparatively small. Yarns are scarce, but in so far as materials can be obtained, manufacturers are very busy. It is expected that during the next few months heavy demand will continue. In clothing, the claim is made that consumers have shown a finical tendency to demand only the finest qualities, while prices of ready-made articles are tending materially higher and labor conditions are such as to entail heavy cost of production entirely independent of raw material expenses.

Cotton textile mills are running to capacity and in some instances are sold through June and are accepting contracts for as late as September in the New England district. The purchase of raw cotton has, however, fallen off of late and manufacturers are coming to the view

that the limit of prices has been reached. There is no apprehension as to the future of the industry in New England, extensive additions to factories being under way. In the Philadelphia district the finer grades of cotton yarns are preferred, while stocks of yarns are not increasing. It is becoming increasingly difficult to place new orders owing to the fact that spinners have sold out so far ahead. Prices of yarns are trending upward and the price of finished goods is high and is expected to go higher. The question in the minds of buyers is said to be not so much that of price as of delivery. From the Middle West prosperity in wholesaling is reported, wholesale dry-goods dealers reporting increases running from 47 per cent to 100 per cent and even over 300 per cent for December, as compared with the corresponding month a year ago.

In leather and shoes there has been apparently some sign of a slowing down in demand for the highest cost goods, with corresponding increase in demand for the lower grades. The leather market has been firm and stable and is likely to remain unchanged for some time to come. Some manufacturers fear further wage increases which may offset declines in other items of production cost. Factories, however, are sold well into the spring and their capacity is not sufficient to take care of business offered.

In automobile manufacturing the sale of pleasure cars seems to be reaching new proportions. Trucks are in but little demand, although there has been some recent improvement. Hardware business is flourishing, and the volume for December and the first half of January was considerably in excess of the previous year. Manufacturers of electrical specialties report business from 80 per cent to 115 per cent beyond that of December, 1918. Harvesting machinery manufacturing in some districts is problematical owing to the uncertainty of the wheat crop. Manufacturers of chemicals are enjoying a steady trade. The stove business is not normal in volume.

The housing situation in the Middle West continues to be fundamentally important. In

the Kansas City district the year 1919 recorded an increase of 130 per cent over 1918, the estimated cost of new buildings amounting to more than \$64,000,000. In district No. 1 the period of building postponement has apparently been passed, immediate necessities being of such urgent character that they must be met. It is predicted that the current year will break all current records. Certain classes of materials, however, seem to be absolutely impossible to deliver. In the Philadelphia district a good volume of demand for many classes of materials is reported. Stocks of lumber on hand are scanty. In Chicago the structural trades are operating at one-half normal speed owing to inability to obtain structural steel. Prohibitive prices and extreme scarcity control the brick situation. In district No. 6 the demand for lumber is in excess of the supply and prices continue very high. The winter season has been unfavorable for production. The naval stores industry is quiet, but producers are engaged in preparing for the coming season. Demand is improving. Foreign purchasing is restricted on account of high exchange rates. Taking the country as a whole, the characteristics of the situation are extremely strong demand for building materials, particularly for lumber, and very low stocks, coupled with unfavorable transportation conditions which have prevented deliveries. Early spring building operations will be correspondingly difficult.

During the month of December there was an increase of 8 points in the Bureau of Labor Statistics index number, the index number for the month of December standing at 238. The index numbers for each of the principal classes of commodities likewise show increases, the figure for the group of raw materials for the month of December being 233, as compared with 226 for November, for the group of producers goods increasing from 216 in November to 229 in December, and for the group of consumers goods standing at 244 during December as compared with 236 during November. The increase in the index number for the group of raw materials is due largely to the increases in

prices of farm products and forest products, the index number for the former group increasing 12 points to 288, and for the latter group increasing 20 points, the December figure being 259. On the other hand, animal products show a slight decrease and mineral products a slight increase.

There has been an evident improvement in general labor conditions during the month. In the East and North employment is reported as being full and labor is said to be in a more contented mood than for some time past. High wages and generally satisfactory conditions of employment are given as the reason for this improvement. At some manufacturing centers efforts are made to increase wages on the ground that higher living costs make them necessary but this argument in behalf of higher wages is apparently losing its force, employers feeling that the strong demand for luxuries indicates that there is a large surplus of buying power in the hands of consumers. In the steel districts the termination of the strike has resulted in a more stable condition of the labor market, and the Pittsburgh district is now free from strikes, excepting minor local disturbances. In all parts of the country a similar condition is reported except that poor transportation conditions seem at some points to make full operation difficult, hence subjecting labor to some little irregularity of employment. At some points in the South and Southwest there are still complaints that labor is not working full time but is using its high income to purchase leisure at the expense of production. Nevertheless, the general labor situation even in these districts is reported as the best for months past. There is some prospect of agricultural labor shortage in connection with the crop season now pending, but the extent of this is still for the future to determine. There are some strikes of street railway workers in various cities and more or less unrest exists here and there, but from various quarters it is stated that a much better understanding of the industrial situation exists among labor organizations and that adjustments of

wages already made have tended to restore good feeling.

The banks in the eastern centers particularly are reporting a heavy demand for funds and are using the Federal Reserve Banks freely. In the interior of the country money has been in strong demand for local uses. The action of the Federal Reserve system in raising its discount rate to 6 per cent on January 23 has been favorably received by the financial community as a step toward the reduction of outstanding lines of credit. Ordinary commercial rates are moving upward. While on some days there have been very high rates for call funds at the different centers, a reduction in the volume of speculation has limited such charges, and during much of the time call funds have ranged around 6 per cent to 8 per cent, although they have run as high as 25 per cent. The market for commercial paper is dull, and commercial paper houses report that they are discouraging their clients from extensive borrowing. A lower level of prices and very much less activity in stocks and securities generally has been characteristic during the latter part of the month of January. Liberty bonds have declined slightly and standard railroad and industrial bonds have sold at low figures. Foreign exchange has moved to lower levels, sterling bills reaching the low level of \$3.49, while practically all continental exchanges have also gone to record low figures. During the past month the money situation has not shown the relaxation usual in January. New financing has been greatly impeded. There has been no change in the foreign credit situation, but a Belgian loan of \$25,000,000 was successfully placed during the middle of the month.

On the whole, the business outlook presents much the same characteristics as during December, but with indications that a peak in high prices and inflation has been approached if not reached. Financially the month has been one of doubt and tension. Prospects of business activity for the coming weeks appear "favorable," but will require careful disposal

of pending financial and exchange problems. Foreign trade continues on its abnormally high level, although a reduction during December was noted. A much heavier reduction, should exchange continue at its present unfavorable figures, is predicted by many.

SPECIAL REPORTS.

REPORTED BY DISTRICT NO. 2.

Money rates.—The money market of the past 30 days has been in a state of tension. Rates for call money on the New York Stock Exchange covered the wide range of 6 to 25 per cent, which was the highest since the 30 per cent rate of November 12. The high figures were reached at the end of the year, when funds were being withdrawn from New York by out-of-town banks for use at home. Early in January rates were easier, a reflection of the creation of credit which was incidental to the redemption of certificates of indebtedness. Throughout the period renewals were made at unusually high figures. From December 23 to January 5 the renewal rate ranged from 10 to 15 per cent; on January 6 the rate was 8 per cent; since then it has ranged between 6 and 8 per cent. Time money has been scarce and rates have been high. Transactions have been few, even for the shortest maturities. Rates are nominally $7\frac{1}{2}$ per cent for loans on mixed collateral and 8 to $8\frac{1}{2}$ per cent on all industrial.

The market for commercial paper has continued dull as far as banks in the city of New York are concerned. Few of them report any purchases at all. It has been observed, however, that there has been an increased demand for commercial paper from institutions within a comparatively short distance of New York, and dealers report their outside business to be good in practically all sections of the country. Very recently a heavy supply has manifested itself, which appears to be considerably in excess of the power of the market to absorb. Certain commercial paper houses report that they are discouraging their clients from borrowing extensively. The rate remains on a 6 per cent basis, with a few sales of exceptionally desirable names at $5\frac{1}{2}$ per cent. In the last 30 days the Federal Reserve Bank twice raised its purchase rate on acceptances. Present purchase rates are 5 per cent for indorsed 90-day bills, and $4\frac{1}{4}$ per cent for 60-day and 30-day bills. Stringency in money

rates has kept the discount market limited, but latterly dealers in acceptances have been taking steps to widen the market for this kind of paper.

Stock market.—On the whole the stock market in the last 30 days has been particularly sensitive to the stringency of money. For a short time around the first of the year prices rose and the volume of sales increased accordingly, but for the most part the movement of prices has been downward, on a market which has been in the hands of professional traders, with public speculative activity much diminished. No considerable re-investment demand has been reported.

Liquidation, which had its beginning more than two months ago, has continued with few interruptions. It has been orderly and there has been evidence of a substantial amount of real capital to sustain the market against radical declines. Railroad shares reached the lowest point of December on the 12th, and industrials on the 22d; but the rallies were slight and generally lacking in vigor. By the middle of January railroad stocks were again down to a price level only about $1\frac{1}{2}$ points above the lowest of December, while industrials were down $1\frac{1}{2}$ points below the lowest of the previous month.

Average daily stock sales for the week just before Christmas were 817,400 shares; and this compares with 1,197,700 a day for the week ended January 2, and 826,700 for the week ended January 9. Around the first of the month an active day was a day of rising prices, but more recently activity has been accompanied by weakness.

Bond market and new financing.—Heavy liquidation in bonds, both corporation and Government, continued somewhat past the middle of December, attributable in part at least to a desire on the part of holders to record losses for the purposes of the income tax. The general level of prices touched its lowest on December 18, but in the succeeding three weeks there was a substantial movement upward.

Railroad bonds, in response to favorable reports from Washington as to the time when the roads will be returned to their owners, and the conditions under which the return may be accomplished, showed more strength than any of the other major groups of bonds. They rose about $2\frac{3}{8}$ points from the middle of December to the middle of January. Public utility issues recovered about $\frac{3}{8}$, industrials $1\frac{1}{2}$ points, and foreign Government bonds as a group about $1\frac{1}{2}$.

Liberty bonds rose from $\frac{1}{4}$ to $1\frac{1}{2}$ points up to January 4, and as usual made up the larger part of aggregate of sales. Transactions in corporation bonds remained heavy, averaging about \$5,500,000 per day over the turn of the year, and then sharply diminished to \$2,800,000 daily.

During the second week in January renewed liquidation of moderate proportions made its appearance. Liberty bonds lost somewhat more than their previous gains and railroad bonds also declined.

The curtailment of new issues of securities observed in November continued, the result of general financial conditions reflected in a lessened public demand. The total in December was \$223,000,000 as compared with \$253,000,000 in November and \$390,000,000 in October. For the entire years 1919 and 1918 the monthly averages were \$252,000,000 and \$112,000,000, respectively. The new issues in December included a number of high-grade municipal and Government bonds; preferred stocks of industrial corporations of proved standing, as well as of corporations which are still to demonstrate their capacity to earn on augmented capital; and corporation bonds and notes of varying degrees of quality.

New incorporations in December amounted in nominal capital to \$1,077,500,000. This compares with the monthly averages of \$1,056,000,000 for 1919 and \$216,000,000 for 1918.

REPORTED BY DISTRICT NO. 3.

The production of bituminous coal is gradually recovering but is not yet up to normal. The car situation at the mines has not been relieved to any extent and is having its effect in holding back production. Prices are trending upward. The possibility of scarcity of this fuel has not yet been eliminated.

The anthracite industry closed the year with an estimated commercial production of 68,700,000 tons, which is 10,000,000 tons short of the previous year. This was largely occasioned by the reduced demand for steam sizes, which have not moved freely in spite of the suspension of mining in the bituminous fields during the strike.

At the present time market demands are readily absorbing the output of domestic sizes, but the smaller steam sizes are in surplus supply, indicating a smaller demand from manufacturers. Prices, with the exception of the steam sizes, have been steady. The tendency

for the future will entirely depend on the condition of the labor situation, which is now being investigated in the bituminous field by the President's commission. In the anthracite field the present wage agreement expires on April 1, and a new wage agreement must then be negotiated. Until that time prices are expected to remain the same. The general attitude of labor at present is toward higher wages. The railroad car situation in the anthracite field has not been disturbing and the general supply of fuel is apparently ample for all purposes at this time.

REPORTED BY DISTRICT NO. 4.

Demand for iron and steel is keeping well ahead of supply since production generally has continued unsatisfactory and subnormal. Early deliveries in many lines virtually are impossible to obtain. Buyers encountering this situation on their current requirements have been rendered more anxious to fortify themselves on their future needs. The result has been that strong efforts are being made on all sides to get under cover forward needs running to July 1 and beyond. Fearing a shortage of material, many consumers have made prices a secondary consideration; therefore, they have been actively bidding up the market upon themselves, and the situation wholly is in the sellers' hands. The steel corporation having reiterated its determination to maintain the minimum price schedules suggested by the industrial board March 21, now finds itself practically alone in this position. Various independent producers are regulating the quotations more nearly to conform with the present intensity of demand and the material advances in operating costs. Some of them are observing a conservative policy; others have raised their schedules sharply. As a consequence the spread of going prices has been increased. Between the high and low figures it now amounts to something like \$17 per ton in steel plates, \$13 in steel bars, \$19 to \$24 in sheets, \$6 in structural shapes, and corresponding amounts in other finished products.

While the steel corporation mills continue to adhere to minimum prices, these are being quoted only to regular customers. Furthermore, the obligations of the largest producer have grown heavily so that deliveries on many lines have become far deferred. Total unfilled orders of the steel corporation on December 31 were the largest since October 31, 1918, and

December showed the greatest single monthly gain in history. This amounted to 1,137,036 tons. During the past seven months the total unfilled orders of the leading interests were swollen over 4,000,000 tons. Some of the independent mills are in a relatively similar position, and have enough business on their books at present at the current rate of operations to carry them well past mid-year.

A large buying movement in heavy melting steel scrap is accepted as further indication that heavier steel production is at hand. Insistent demand continues for immediate or early shipment, particularly in bars, sheets, and plates, strip steel, wire nails, and oil-country goods, and the trade is being scoured for odd lots in stocks and offering premiums over the customary prices.

Sheet mills are particularly hard pressed with a tremendous demand arising from automobile makers.

Tinplate consumers are pressing the mills for additional booking of orders, but the mills report they are nearly sold up to July 1 and are accepting very light additional business. The season for really heavy consumption of tinplate is several months away. Most favorable prices are ruling on export business, but it is reported very little of this trade is accepted. Tinplate market remains quotable at March 21 prices.

Pipe mills will not be able to overtake the demand for oil-country goods even in the next six months. Severe weather has slowed down operations somewhat in the fields, but the demand is unabated for tubing and casing and drive pipe. Pipe lines projected for early spring in newly developed fields are further postponed.

Production has remained unsatisfactory and few of the mills have been able as yet to work back to maximum outputs. This has been due to the demoralizing effects growing out of the steel and coal strikes, the lack of common labor, etc. The official termination of the steel strike undoubtedly will help to bring about some improvement in this respect, in that working forces will be augmented. However, during the strike many of the men had become scattered through other lines of employment and the taking up of their old jobs promises to be gradual. General efficiency has suffered from the recent interruptions of operations and the manufacturers are finding it a real problem to restore it.

Under these circumstances much tonnage now being offered the mills is being declined because of the doubt that it can be delivered within the period desired. This has brought up the big question as to how the railroads are to obtain the large quantity of steel necessary to their speedy rehabilitation once they are returned to private hands. There has been some talk that special dispensation may have to be arranged for their benefit, in order that their requirements may be met. The railroads have been heavy buyers of steel during the several weeks which have elapsed since the presidential announcement that they were to be returned to their former owners March 1. Principally rails for 1920 delivery have been taken, these orders amounting probably to 1,000,000 tons. Heavy purchases also have been made for car repairs, in track fastenings, etc. New ship work is coming along steadily and large lots of plates and other forms have been placed to cover additional construction contracts. The mills have been obliged to refuse considerable business of this character.

The pig-iron market has continued to rise under a steady demand that has considerably exceeded the available supply. Many of the furnaces now are sold up entirely against their first half production. Buyers are now coming into the market for the last half of the year and sales for that period which had been on the basis of \$38 to \$42 at furnace for the base grade have been increasing. Such little metal as is obtainable for first half shipment is bringing from \$40 to \$42 for the base grade. Producers are less inclined to advance above these levels, believing that the market has advanced amply, if not too rapidly.

December production of pig iron as compiled by the Iron Trade Review made a somewhat better showing than was anticipated earlier in the month, when the coal strike was affecting operations. The December tonnage produced was 2,629,851, against 2,404,369 in November and 1,864,424 in October. According to the record of furnaces blowing on December 31, which was 262, pig-iron production virtually had been restored to the basis which was prevailing at the outbreak of the steel strike in September.

With December figures, it is shown that the production of coke and anthracite pig iron in the country in the calendar year of 1919 was 30,586,714 tons and including charcoal iron about 30,925,000 tons. This compares with 39,054,644 tons in 1918, 38,621,216 tons in 1917, and 39,434,797 tons in 1916.

REPORTED BY DISTRICT NO. 6.

The value of agricultural products raised in Georgia during the year 1919, exclusive of any live stock, is estimated to be \$613,000,000, by the Cooperative Crop Reporting Service, conducted jointly by the United States Bureau of Crop Estimates and the Georgia State Department of Agriculture. This is more than \$15,000,000 increase over the previous year, although it was the worst crop season in a decade, and a record for boll weevil damage.

The year has been marked agriculturally by the adding of tobacco and sugar cane to the list of principal crops. The season of 1918 has already seen peanuts and velvet beans become principal crops, and with the continuous spread of the boll weevil further diversification is expected. The early ravages of the insect the past year caused heavy abandonment of cotton, which was largely replaced by food and feed crops.

Below are given figures, published by the United States Department of Agriculture, showing the number of bales of cotton ginned in the States of the Sixth Federal Reserve District prior to January 1, 1920:

Alabama.....	680,459	Florida.....	17,515
Georgia.....	1,637,738	Louisiana.....	291,222
Mississippi.....	823,082	Tennessee.....	239,876

Ginnings of sea-island cotton prior to January 1 were:

Florida.....	2,886
Georgia.....	650

Alabama reports indicate that very little preparation has so far been made for the approaching season's crops. The unfavorable weather conditions have prevented farm work to any great extent.

The crop of sugar-cane sirup for the past season is estimated at from 60 per cent to 70 per cent of normal.

The rice crop of Louisiana for 1919 is valued at \$53,000,000, being sold all over the country, and shipped to Cuba, Porto Rico, and all Latin American countries, in addition to large European shipments. The sugar crop has already been sold for high prices, which in a measure has offset the short crop. The estimated value of the 1919 crop, including by-products, is \$50,000,000.

Tennessee reports show 1919 crops to be below normal, except tobacco and hay. Tobacco production is estimated at 20 per cent above that of 1918. Corn and cotton were badly damaged by rain. The wheat acreage

is stated to be only 50 per cent of that sowed in 1918, and oats, rye, and barley average about 75 per cent of normal, both as to acreage and condition of crop.

Reports from Florida indicate that frosts about the first of January did considerable damage to growing crops in the southern part of the State, the section to which agriculture is practically confined at this season of the year. Everyone, however, saved their seed beds, and will replant the stock that has been frosted.

A heavy average of potatoes is being planted. There is a large acreage of cabbage which has not been damaged by the frosts and is in splendid growing condition. A large quantity of seed cane is being banked, indicating a large acreage of this product next season.

An increase of several thousand acres in plantings of tomatoes this season is indicated. The recent cold weather damaged the early plantings to about 10 per cent to 20 per cent; these seed beds, however, were also saved, and this acreage will be replanted.

REPORTED BY DISTRICT NO. 7.

Business is in a peculiar pocket. On one side there are forays against high prices, society women engineering film propaganda and quasi-boycotts against this or that commodity at the prevailing prices, or else pledging themselves to refrain from buying until concessions are made. On the other side there is the obstinate fact that demand for commodities outruns any possibility of providing a supply, that production is low in volume because labor is inefficient and because raw materials are available in quantities much below necessary requirements. These factors, combined with others of vital moment, such as car shortage, motive-power famine, inadequate transportation facilities, and strike rumors, constitute a total of risk element against which the average man of business dreads to pit his capital. Crowning all the rest of the difficulties that are piled up around business tranquillity stands the foreign exchange situation, most obstinate and unfavorable in its bearings on American hopes.

"The wish is father to the thought," apparently, when it is asserted that "prices are on the point of breaking." Occasionally, it is true, there appear advertisements announcing "big cuts" in prices, and these are heralded as the beginning of the era of forced liquidation and of declines in the cost of living. Investigation fails to show that these "leaders" represent the facts of the general market. On

the contrary, all the reports sent in, responsive to questionnaires for purposes of this report, bear out the main point in Gov. Harding's Boston address, namely, that foreign competition against domestic demands for a terribly curtailed supply of goods is responsible alike for the obstinate unfavorableness of the foreign exchanges to our sales of goods abroad and for the persistent maintenance of the "high cost of living."

Advices from all parts of the district indicate that the general volume of business in the Middle West continues at a high level and that building operations and other activities will be sufficient to sustain the movement, for the immediate future at least. Farming communities continue to enjoy the prosperity which has resulted from several years of very high prices, and so long as the industrial centers of the agricultural districts continue to be abundantly supplied with purchasing power, there is little indication of any marked decline in domestic trade.

There is running through the banking mind in the Middle West, however, the thought that this country can not long continue the extraordinary volume of foreign exports without some improvement in the foreign exchange situation. A drastic drop in international business, if it should come, would tend to alter the exchange situation. Such decline in exports may be offset to some extent by the tremendous accumulative buying power of our own country, yet this is an unknown factor in the present business situation.

REPORTED BY DISTRICT NO. 8.

Wholesalers in practically all lines appear to be very prosperous. Many report that their business was never better. The buying power of the merchants is very strong and collections are good. Increases in business as high as 350 per cent over December, 1918, are reported. The dry goods trade is especially active.

Wholesale dry goods dealers report increases ranging from 47 to 100 per cent and even over 300 per cent in December as compared to the corresponding month in 1918. The demand is far above normal and there is still difficulty in securing goods promptly from factories. As has been the case for several months, orders on hand for future delivery are exceptionally large.

Wholesale shoe dealers say business is improving, showing increases as high as 35 per cent over November and 50 per cent over December, 1918. Orders for future delivery are larger than usual.

In the wholesale drug line conditions have not materially changed since the last report. Prices are generally stationary and collections are good. One concern states that it has about 10 per cent less owing to it on account than it had a year ago, although its annual business increased 20 per cent over that for the year 1918.

While some wholesale grocers report decreases in business as compared to December, 1918, most concerns report increases ranging from 18 per cent to 25 per cent for the same period. Orders on hand for future delivery are small, in some cases only 50 per cent of those held last year.

The wholesale hardware business is steady. December shows slight increases over the corresponding month in 1918. Some concerns have large orders for future delivery, while others, those dealing in mining tools for instance, have none.

Wholesale hat houses report increases as high as 82 per cent over December, 1918. Their orders for future delivery are exceptionally large. There is a scarcity of skilled labor and a difficulty in obtaining goods from the manufacturers.

REPORTED BY DISTRICT NO. 12.

Heavy snows and severe cold weather in the Pacific Northwest and the interior sections of this district have brought live stock off the ranges and forced earlier winter feeding than usual, requiring heavy purchases of feed, at exceptionally high prices. It is anticipated, however, that the snowfall will result in satisfactory range conditions in the late spring and early summer. Winter wheat was practically undamaged by the cold and the heavy snows will greatly increase the moisture content of the soil, thereby improving the prospects for large per acre yields during 1920. Fruit trees in Oregon, particularly peach and pear trees, have suffered from freezing. The exact amount of damage, however, will not be ascertainable for some time. In California barley is sprouting very slowly and lack of rain is causing some anxiety concerning prospects for 1920 crops.

The major portion of the Washington commercial apple crop of 19,320,000 boxes, which compares with a 1918 crop of 12,888,000 boxes, is out of the hands of the growers, having been marketed at record prices. The dealers are now suffering a loss reported at approximately \$750 per car through the recent drop in prices and the heavy losses due to freezing of fruit in common storage and in transit.

EARNINGS AND EXPENSES OF THE FEDERAL RESERVE BANKS FOR 1919.

Total earnings of the Federal Reserve Banks for the calendar year 1919 were \$102,380,583, compared with \$67,584,417 for the calendar year 1918, while total current expenses were \$20,341,798, compared with \$12,137,438 for the earlier year. Current expenses for the year under review include, besides \$15,439,194 of expense of operation proper, \$3,016,823, the cost, including expressage, insurance, and other expenses incident to the issue and retirement of Federal Reserve notes; \$872,326, taxes on Federal Reserve bank note circulation; \$938,791, the cost of furniture and equipment purchased during the year, and \$74,664, the cost of repairs and alterations of bank premises.

As a result of increased borrowings by member banks and the higher discount rates adopted, the earnings of all the Federal Reserve Banks show considerable higher totals for the last three months than for the earlier months of the year.

Total current expenses shown above are exclusive of the expenses of the fiscal agency departments. These expense are treated separately, being reimbursable by the Government. During the past calendar year the Federal Reserve Banks acting as fiscal agents, largely in connection with the Victory loan and the several certificates issues, expended a total of \$16,626,016. There was also due to the banks from the Treasury at the beginning of the year a total of \$9,573,832, expended by the banks during the year 1918. Reimbursements received during the year from the Government amounted to \$22,612,681, leaving thus a reimbursable balance at the end of 1919 of \$3,587,167.

Current net earnings of the banks—i. e., the excess of earnings over current expenses—totalled \$82,038,785, compared with \$55,446,979 for 1918. Calculated on an average aggregate paid-in capital for the year of \$83,513,000 the net earnings for 1919 constitute 98.2 per cent, as compared with 72.6 per cent on the average paid-in capital in 1918.

To the current net earnings above shown should be added \$219,575, the amount by which the reserve set aside in previous years to take care of depreciation of United States bonds owned has been reduced, and \$40,857 representing largely amounts carried directly to profit and loss during the past year. This gives total gross profits of \$82,299,217. Deductions from

this total, \$3,931,713, comprise the following items: Depreciation allowances of \$2,649,819 on bank premises (especially large in New York City and Chicago); additional reserve against depreciation of United States bonds, \$34,156; a special reserve of \$525,741 set aside by the New York bank to cover losses and take care of future contingencies; an amount of \$493,928, assessed against the banks for the support of the Federal Reserve Board during the first six months of 1920, and miscellaneous deductions of \$228,069. This leaves net earnings available for dividends, surplus, and franchise taxes of \$78,367,504. Dividends at the rate of 6 per cent paid during the year by all the Federal Reserve Banks amounted to \$5,011,832.

Under section 7 of the original act the banks had to carry to surplus one-half of their net earnings up to 40 per cent of their paid-in capital and had to pay the other half to the Government as a franchise tax. In accordance with this provision the banks at the close of 1918 carried to surplus \$21,605,901, and under instructions from the Reserve Board, concurred in by the Treasury, set aside the balance of their net earnings, \$26,728,440, as a special reserve for payment of the franchise tax. On March 3, 1919, an amendment to section 7 was enacted whereby all net earnings, after deduction of 6 per cent dividends, were to be paid into a surplus fund until this fund should have reached 100 per cent of the total subscribed capital, and that thereafter 10 per cent of such net earnings were to be carried to surplus, while the remainder was to be paid as a franchise tax to the Government. This amendment was made applicable to the net earnings for the calendar year 1918, and accordingly the Federal Reserve Banks transferred to surplus account the amount of \$26,728,440 reserved at the close of the year for franchise tax.

At the end of 1919 net earnings, after payment of dividends, amounted to \$73,355,672, and of this amount \$70,651,778 was carried to surplus, while the balance was paid to the Government as franchise tax by the New York bank, whose surplus is in excess of 100 per cent of its subscribed capital. For the other banks the ratios of surplus to subscribed capital stand as follows:

	Per cent.		Per cent.
Boston.....	58.8	St. Louis.....	45.8
New York.....	100.7	Minneapolis.....	58.0
Philadelphia.....	55.8	Kansas City.....	76.1
Cleveland.....	47.7	Dallas.....	44.3
Richmond.....	66.3	San Francisco.....	65.3
Atlanta.....	68.5		
Chicago.....	57.9	System.....	68.7

Of the total earnings of the banks, about 78.9 per cent, as against 71.5 per cent in 1918, came from discounts, largely war paper; bills purchased in open market contributed about 13.7 per cent of the total earnings, as against 17.7 per cent in 1918; United States securities, chiefly Treasury certificates, 5.6 per cent, as against 5.7 per cent the year before; transfer operations yielded about 0.8 per cent of the annual earnings, compared with 1.5 per cent in 1918, while the balance of the earnings represent penalties, including interest on deficient reserves, collection charges, profits on sales of foreign coin, and sundry smaller profits.

Of the total expenses of operation of the banks proper, exclusive of their fiscal agency departments, \$7,103,547, or about 46 per cent, as against 42 per cent the year before, went as compensation to the clerical staff, and \$1,418,144, or about 9 per cent, as against 11.5 per cent in 1918, as salaries to bank officers. Compensation of special officers and watchmen, also of extra help, overtime pay, and supper money account for \$1,375,311, or about 9 per cent of the total expenses of operation; \$902,547, or 6 per cent, as against 10 per cent the year before, went for postage and expressage, and \$829,178, or about 5.5 per cent, for printing and stationery. Contributions of the banks for the support of the Federal Reserve Board totaled \$594,818, as against \$382,641 the year before, and constitute about 4 per cent of the banks' total operating expenses, compared with 4.5 per cent for 1918.

Rent paid by the banks totaled \$613,988, compared with \$369,122 in 1918, the New York and Chicago banks reporting the largest increases under this head. All the banks have invested in bank premises, but most of them for the present find it necessary to transact the bulk of their business in rented quarters. Total book value of investments in bank premises at the close of the year, after allowing \$2,649,819 for depreciation, stood at \$10,156,318, compared with \$8,081,841 at the beginning of the year.

Earnings and expenses of each Federal Reserve Bank for the calendar year 1919.

EARNINGS.

	Boston.	New York.	Philadel- phia.	Cleaveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Discounted bills.....	\$6,003,252	\$29,935,911	\$7,987,864	\$5,341,785	\$4,099,953	\$3,735,033	\$8,915,827	\$2,918,462	\$1,829,461	\$3,888,839	\$2,443,806	\$3,667,951	\$80,768,144
Purchased bills.....	1,077,691	3,326,839	67,019	1,882,985	351,418	367,338	2,141,789	564,495	882,564	340,875	113,397	2,870,368	13,986,778
United States securities.....	369,457	1,888,497	495,768	450,308	185,293	228,958	736,241	320,412	213,501	405,400	229,080	238,385	5,761,300
Municipal warrants.....						85							85
Transfers—net earnings.....				45,607		8,356	143,495	10,570	51,461	198,749	193,661	178,410	830,309
Deficient reserve penalties (including interest).....	27,836	36,405	25,673	66,442	125,192	68,313	44,569	52,373	26,382	106,705	81,984	65,970	727,844
Profits realized on United States securities.....				2,350		5							2,355
Sundry profits.....	19,347	144,760	33,556	11,352	13,468	7,913	30,157	18,166	3,672	20,914	323	140	303,768
Total earnings.....	7,497,583	35,332,412	8,609,880	7,800,829	4,775,324	4,416,001	12,012,078	3,884,478	3,007,041	4,961,482	3,062,251	7,021,224	102,380,583

CURRENT EXPENSES.

Expense of operation:													
Assessments, account expenses													
Federal Reserve Board.....	\$45,619	\$181,875	\$49,059	\$58,676	\$29,535	\$22,391	\$80,170	\$24,981	\$20,209	\$28,151	\$20,362	\$33,790	\$594,818
Federal advisory council (fees and traveling expenses).....	500	1,150	381	1,035	736	470	816	1,150	1,274	300	992	2,594	11,398
Governors' conferences (including traveling expenses).....	244	316	210	499	254	575	523	553	83	498	788	2,498	7,041
Federal Reserve agents' conferences (including traveling expenses).....	109	139		255	43	133	84	229	341	361	109	1,105	2,908
Salaries—													
Bank officers.....	105,097	294,795	90,929	99,815	74,796	116,952	158,083	95,040	61,014	91,604	87,212	136,807	1,418,144
Clerical staff.....	606,345	1,982,807	577,104	494,639	326,746	289,855	881,142	400,860	208,171	453,258	390,993	491,627	7,103,547
Special officers and watchmen.....	12,278	61,208	44,688	17,444	7,497	10,037	64,752	13,408	8,726	14,423	6,363	13,757	274,581
All other.....	12,111	781,297	59,228	71,687	16,283	12,934	80,785	20,289	3,530	11,698	11,883	19,005	1,100,730
Directors' fees.....	3,550	24,345	4,059	2,600	3,400	3,013	4,915	5,970	3,870	6,735	2,220	5,879	70,556
Per diem allowance.....	1,140		650	930	820	4,085	590	2,290	980	6,438	740	1,344	20,007
Traveling expenses.....	2,661	3,385	1,278	1,989	1,999	3,025	1,249	3,326	1,965	5,102	1,487		27,466
Officers' and clerks' traveling expenses.....	8,708	29,015	5,421	16,304	8,689	9,113	28,147	22,933	5,531	13,959	14,578	16,729	179,127
Legal fees.....	3,817	11,250	1,941	3,000	570	4,495	5,500	61	3,380	1,825	2,400	3,199	41,438
Rent.....	58,367	290,243	1,500	53,525	7,941	14,018	97,477	36,020	14,295	31,820	5,526	3,256	613,988
Taxes and fire insurance.....	3,554		15,775	533	11,452	8,268	253	701	851	646	1,746	5,672	49,451
Telephone.....	11,855	32,490	14,423	6,445	2,447	2,988	9,793	3,548	2,223	3,734	3,189	4,912	98,047
Telegraph.....	7,958	33,235	7,578	15,084	10,032	24,326	24,216	15,609	2,752	12,233	21,772	27,929	202,724
Postage.....	78,621	116,072	60,780	70,916	48,262	49,906	98,723	54,853	34,781	78,769	39,883	47,193	778,759
Expressage.....	3,416	54,395	7,804	2,023	2,809	8,831	6,393	4,586	969	2,468	25,556	4,538	123,788
Insurance and premiums on fidelity bonds.....	19,104	98,817	45,848	33,088	9,718	8,881	8,736	18,961	8,692	20,806	13,308	20,636	306,595
Light, heat, and power.....	16,771	2,859	17,616	3,937	5,093	3,889	8,087	1,945		4,546	3,365	5,852	73,960
Printing and stationery.....	41,478	236,653	78,477	46,952	39,083	46,294	101,466	34,676	25,228	49,782	41,009	88,080	829,178
Repairs and alterations.....	16,722	130,718	31,581	9,560	11,393	2,619	40,349	5,314	6,352	11,508	13,194	18,620	297,930
Cost of currency shipments to and from member and nonmember banks.....	78,824	103,905	35,354	33,790	41,504	31,982	66,144	47,789	7,906	27,075	25,519	46,474	546,266
All other.....	82,115	142,251	102,559	31,552	21,008	44,003	84,905	18,673	11,255	40,881	41,348	46,197	666,747
Total expense of operation.....	1,220,964	4,613,220	1,260,243	1,076,278	682,110	723,083	1,853,298	833,765	434,378	918,620	775,542	1,047,693	15,439,194
Cost of Federal Reserve currency (including expressage, insurance, etc.).....	285,917	642,430	209,419	168,867	119,347	148,735	400,418	188,617	56,273	131,339	85,719	187,486	2,624,567
Miscellaneous charges, account note issues.....	31,774	105,167	45,411	16,981	28,582	11,536	62,558	20,313	17,002	16,493	8,028	28,411	392,256

Taxes on Federal Reserve bank note circulation.....	39,422	169,514	98,132	80,491	32,468	41,561	133,970	58,300	24,912	65,327	42,829	35,400	872,326
Furniture and equipment.....	43,748	204,014	100,868	53,414	49,420	46,844	98,080	73,798	23,926	54,290	70,718	119,671	938,791
Bank premises.....			61,112			458						13,094	74,664
Total current expenses.....	1,671,825	5,734,345	1,775,185	1,396,031	911,927	972,217	2,548,324	1,174,793	556,491	1,186,069	982,836	1,431,755	20,341,798
Current net earnings, year 1919.....	5,825,758	29,598,067	6,834,695	6,404,798	3,863,397	3,443,784	9,463,754	2,709,685	2,450,550	3,775,413	2,079,415	5,589,469	82,038,785
Per cent of average paid-in capital.....	84.3	137.5	89.1	69.0	91.7	104.8	81.0	69.3	81.6	99.0	63.5	113.3	98.2

PROFIT AND LOSS ACCOUNT OF EACH FEDERAL RESERVE BANK FOR THE CALENDAR YEAR 1919.

	Boston.	New York.	Philadel- phia.	Cleve- land.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Earnings.....	\$7,497,583	\$35,332,412	\$8,609,880	\$7,800,829	\$4,775,324	\$4,416,001	\$12,012,078	\$3,884,478	\$3,007,041	\$4,961,482	\$3,062,251	\$7,021,224	\$102,380,583
Current expenses.....	1,671,825	5,734,345	1,775,185	1,396,031	911,927	972,217	2,548,324	1,174,793	556,491	1,186,069	982,836	1,431,755	20,341,798
Current net earnings for year.....	5,825,758	29,598,067	6,834,695	6,404,798	3,863,397	3,443,784	9,463,754	2,709,685	2,450,550	3,775,413	2,079,415	5,589,469	82,038,785
Credits to current net earnings on account of—													
Amounts previously reserved for depreciation on U. S. bonds.....					58,606	13,096				147,846		27	219,575
All other.....		31,096	3,697		940	3,584				103	470	967	40,857
Total.....	5,825,758	29,629,163	6,838,392	6,404,798	3,922,943	3,460,464	9,463,754	2,709,685	2,450,550	3,923,362	2,079,885	5,590,463	82,299,217
Deductions from current net earnings on account of—													
Bank premises.....		900,032		254,684	20,000	51,478	820,000	335,000	100,000			168,625	2,649,819
Reserve for depreciation United States bonds.....			29,112	5,044									34,156
Assessment account expenses F. R. Board, Jan.-June, 1920.....	38,666	168,682	41,828	46,555	25,531	20,302	66,764	19,520	16,607		16,167	33,306	493,928
Special reserves.....		525,741											525,741
All other.....	9,711	75,089	108,283	4,730	146	6,287	786	11			21,854	1,172	228,069
Total deductions.....	48,377	1,669,544	179,223	311,013	45,677	78,067	887,550	354,531	116,607		38,021	203,103	3,931,713
Net earnings available for dividends, surplus, and franchise tax, Dec. 31, 1919.....	5,777,381	27,959,619	6,659,169	6,093,785	3,877,266	3,382,397	8,576,204	2,355,154	2,333,943	3,923,362	2,041,864	5,387,360	78,367,504
Dividends paid.....	414,447	1,291,047	462,380	556,785	252,872	197,397	700,807	234,660	180,186	228,755	196,335	296,161	5,011,832
Transferred to surplus fund.....	5,362,934	23,964,678	6,196,789	5,537,000	3,624,394	3,185,000	7,875,397	2,120,494	2,153,757	3,694,607	1,845,529	5,091,199	70,651,778
Franchise tax paid United States Government.....		2,703,894											2,703,894

FISCAL AGENCY DEPARTMENT EXPENSES OF EACH FEDERAL RESERVE BANK, AMOUNTS REIMBURSED BY THE TREASURY DEPARTMENT, AND BALANCES REIMBURSABLE AT THE END OF THE CALENDAR YEAR 1919.

	Boston.	New York.	Philadel- phia.	Cleveland.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minneapo- lis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Total disbursements during 1919.....	\$1,166,763	\$4,963,642	\$1,005,050	\$1,494,163	\$577,099	\$712,656	\$2,711,206	\$921,819	\$606,534	\$752,044	\$553,058	\$1,161,982	\$16,626,016
Amounts reimbursable Jan. 1, 1919.....	558,932	3,049,530	758,096	766,785	226,076	458,650	1,261,885	450,342	150,212	451,220	508,669	933,435	9,573,832
Total.....	1,725,695	8,013,172	1,763,146	2,260,948	803,175	1,171,306	3,973,091	1,372,161	756,746	1,203,264	1,061,727	2,095,417	26,199,848
Reimbursements received during 1919.....	1,539,918	7,035,337	1,645,329	1,930,562	550,352	1,049,519	3,440,610	1,265,704	627,461	796,088	848,133	1,883,668	22,612,681
Balance reimbursable Jan. 1, 1920.....	185,777	977,835	117,817	330,386	252,823	121,787	532,481	106,457	129,285	407,176	213,594	211,749	3,587,167

Earnings and current expenses of each Federal Reserve Bank, by months, for the calendar year 1919.

EARNINGS.

	Boston.	New York.	Philadel- phia.	Cleveland.	Rich- mond.	Atlanta.	Chicago.	St. Louis.	Minneapo- lis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
January.....	\$525,055	\$2,806,299	\$658,171	\$579,072	\$385,481	\$349,756	\$823,055	\$282,051	\$204,303	\$382,520	\$265,073	\$509,295	\$7,770,131
February.....	506,592	2,576,420	616,446	542,338	354,977	288,668	693,832	226,019	193,851	340,310	227,487	466,167	7,063,107
March.....	587,475	2,843,565	690,373	587,250	394,719	324,003	865,435	327,022	324,985	413,774	246,157	577,361	8,072,719
April.....	587,362	2,843,937	674,315	570,417	396,212	318,497	853,765	330,224	359,045	413,795	232,809	508,416	7,794,264
May.....	619,839	2,908,549	706,261	590,570	398,218	338,776	934,637	288,564	240,428	400,104	234,943	566,630	8,226,919
June.....	604,188	2,586,788	702,695	576,734	377,693	334,959	958,234	285,962	229,249	395,505	233,634	507,603	7,793,244
July.....	631,738	3,064,518	702,684	619,051	380,629	344,191	1,022,300	284,508	238,952	391,880	255,115	575,207	8,511,773
August.....	583,143	2,896,848	718,959	646,465	366,955	352,294	988,732	311,286	216,553	351,139	242,681	588,572	8,263,677
September.....	629,460	2,823,409	707,226	621,130	383,302	383,043	831,560	343,458	241,666	436,133	256,967	607,390	8,164,744
October.....	658,413	3,155,511	756,681	700,893	416,300	446,108	1,076,905	363,794	300,369	458,344	295,663	663,666	9,294,647
November.....	745,500	3,400,023	793,629	845,449	420,958	451,996	1,280,014	385,860	299,549	456,273	259,549	707,021	10,055,821
December.....	841,818	3,821,545	881,340	911,460	499,880	483,740	1,574,159	450,730	357,091	521,705	312,173	743,896	11,399,537
Total.....	7,497,583	35,332,412	8,609,880	7,800,829	4,775,324	4,416,001	12,012,078	3,884,478	3,007,041	4,961,482	3,062,251	7,021,224	102,380,583

CURRENT EXPENSES.

January.....	\$105,759	\$345,502	\$79,011	\$93,863	\$50,214	\$57,207	\$136,033	\$73,798	\$33,423	\$87,111	\$62,652	\$77,595	\$1,202,168
February.....	92,402	306,935	94,606	115,527	70,201	75,445	135,033	63,199	35,580	63,002	46,422	75,109	1,173,461
March.....	177,414	411,008	117,851	119,519	77,650	74,446	181,500	97,658	32,358	116,995	80,096	89,342	1,575,837
April.....	125,801	354,288	91,920	83,108	67,434	76,463	206,763	75,704	32,402	102,430	54,775	84,950	1,356,038
May.....	97,283	531,778	84,591	90,258	63,803	69,099	237,633	68,598	33,708	74,957	65,456	78,494	1,495,658
June.....	152,789	654,433	348,017	114,565	71,964	64,140	229,903	150,356	90,543	83,505	75,598	221,873	2,257,686
July.....	105,782	388,537	121,370	98,212	47,665	56,868	165,619	73,337	37,577	81,115	63,574	78,314	1,317,970
August.....	139,303	374,970	108,115	88,644	48,388	79,218	207,021	73,731	39,690	82,284	98,181	72,185	1,411,730
September.....	124,664	371,320	102,211	84,975	63,915	61,986	181,992	84,297	41,007	81,547	76,558	82,513	1,356,985
October.....	106,449	361,698	101,998	93,261	63,598	67,561	284,410	76,931	40,590	90,376	81,354	85,638	1,453,864
November.....	106,062	536,922	102,584	93,366	59,945	78,867	171,480	82,425	44,315	99,277	87,848	104,499	1,567,590
December.....	338,117	1,096,954	422,911	320,733	227,150	210,917	410,937	254,759	95,298	223,470	190,322	381,243	4,172,811
Total.....	1,671,825	5,734,345	1,775,185	1,396,031	911,927	972,217	2,548,324	1,174,793	556,491	1,186,069	982,836	1,431,755	20,341,798

Foreign Financing.

Following is copy of a letter which Secretary Glass has addressed to Homer L. Ferguson, president of the Chamber of Commerce of the United States of America, on the subject of foreign financing:

JANUARY 28, 1920.

SIR: I have the honor to acknowledge receipt of the letter of January 22, 1920, signed by yourself and Messrs. A. C. Bedford, John H. Fahey, and Harry A. Wheeler, to whom, as a committee designated by the Chamber of Commerce of the United States, was referred a communication transmitting a memorandum signed by 44 prominent American citizens addressed to the United States Government, the Reparations Commission, and the Chamber of Commerce of the United States, recommending that the Chamber of Commerce of the United States designate representatives of commerce and finance to meet with those of other countries for the purpose of examining the situation as set out in the communication, and recommending such action as may be advisable.

In compliance with your request for an expression of opinion from the Treasury in respect to the observations and recommendations contained in the memorial, I may first state that the views and policy of the Treasury in respect to the international financial situation are set forth in the inclosed extracts from my annual report (pp. 11 to 14, inclusive).

With much that is contained in the memorial the Treasury is in hearty accord. Concerning the need of increased production and decreased consumption, the need of balancing governmental budgets and taking effective measures to deflate currency and credit, concerning the need of prompt and proper determinations by the Reparations Commission which will make possible the resumption of industrial life in Germany and the restoration of trade with Germany, there can be no doubt.

The people of the United States are being called upon by taxes and otherwise not only to meet the Government's expenditures but to reduce the war debt. So far as the countries of Europe are concerned, the adoption of similar policies is a matter for the Governments of those countries and for the Reparations Commission.

In an effort to alleviate the situation the United States Government has done all that was considered advisable and practicable. Since the armistice, we have extended to foreign Governments the following financial assistance:

Direct advances.....	\$2, 380, 891, 179. 65
Funds made available to those Governments through the purchase of their currencies to cover our expenditures in Europe.....	736, 481, 586. 76
Army and other governmental supplies sold on credit (approximately).....	685, 000, 000. 00
Relief (approximately).....	100, 000, 000. 00
Unpaid accrued interest up to Jan. 1, 1920, on Allied Government obligations.....	324, 211, 922. 00
Total.....	4, 226, 584, 688. 41

The Treasury is opposed to further governmental aid beyond that outlined in my annual report and in my recent communication to the Ways and Means Committee of Congress with respect to the extension of interest on the Allied Government obligations held by the Government of the United States and to the supplying of relief to certain portions of Europe. The Governments of the world must now get out of banking and trade. Loans from Government to Government not only involve additional taxes or borrowings by the lending Government with the inflation attendant thereon, but also a continuance by the borrowing Government of control over private activities, which only postpones sound solutions of the problems.

The Treasury is opposed to governmental control over foreign trade and finance and even more opposed to private control. It is convinced that the credits required for the economic restoration and revival of trade must be supplied through private channels; that as a necessary contribution to that end the Governments of the world must assist in the restoration of confidence, stability, and freedom of commerce by the adoption of sound fiscal policies; and that the Reparations Commission must adopt promptly a just and constructive policy.

The memorial which was simultaneously circulated in Europe differs in its scope and character from the one presented in the United States. The European memorial contains some passages omitted in the American memorial which apparently advocate further governmental financial assistance, and also requests the respective Governments to designate representatives to attend the proposed conference, which would give it an official character.

The Treasury has not looked with favor upon certain features of the memorial nor upon the proposed conference, being apprehensive lest the memorial and such a conference should serve to cause confusion and revive hopes (which, I am certain, are doomed to disappointment) that the American people through their Government will be called upon to assume the burdens of Europe by United States Government loans—such matters as the suggestion of further governmental loans by the United States, the cancellation of some or all of the obligations of European Governments held by the United States Government (as contemplated by a passage contained in the European memorial but omitted from the American memorial), and the deferring of obligations of foreign Governments held by the United States to liens created in favor of loans hereafter made for reconstruction purposes, are clearly not appropriate for consideration in such a conference as is contemplated by the memorial.

The existing world-wide inflation of currency, credit, and prices is a consequence of the fact that for a period of four or five years the peoples of this earth have been consuming and destroying more than they have produced and saved, and against the wealth so destroyed the warring nations have been issuing currency and evidence of indebtedness. The consequence of the world's greatest war is profound and inescapable. It has affected all the nations of the civilized world, as well those who participated actively

in the war as those who did not. The inflation exists in the neutral countries of Europe and in the Orient. It exists where there was no war debt, where the war debt was badly handled, and to some degree where the war debt was well handled.

The problems to the cure of which the distinguished gentlemen are directing their attention, have been the subject in one form or another, of daily study of the Treasury Department since the outbreak of the war, and especially since the signing of the armistice. These problems have at all times been complex and difficult, and simple solutions have never been possible, because they involve some factors which are not susceptible of solution by any comprehensive plan. The process of healing the wounds inflicted by the war must necessarily be slow and painful, involving as it does not only the physical restoration of industry and agriculture, but as well the restoration to habits of industry of masses of men accustomed by the war to unsettlement. We must necessarily, and to a great extent, depend upon and encourage the independent activity and resourcefulness of each person affected to repair his own fortunes, with the assistance of his business connections in other countries, and also upon each individual to return to a normal life of industry and economy.

From the moment of the cessation of hostilities the Treasury of the United States has pursued a policy of looking toward the restoration as promptly as possible of normal economic conditions, the removal of governmental controls and interferences and the restoration of individual initiative and free competition in business. It has insisted upon strict economy in governmental expenditure and upon the maintenance of taxes at a level which, with the salvage of war materials and supplies, etc., will insure the prompt retirement of the floating debt of the United States and the establishment of a fund adequate for the retirement of the funded debt in the course of a generation. The Treasury long since, with the cooperation of the Federal Reserve Board, removed the embargo on the export of gold, thus enabling American citizens and, indeed, the nations of the world, to the extent that they find credit here, to finance their purchases throughout the world in cash.

Rightly or wrongly, a different policy has been pursued in Europe. European Governments have maintained, since the cessation of hostilities, embargoes upon the export of gold. The rectification of the exchanges now adverse to Europe lies primarily in the hands of European Governments. The normal method of meeting an adverse international balance is to ship gold. The refusal to ship gold prevents the rectification of an adverse exchange. The need of gold embargoes lies in the expanded currency and credit structure of Europe. Relief would be found in disarmament, resumption of industrial life and activity and the imposition of adequate taxes and the issue of adequate domestic loans.

The American people should not, in my opinion, be called upon to finance, and would not in my opinion

respond to a demand that they finance, the requirements of Europe in so far as they result from the failure to take these necessary steps for the rehabilitation of credit.

Such things as international bond issues, international guaranties and international measures for the stabilization of exchange are utterly impracticable so long as there exist inequalities of taxation and domestic financial policies in the various countries involved; and when these inequalities no longer exist such devices will be unnecessary.

It is unthinkable that the people of a country which has been called upon to submit to so drastic a program of taxation as that adopted by the United States, which called for financing from current taxes a full one-third of the war expenditures, including loans to the Allies, should undertake to remedy the inequalities of exchange resulting from a less drastic policy of domestic taxation adopted by the other Governments of the world. The remedy for the situation is to be found not in the manufacture of bank credit in the United States for the movement of exports, a process which has already proceeded too far, but in the movement of goods, of investment securities and, in default of goods or securities, then of gold into this country from Europe; and in order that such securities may be absorbed by investors our people must consume less and save.

The United States could not, if it would, assume the burdens of all the earth. It can not undertake to finance the requirements of Europe because it can not shape the fiscal policies of the Governments of Europe. The Government of the United States can not tax the American people to meet the deficiencies arising from the failure of the Governments of Europe to balance their budgets, nor can the Government of the United States tax the American people to subsidize the business of our exporters. It can not do so by direct measures of taxation nor can it look with composure upon the manufacture of bank credit to finance our exports when the requirements of Europe are for working capital rather than for bank credit. Lamentable as would be the effects upon our industrial life and upon Europe itself of the continued maintenance of an exchange barrier against the importation into Europe of commodities from the United States, this country can not continue to extend credits on a sufficient scale to cover our present swollen trade balance against Europe, while paying cash (gold and silver) to the countries of Central and South America and the Far East with which it has an adverse balance on its own and international account. The consequence of the maintenance by Europe of this barrier will be to force the United States to do business with those countries with which it is able to do business on a cash basis. The only other policy which the United States could adopt would be the policy of reestablishing embargoes on gold and silver and of inflating its own currency to the same extent that the currencies of Europe are inflated with a view to lowering its exchange to a parity with theirs. This would involve taxing the whole people for the benefit of our exporters and the benefit of Europe

and submitting to have imposed on the United States domestic financial policies adopted by Europe but quite contrary to those heretofore adopted by the United States. It would mean a world-wide inflation, the abandonment of the gold standard, and, ultimately, chaos.

If the peoples and Governments of Europe live within their incomes, increase their production as much as possible, and limit their imports to actual necessities, foreign credits to cover adverse balances would most probably be supplied by private investors and the demand to resort to such impracticable methods as Government loans and bank credits would cease.

There is no more logical or practical step toward solving their own reconstruction problems than for the Allies to give value to their indemnity claims against Germany by reducing those claims to a determinate amount which Germany may be reasonably expected to pay, and then for Germany to issue obligations for such amount and be set free to work it out. This would increase Germany's capacity to pay, restore confidence, and improve the trade and commerce of the world. The maintenance of claims which can not be paid causes apprehension and serves no useful purpose.

Private investors can only make loans to the extent of their savings in excess of domestic capital requirements and then will only make them to the extent that they have confidence in the securities or obligations offered. The adoption of the measures indicated should add to the confidence of the private investor.

If the Chamber of Commerce of the United States considers it advisable and desirable to designate representatives to attend an unofficial conference, the Treasury does not desire to offer any objection provided the scope and character and limitations of such a conference as well as the impossibility of United States Government action are clearly understood.

Cordially yours,

CARTER GLASS.

HOMER L. FERGUSON, Esq.,

President, Chamber of Commerce of the United States of America, Washington, D. C.

[From the Annual Report of the Secretary of the Treasury, 1919.]

THE INTERNATIONAL FINANCIAL SITUATION.

The international financial situation is one of great importance and in which we are seriously interested. The present position relative to foreign financing and the general policy of the Treasury concerning this vital problem should be fully stated.

Since the armistice the United States has advanced to the Governments of the Allies, as of the close of business October 31, 1919, the sum of \$2,329,257,138.55, and there remained on that date an unexpended balance of \$593,628,111.45, from the total loans of \$10,000,000,000 authorized under the Liberty loan acts.

The Treasury asked and obtained power for the War Finance Corporation to make advances up to the amount of \$1,000,000,000 for nonwar purposes, and the War Finance Corporation is prepared to make such advances.

By the act approved September 17, 1919, the Federal Reserve Board is authorized to permit, until January 1,

1921, national banks to invest to a limited extent in the stock of American corporations principally engaged in such phases of international or foreign financial operations as may be necessary to facilitate exports.

The Secretary of War is authorized to sell surplus Army stores on credit.

The United States wheat director is authorized to sell wheat to Europe on credit.

The power which at present exists in the Government or governmental agencies to assist in meeting Europe's financial needs is, therefore, considerable. This power must, of course, be exercised with extreme caution and with the most careful regard for the urgent needs of our own people for an ample supply of foodstuffs and other necessities of life at reasonable prices.

The Treasury is considering with representatives of the Governments of the Allies the funding of the demand obligations which the United States holds into long-time obligations and at the same time the funding during the reconstruction period or, say, for a period of two or three years, of the interest on the obligations of foreign Governments acquired by the United States under the Liberty loan acts.

The Treasury believes that the need of Europe for financial assistance, very great and very real though it is, has been much exaggerated both here and abroad. Our hearts have been so touched by the suffering which the war left in its train and our experience is so recent of the financial conditions which existed during the war (when men were devoting themselves to the business of destruction) that we are prone to overlook the vast recuperative power inherent in any country which, though devastated, has not been depopulated, and the people of which are not starved afterwards. We must all feel deep sympathy for the suffering in Europe to-day, but we must not allow our sympathy to warp our judgment and, by exaggerating Europe's financial needs make it more difficult to fill them.

Men must go back to work in Europe, must contribute to increase production. The industries of Europe, of course, can not be set to work without raw materials, machinery, etc., and, to the extent that these are to be secured from the United States, the problem of financing the restoration of Europe belongs primarily to our exporters. Governmental financial assistance in the past and talk of plans for future Government or banking aid to finance exports have apparently led our industrial concerns to the erroneous expectation that their war profits, based so largely on exports, will continue indefinitely without effort or risk on their part. To them will fall the profits of the exports and upon them will fall the consequences of failure to make the exports. So soon as domestic stocks, which were very low at the time of the armistice, have been replenished, those industries which have been developed to meet a demand for great exports, paid for out of Government war loans, will be forced to close plants and forego dividends unless they maintain and develop an outlet abroad. The industries of the country must be brought to a realization of the gravity of this problem, must go out and seek markets abroad, must reduce prices at home and abroad to a reasonable level, and create or cooperate in creating the means of financial export business. There is no reason for high commodity prices in the specter of European demand nor for high interest rates in the specter of European credits. Our fear must be that the cessation of war exports will result in closed plants, passed dividends, and general depression. The way to avoid those evils is to stimulate production and encourage industrial and commercial activity and not to burden them with high interest rates which are a deterrent to these things, but unfortunately are not a deterrent, except temporarily, in such times as these to speculation.

Since armistice day, the consistent policy of the Treasury has been, as far as possible, to restore private initiative and remove governmental controls and interferences. It has been the view of the Treasury that only thus can the prompt restoration of healthy economic life be gained. The embargoes on gold and silver and control of foreign exchange have been removed, as well as the voluntary and informal control of call money and the stock exchange loan account. The control exercised by the Capital Issues Committee over capital issues has been discontinued. Thus the financial markets of the United States have been opened to the whole world and all restrictions removed that might have hindered America's capital and credit resources, as well as its great gold reserve, from being available in aid of the world's commerce and Europe's need.

There are those who believe that the dollar should be kept at par—no more, no less—in the market of foreign exchange. If effective action were taken to carry out such a policy, it could only be done by drawing gold out of the United States when the dollar would otherwise be at a discount and by inflating credit when the dollar would otherwise be at a premium.

The dollar is now at a premium almost everywhere in the world. Its artificial reduction and maintenance at the gold par of exchange in all currencies is quite unthinkable unless we propose to level all differences in the relative credit of nations and for our gold reserve substitute a reserve consisting of the promises to pay of any nation that chooses to become our debtor. Inequalities of exchange reflect not only the trade and financial balance between two countries but, particularly after a great war such as that we have been through, the inequalities of domestic finance. The United States has met a greater proportion of the cost of the war from taxes and bond issues than any other country. Largely as a consequence of this policy the buying power of the dollar at home has been better sustained than has the buying power at home of the currency of any European belligerent. For the United States to determine by governmental action to depress the dollar as measured in terms of foreign exchange and to improve the position of other currencies as measured in terms of dollars would be to shift to the American people the tax and loan burdens of foreign countries. This shifted burden would be measured by the taxes to be imposed and the further loans to be absorbed by our people as a consequence and by increased domestic prices.

United States Government action at this time to prevent in respect to foreign exchange the ordinary operation of the law of supply and demand, which automatically sets in action corrective causes, and to prevent the dollar from going to a premium when its natural tendency is to do so would artificially stimulate our exports, and, through the competition of export demand with domestic demand, maintain or increase domestic prices.

The view of the Governments of the Allies, I take it, is that had they (after the war control of their imports had been relaxed) attempted to continue to "peg" their exchanges here at an artificial level by Government borrowing, the effect would have been to stimulate their imports and discourage their exports, thus aggravating their already unfavorable international balances.

It is not, of course, to be expected that the breach left by the withdrawal of governmental support of exchange can be filled by private initiative until the ratification of the treaty of peace has given reasonable assurance against the political risk which, rather than any commercial or credit risk, now deters private lenders. Some progress has already been made in placing here through private channels the loans of allied and neutral European countries and municipalities. The Treasury favors the making, in our markets, of such loans, which contribute to relieve the

exchanges. I am sure that when peace is consummated and the political risk measurably removed American exporters and European importers will lay the basis of credit in sound business transactions, and I know that American bankers will not fail then to devise means of financing the needs of the situation nor American investors to respond to Europe's demand for capital on a sound investment basis.

Meanwhile it is well to remember the invisible factors which are always at work toward a solution of the problem. Immigrants' remittances to Europe are and will continue to be a very large item in rectifying the exchanges. As soon as peace is concluded foreign travel will be a further item. Another very important factor is the purchase of European securities and properties and repurchase of foreign-held American securities by American investors; but the principal factor in Europe's favor is the inevitable curtailment of her imports and expansion of her exports. These processes, of course, are stimulated by the very position of the exchanges which they tend to correct.

European Financial Situation.

The following statement regarding the European financial situation was issued by Mr. Herbert Hoover on January 6, 1920:

"I emphatically disagree with the statements being circulated by European propagandists, either as to the volume of European financial needs from the United States or their suggestions that the great bulk of these needs can not be met by ordinary commercial credits and that thus our Treasury must need supply further large loans. Aside from some secondary measures by our Government, the problem is one of ratification of peace and ordinary business processes and not one of increasing our burden of taxation. Our taxes are now 600 per cent over prewar rates, while no one of the Allies has increased taxes to this extent. We simply can not increase this burden. We can not increase the volume of credits that Government lending implies without double damage to ourselves.

"Of secondary measure, some dozen cities in central and southern Europe need breadstuffs on credit from the Grain Corporation to prevent actual starvation, and the Allies are asking for temporary delay in paying interest on our Government loans to them. These dozen cities can not find commercial credits and the Allies can not pay this year in any event. The actual situation varies with every country in Europe, and generalities are not worth print paper. The European neutral countries have made money from the war and have asked no favors. Outside of interest to the Allies, Britain states it wants nothing but commercial credit. These she can always obtain if she puts up her ample collateral assets. France also has unpledged foreign assets that would cover most of her important needs.

"The position of Italy is more difficult, but with demobilization of her army and her navy her needs would be less. So far as I know, no one is threatening her with war. It is possible that some of her larger cities may need breadstuff assistance beyond the ability of commercial credits. Germany could pay or secure commercial credits

if the Reparation Commission would allow her to mobilize and use her resources until she gets further on her feet. The Baltic States have enough food except milk for their children, and we are taking care of this. Bulgaria, Greater Serbia, Greece, Roumania, South Russia and Turkey (except Armenia) have a surplus of food this year and are exporting it. If they prohibit the import of silk stockings, perfume, and other nonessentials, they could procure their other imports or at least live until they do it on a business basis. Hungary could feed herself if Roumania would return the cattle and grain she abstracted last summer.

"We are therefore left with Finland, Belgium, Poland, Czecho-Slovakia, and Austria to consider. Austria is the sorest point in Europe, and while she must be fed this winter, the Allies should be made to realize that any assistance from us is upon condition that she is free to make such political associations as will take her out of a perpetual poorhouse. Most European statesmen naturally desire to please their people by borrowing from our Government to revive prosperity overnight. But to my mind the one essential thing for all those countries which can not provide for themselves out of normal commerce is to feed their people over this winter and to devote themselves to setting their internal finances in order and defer immediate rehabilitation of industry until the world recovers sufficiently for them to secure commercial credits and private capital. In the food matter, the five last countries mentioned will take care of their agricultural and small town populations out of their crops of last year. These countries and Italy's deficiency in commercial credits lies in a dozen large cities, aggregating, say, fifteen or twenty million people. Even these have some resources that to my mind are sufficient to take care of their food needs except bread, together with milk for the children, and the most of the latter is being taken care of by charity.

"Therefore the problem from the point of view of action of our Government, outside the temporary deferring of interest, further reduces itself to helping out with the bread supply of less than 5 per cent of the population of Europe. The latter is only an echo of the job that our Government had to undertake in the year ending August 1 last in saving Europe from famine. Therefore no such situation exists as that which confronted us last year at this time, and there is no ground for hysteria on either side of the Atlantic.

"This year the Government has a large surplus of wheat flour acquired by it under the wheat guarantee. In the ordinary course we should hold it for spot cash for foreign nations. We could solve the bread situation in these dozen cities in Europe if the Grain Corporation were to sell about 15 per cent of our surplus flour on short credits to meet these acute situations. The difference between these short credits and cash is the difference between starvation and existence to them. These plans require no new appropriations on our Treasury and no additional taxes on our

people, but it does require an understanding in Europe that this country is nearing the time when it must cease to carry the economic burden of Europe except through charity and ordinary business processes set up under proper security. The American people are now finding \$5,000,000 a month in charity to feeding 3,000,000 of children and fighting diseases. If we add bread supply on Government credit to these starving cities with this and business credits we would be doing our share of world responsibility. It would appear that the 70,000,000 people of prosperous neutrals who have not suffered in the war should also be the scene of European appeals. Many people of Europe are not at work. For instance, their coal production is less than 70 per cent and their economic demobilization is in a great degree due to this alone. Only they can remedy it. The currency, taxation, and internal financial reorganization problems are their own problems. We can not reorganize these things for them.

"If we do undertake the solution of the bread question by our Government, our action will benefit and protect the other nations of Europe from infection of anarchy and chaos. Poland is the sole shield of Europe from bolshevik invasion. If we extend this help, it should be upon consideration that the stronger nations in Europe will do their full part in many directions.

"While a restoration of last year's complete control of supplies in Europe would make things go smoother, it stifles the initiative to help themselves and does more damage than good. We withdrew from Europe at last harvest precisely for this reason, that Europe had to be impressed with the necessity to go back to work and ordinary business processes. The world needs to get away from the notion of governmental help, both internally and externally, and get back to work and business."

Final Report of Cunliffe Committee.

(From Board of Trade Journal, Dec. 18, 1919.)

The committee on currency and foreign exchanges, which was constituted under the chairmanship of Lord Cunliffe, has made its final report to the lords commissioners of His Majesty's Treasury (Cmd. 464, price 1d. net). The committee was originally appointed in January, 1918, "to consider the various problems which will arise in connection with currency and the foreign exchanges during the period of reconstruction and report upon the steps required to bring about the restoration of normal conditions in due course." The following words were subsequently added to the terms of reference: "And to consider the working of the bank act, 1844, and the constitution and functions of the Bank of England with a view to recommending any alterations

which may appear to them to be necessary or desirable."

In the House of Commons on Monday the Chancellor of the Exchequer announced the action which the Government proposed to take on the report. We give below the text of the committee's report and of Mr. Chamberlain's statement:

My Lords: 1. We have the honor to present herewith our final report on certain matters referred to us in January, 1918, with which we were not in a position to deal in our interim report in August of that year.

2. *Foreign exchanges.*—We stated in the introduction to our interim report our opinion that a sound system of currency would in itself secure equilibrium in the foreign exchanges. We have reviewed the criticisms which have been made upon this part of our report, but we see no reason to modify our opinion. We have found nothing in the experiences of the war to falsify the lessons of previous experience that the adoption of a currency not convertible at will into gold or other exportable coin is likely in practice to lead to overissue and so to destroy the measure of exchangeable value and cause a general rise in all prices and an adverse movement in the foreign exchanges.

3. The nominal convertibility of the currency note which has been sustained by the prohibition of the export of gold is of little value. The weakness of the exchanges is, in a measure, due to trade conditions, but an important cause of the depreciation in sterling in New York and other financial centers is, in our opinion, to be found in the expanded state of credit in this country. The existing expansion is not merely the legacy of the stress of war finance and Government borrowings, which even now have not ceased, but also in part the result of maintaining rates for money in London below those ruling in other important financial centers. The difficulties of the foreign exchanges' position are aggravated by the grant of long-term loans and credits, whether directly or under guaranty or otherwise by the Government or by private lenders, to enable foreign states or their nationals to pay for exports from this country. Few of these loans and credits will be liquidated at an early date. The large payments which we have to make to America, North and South, for necessary imports of foodstuffs and raw materials from those countries make it essential that we, in our turn, should secure payment in cash for as large a proportion as possible of our exports visible and invisible. We recommend, therefore, that preference should be given to exports to countries which are able to make payment in the ordinary course of trade.

Increased production, cessation of Government borrowings, and decreased expenditure both by the Government and by each individual member of the nation are the first essentials to recovery. These must be associated with the restoration of the prewar methods of controlling the currency and credit system of the country for the purpose of reestablishing at an early date a free market for gold in London.

4. *Bank of England.*—The principles of the bank charter act of 1844 were fully considered by us in our interim report. We have examined with care the opinions there expressed in the light of certain criticisms which have been made with regard to them. We see, however, no reason to alter our conclusions. We have again considered the principles governing the banking systems of the principal foreign countries, and we are satisfied that they are not so well adapted to the needs of this country as those contained in the act of 1844. Certain important altera-

tions which experience suggested to be desirable have been made in the constitution and management of the bank during the war, and we do not now think it necessary to make any further recommendations.

5. *Government borrowings on ways and means advances from the Bank of England.*—We desire to draw attention to the extensive use made during the war of the system of ways and means advances from the Bank of England. We referred to this matter in paragraph 16 of our interim report and explained its effect in causing credit and currency expansion. The powers given to the Government by Parliament to borrow from the Bank of England in the form of an overdraft on the credit of ways and means were, as the name implies, intended to enable the Government to anticipate receipts from revenue or permanent borrowings for a brief period only. Indeed, Parliament by expressly providing that all such advances should be repaid in the quarter following that in which they were obtained, showed that it had no intention of bestowing upon the Government the power of securing an overdraft of indefinite duration and amount. Under the exigencies of war finance the Government found it necessary to reborrow in each quarter on the credit of ways and means the amount needed to enable them to comply with the statutory requirement that the previous quarter's ways and means advances should be repaid, with the result that the total outstanding advances remained for a long time at a high figure. We are glad to see that efforts are now being made to reduce this overdraft to more moderate dimensions.

We therefore hope, now that conditions are less abnormal, that the Government will confine its use of ways and means and advances from the Bank of England to providing for purely temporary necessities. Such advances afford a legitimate method of tiding over a few weeks' shortage, but are entirely unsuitable for borrowings over a longer period.

6. *Foreign banks.*—Several of our witnesses have called attention to the conditions under which it is open to foreign banks to establish themselves in this country. We suggest that this is a matter which should receive the early attention of His Majesty's Government.

7. *Scottish and Irish banks.*—We have now taken evidence in regard to the application of the recommendations in our interim report to Scotland and Ireland. The status of legal tender was given to the notes of the Scottish and Irish banks of issue as an emergency measure to tide over the period at the outbreak of war when a serious shortage of currency was threatened, a condition of affairs which no longer obtains. Some of the witnesses on behalf of the Scottish and Irish banks showed a marked desire to retain the privilege of legal-tender status for their notes. In our opinion the grant of legal-tender status could not be given permanently to the notes of Scottish and Irish banks except under statutory conditions similar to those embodied in the bank act of 1844. The evidence before us indicates that rather than be subjected to such conditions the banks would prefer the restoration of the prewar status. We accordingly recommend that the prewar status be restored. We further recommend that when the position which we contemplate in our interim report is ultimately reached, the cover held by the Scottish and Irish banks for their excess issue shall take the form of any legal tender at that time in existence.

8. *Currency note issue.*—We have considered whether steps should not be taken at an early date to impose limitations upon the fiduciary portion of the currency note issue with a view to the restoration of the normal arrangements under which demands for new currency operate to reduce the reserve in the banking department of the Bank of England. In view of the fact that demobilization is approaching completion and that as we hope fresh Government borrowing will shortly cease, we consider that

effect should now be given to the recommendation made in our interim report that the actual maximum fiduciary circulation in any year should become the legal maximum for the following year, subject only to the emergency arrangements which we proposed in paragraph 33 of our interim report. The policy of placing Bank of England notes in the currency note reserve as cover for the fiduciary portion of the issue as opportunity arises should, of course, be continued. We recommend further that the treasury minute made under section 2 of the currency and bank notes act, 1914, providing for the issue of currency notes to joint-stock banks, which is in fact inoperative, should now be withdrawn.

The committee wish to place on record their deep sense of obligation to Mr. G. C. Upcott, who served as secretary to the committee from the beginning with unflinching zeal, knowledge, and ability. They are also greatly indebted to Mr. H. E. Fass, who was appointed joint secretary with Mr. Upcott in July, 1919, and rendered important and efficient service in the closing period of the committee's labors.

We have the honor to be, My Lords, your obedient servants,

(Signed) CUNLIFFE (*Chairman*).
C. S. ADDIS.
R. E. BECKETT.
GASFARD FARRER.
HERBERT C. GIBBS.
W. H. N. GOSCHEN.
INCHCAPE.
R. W. JEANS.
A. C. PIGOU.
GEO. F. STEWART.¹
W. WALLACE.

G. C. UPCOTT,
H. E. FASS,
Secretaries.

DECEMBER 3, 1919.

THE GOVERNMENT PROPOSALS.

In reply to a question in the House of Commons on Monday by Lieutenant-Commander Kenworthy, the Chancellor of the Exchequer said:

The committee reaffirm the views set forth at greater length in their first interim report, as to the importance of restoring at the earliest possible moment the prewar methods of controlling the currency and credit system of the country, and reestablishing the free market for gold in London. They point out that the difficulties of the foreign exchange position are aggravated by the grant of loans and credits to enable foreign States to pay for exports from this country, when we in our turn have to pay cash for imports of necessities from America, North and South, and they recommend that preference be given to exports to countries which are able to make payment in the ordinary course of trade. The argument as to the exchange is obviously true, and we are fully alive to the importance of this aspect of the question. There are, however, other considerations arising out of our relations with our allies, and out of the economic condition of Europe, to which due weight must be given in particular cases. Subject

¹ Subject as regards the recommendations of paragraph 7 to the following reservation:

"Having regard to the evidence given by the witnesses from Ireland, the prewar status should not be restored in Ireland until the Government considers the time opportune. (Signed) GEO. F. STEWART.

to the fulfilment of these obligations I agree with the committee.

The Government further agree with the committee's view that increased production, cessation of Government borrowings, and decreased expenditure, both public and private, are the first essentials to recovery. So far as I can foresee, the highest point of the national debt will be reached in the course of the next month or six weeks, and I have every hope that thereafter we may be in a position to effect a gradual but steady diminution of the gross debt. In paragraph 4 the committee reaffirm their view that the principles of the bank charter act of 1844 are well adapted to the needs of this country. In paragraph 5 the committee express their gratification at the efforts now being made to reduce the amount of ways and means borrowings from the Bank of England, and express the hope that, with the return of more normal conditions, the Government will confine the use of such advances to what the committee describe as their legitimate function, namely, to tide over a few weeks' shortage. I am in entire agreement with the committee on this matter, and every effort will be made to continue the process of paying off such advances. The question of the position of foreign banks in this country, referred to in paragraph 6 of the report, is already under the consideration of the Board of Trade. In paragraph 7 the committee recommend that the legal tender status accorded to the notes of Scottish and Irish banks as an emergency measure in August, 1914, be withdrawn, and prewar conditions restored. I propose to give effect to this recommendation forthwith, and a proclamation will be submitted this week to his majesty in council to take effect as from 1st January, 1920.

In paragraph 8 the committee make three recommendations, viz, (a) that the actual maximum fiduciary circulation of currency notes in any one calendar year be fixed as the legal maximum for the next; (b) that the practice of placing Bank of England notes in the currency note reserve as cover for the note issue as opportunity arises be continued; (c) that the Treasury minute made under section 2 of the currency and bank note act, 1914, providing for the issue on loan of currency notes to joint-stock banks be now withdrawn. I propose to give immediate effect to the first and third of these recommendations, and to continue the policy recommended in the second. I propose to circulate in the official report copies of the Treasury minutes issued on their points,

TREASURY MINUTES.

The Treasury minutes referred to by Mr. Chamberlain are as follows:

The Chancellor of the Exchequer draws the attention of the board to paragraph 8 of the final report of the committee on currency and foreign exchanges after the war, which recommends the imposition of a maximum limit on the issue of currency notes under the currency and bank notes act, 1914. The chancellor proposes to the board that steps shall be taken to give effect to the recommendation that the actual maximum fiduciary circulation of currency notes in any year shall be the fixed maximum for the following year.

The maximum fiduciary circulation during the expired portion of the current calendar year has been £326,608,298 10s., and the chancellor accordingly proposes that directions shall now be given to the Bank of England restricting them from issuing currency notes during the 12 months commencing 1st January, 1920, in excess of a total of £320,600,000, except against gold or Bank of England notes, and from issuing in the calendar year commencing 1st January in any year henceforward notes in excess of

the actual maximum fiduciary circulation of the preceding 12 months. My Lords concur.

Under the powers conferred by section 2 of the currency and bank notes act, 1914, and the treasury minutes of 6th August and 20th August, 1914, and 29th February, 1916, the treasury gave directions embodied in those minutes for the issue of currency notes to bankers, and, upon the application of the national debt commissioners, to the postmaster-general, for the purpose of providing cash for the post office savings bank fund, and to the order of the trustees of any trustee savings bank for such amount as might from time to time be necessary to provide funds for the payment of sums due to depositors (including depositors in special investment departments), the notes so issued being treated as interest bearing advances by the treasury. The arrangements then made were designed to meet the danger of a shortage of currency in the circumstances attendant on war conditions, and the committee on currency and foreign exchanges after the war in their final report recommend that they should now be discontinued. The Chancellor of the Exchequer therefore recommends to the board that the directions given by the minute cited shall be revoked as from 1st January, 1920, in so far as they provide for the issue of currency notes as advances to bankers and to the postmaster-general and the trustee savings banks, provided that any advance made under those powers and still outstanding upon that date shall be unaffected by such revocation and remain so unaffected until repayment. My Lords concur.

GOLD RESERVES OF PRINCIPAL BANKS OF ISSUE, 1900-1919.

In the table below are shown revised amounts of gold reserves held by the leading banks of issue at the end of each year between 1900 and 1919. The figures represent actual vault holdings. The amounts of gold held

abroad and foreign gold credits have been uniformly excluded. This affects chiefly the figures of the Bank of France and of the Bank of Russia. British figures are exclusive of \$138,695,000 held as reserve by the Treasury against currency notes outstanding. For Italy, the figures given represent the amounts of gold in vault reported by all three banks of issue and not merely by the Bank of Italy. Swiss figures prior to 1908 represent gold holdings of all banks of issue. Figures for 1908-1918 represent gold holdings of the Central National Bank organized in 1907.

Figures for the United States include—

(1) Amounts of gold held in the Treasury of the United States at the end of the calendar year and reported among the free assets of the Government; i. e., exclusive of gold cover for gold certificates outstanding; also of amounts of gold held for redemption of Federal Reserve notes.

(2) Amounts of gold held by the national banks and reported in their statements to the Comptroller nearest the close of the years 1900-1916. Of the clearing-house certificates reported by the national banks 60 per cent was estimated to represent gold.

(3) At the close of 1914-1919, gold holdings of the Federal Reserve Banks. These holdings are exclusive of the amounts of gold held by foreign agencies, but include amounts of the banks' and agents' redemption funds held in the Treasury.

Movement of the gold reserves of the principal central banks, 1900-1919.

[In thousands of dollars.]

	United States Treasury, national banks, and Federal Reserve Banks.	Bank of England.	Bank of France.	Russian State Bank.	Banks of Italy, Naples, and Sicily.	Bank of Belgium.	German Reichsbank.	Austro-Hungarian Bank.	Bank of Rumania.
Dec. 31, 1900.....	511,465	138,696	451,427	364,700	77,817	20,578	119,249	186,312	.....
1901.....	532,656	156,042	475,494	351,300	80,689	22,185	150,586	226,129	.....
1902.....	561,697	144,909	490,751	364,900	86,900	21,690	130,219	224,350	.....
1903.....	544,836	140,699	455,731	378,000	116,372	22,600	132,942	224,803	.....
1904.....	590,162	145,641	513,110	453,400	120,806	23,169	168,839	233,601	.....
1905.....	620,961	138,842	555,531	368,700	155,534	23,007	142,060	217,618	.....
1906.....	677,566	141,442	522,200	458,300	179,271	24,254	114,665	225,344	.....
1907.....	630,243	149,625	519,344	488,500	217,419	25,586	118,515	222,737	.....
1908.....	719,193	149,559	673,223	555,700	227,508	30,638	183,000	239,549	.....
1909.....	703,358	158,785	674,612	604,400	232,291	30,680	162,228	274,326	.....
1910.....	718,124	152,592	632,924	634,300	238,544	39,816	157,459	267,542	.....
1911.....	762,937	157,860	618,855	648,500	244,737	48,092	173,352	261,732	.....
1912.....	790,290	147,594	619,009	683,900	248,261	55,423	184,998	245,113	29,242
1913.....	779,292	170,245	678,856	786,800	265,476	59,131	278,687	251,421	29,733
1914.....	863,135	338,191	802,591	803,400	269,584	56,619	498,508	213,757	42,647
1915.....	1,078,741	250,510	967,950	831,200	263,278	.....	581,954	138,758	34,487
1916.....	1,200,831	264,275	652,885	758,396	223,400	.....	599,873	58,759	34,576
1917.....	1,773,072	283,899	639,682	667,041	206,700	.....	572,768	83,717	34,577
1918.....	2,248,295	384,937	684,017	.....	202,457	.....	538,804	53,074	53,074
1919.....	2,093,138	444,516	694,847	¹ 335,784	² 200,122	51,417	³ 259,546	⁴ 47,152	⁴ 34,776

¹ Aug. 1, 1919, data for the bank controlled by the Kolchak government.

² Sept. 30, 1919.

³ Dec. 15, 1919.

⁴ Dec. 6, 1919.

Movement of the gold reserves of the principal central banks, 1900-1919—Continued.

[In thousands of dollars.]

	Bank of Sweden.	Bank of Norway.	Bank of Spain.	Bank of Netherlands.	Bank of Switzerland.	Conversion fund of the Argentine Government.	Bank of Japan.	Bank of Java.	Canadian gold reserves.	Total.
Dec. 31, 1900.....	9,877	6,508	67,555	23,531	19,322	.....	32,576	.....	.....	2,029,813
1901.....	12,591	7,212	67,627	27,699	21,058	.....	34,326	.....	.....	2,165,594
1902.....	13,942	5,897	74,233	22,668	20,530	.....	53,897	.....	.....	2,216,583
1903.....	15,814	5,678	70,175	20,208	20,776	36,895	58,306	.....	.....	2,243,835
1904.....	16,883	6,546	71,810	27,159	20,653	48,570	39,883	.....	.....	2,480,232
1905.....	18,281	6,522	72,505	31,863	20,546	86,979	57,624	.....	.....	2,516,573
1906.....	19,277	8,076	74,373	26,706	21,181	99,115	73,380	.....	.....	2,665,150
1907.....	18,847	8,281	75,521	36,899	{ ¹ 10,907 ² 14,568}	101,414	80,628	.....	.....	2,719,034
1908.....	20,957	8,380	76,259	40,608	22,674	122,261	84,498	.....	.....	3,154,007
1909.....	21,556	8,964	77,760	48,631	23,921	166,447	108,595	.....	.....	3,296,554
1910.....	21,535	9,711	79,280	49,948	30,034	179,447	110,857	.....	.....	3,322,114
1911.....	22,758	10,844	80,693	56,426	31,009	182,394	114,233	² 8,131	.....	3,422,553
1912.....	26,816	10,814	84,384	65,032	33,416	215,031	123,141	² 10,582	.....	3,573,046
1913.....	27,372	12,846	92,490	60,898	32,801	224,989	111,846	² 16,046	160,798	4,039,727
1914.....	29,088	11,181	110,444	83,663	45,922	213,906	108,791	² 10,027	157,196	4,658,650
1915.....	33,385	18,028	166,414	172,530	48,275	⁴ 228,939	123,836	² 12,418	188,331	5,147,194
1916.....	49,183	33,027	241,424	236,217	66,585	⁴ 251,158	204,644	² 13,804	190,770	5,079,807
1917.....	65,513	31,214	379,597	280,689	69,025	⁴ 252,390	323,835	² 28,984	202,176	5,864,879
1918.....	76,532	32,708	430,072	277,156	80,041	⁴ 252,380	361,722	² 43,423	200,576	5,899,268
1919.....	75,356	39,590	472,464	256,204	99,779	^{4,6} 294,094	⁷ 439,577	² 67,827	⁹ 202,965	6,109,154

¹ Of the banks of issue.² Of the Central National Bank.³ Figures as of Mar. 31.⁴ Exclusive of the gold held in the Argentine legations abroad and the 10,000,000 gold pesos in the conversion fund of the Banco de la Nación.⁵ Dec. 28, 1918.⁶ Oct. 31, 1919.⁷ Dec. 6, 1919.⁸ Dec. 15, 1919.⁹ Nov. 29, 1919.Changes in Excess Reserves ("Free Gold")
During 1919.

In the table below and attached diagram there are presented figures showing weekly changes in the amounts of minimum reserves required to be held by Federal Reserve Banks against net deposits and Federal Reserve notes in circulation, also like changes in the banks' total cash reserves. By deducting from the total cash reserves the aggregate amounts required to be held as reserves against net deposit and note liabilities, we obtain figures of excess reserves, or of "free gold," which may serve as the basis of further reserve deposit credit or additional Federal Reserve note circulation.

For the past calendar year there is shown a reduction in the amount of "free gold" from 550 to 315.9 millions. This is the combined result of the growth of required deposit reserves from 543 to 596.6 millions of required note reserves from 1,059 to 1,223.1 millions, and the decline in cash reserves from 2,152.2 to 2,135.5 millions.

Net deposits and required deposit reserves fluctuated largely in accordance with the volume of discount operations, which were lowest

during the early weeks of the year and about the middle of September, and highest during May following the consummation of the Victory loan, and in November of the past year.

Federal Reserve note circulation and required Reserve note circulation fluctuated within narrow limits during the first nine months of the year. It was only in the last week of September that note expansion on a large scale started; as a matter of fact the increase in required note reserves between September 19 and December 26 was about 11 millions larger than the increase for the entire year.

Cash reserves reached the highest point in June. Removal of the gold embargo early in June followed by considerable export withdrawals of gold accounts for the gradual reduction in reserves from 2,270.3 millions on June 6 to 2,138.5 millions on September 12. This movement was checked temporarily by transfers to London of large amounts of German gold acquired from the United States Grain Corporation, but resumed its downward course beginning with the last week in October, the decline in reserves between October 24 and the last Friday in December being 79 millions, as against a decline of 17 millions only for the entire year.

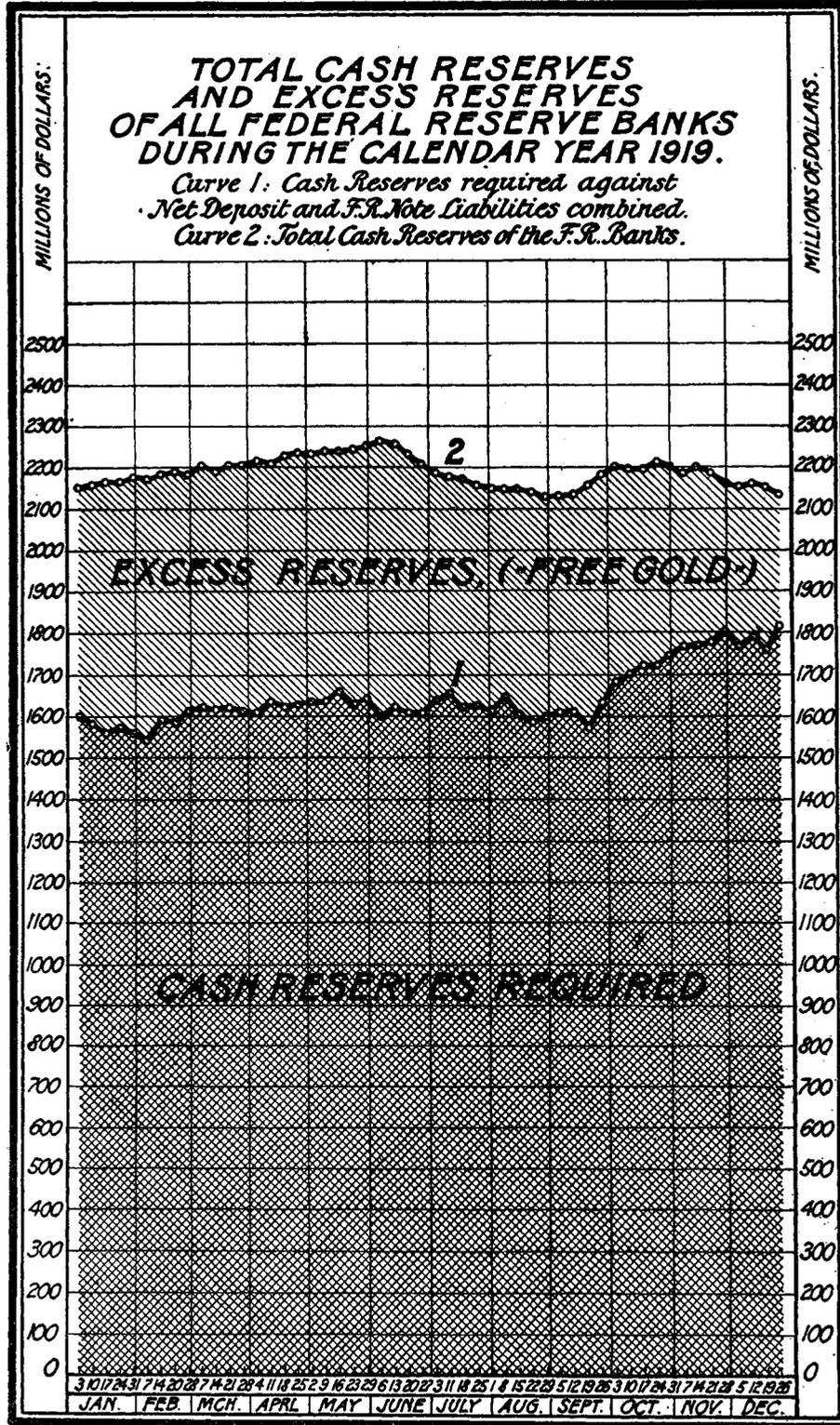
At the beginning of 1919 the "free gold" of the system totaled \$550,084,000. On the basis of a 35 per cent required deposit reserve and 40 per cent required note reserve, this amount would support 1,571.7 millions of additional net deposits, or 1,375.2 millions of additional note circulation. At the close of the year the amount of free gold had declined to \$315,913,000, which is sufficient support for 902.6 millions of additional net deposits or 789.8

millions of additional Federal Reserve note circulation. If it be assumed that for every \$2 of increase in net deposits there will be an increase of \$3 in Federal Reserve note circulation, the possible maximum expansion works out at \$831,350,000, of which \$332,540,000, or 40 per cent, will be represented by net deposits and \$498,810,000, or 60 per cent, by Federal Reserve note circulation.

Required reserves against net deposit and Federal Reserve note liabilities, and amounts of gold held in excess of required reserves.

[In thousands of dollars.]

	Net deposits.		Federal Reserve notes in circulation.		Total net deposit and Federal Reserve note liabilities.	Total amount of required reserves.	Total cash reserves held.	Gold in excess of required reserves (free gold).	Ratio of total cash reserves to net deposit and Federal Reserve note liabilities combined.
	Amount.	Required reserve of 35 per cent.	Amount.	Required reserve of 40 per cent.					
1919.									
Jan. 3.....	1,551,509	543,028	2,647,605	1,059,042	4,199,114	1,602,070	2,152,154	550,084	51.3
Jan. 10.....	1,575,867	551,553	2,590,681	1,036,272	4,166,548	1,587,825	2,161,898	574,073	51.9
Jan. 17.....	1,592,483	557,369	2,513,089	1,005,236	4,105,572	1,562,605	2,170,163	607,558	52.9
Jan. 24.....	1,679,536	587,838	2,466,556	986,622	4,146,092	1,574,460	2,168,387	593,927	52.2
Jan. 31.....	1,659,457	580,810	2,450,729	980,292	4,110,186	1,561,102	2,179,646	618,544	53.0
Feb. 7.....	1,614,161	564,956	2,454,165	981,666	4,068,326	1,546,622	2,175,614	628,992	53.5
Feb. 14.....	1,744,662	610,632	2,468,388	987,355	4,213,050	1,597,987	2,185,318	587,331	51.9
Feb. 20.....	1,730,798	605,779	2,466,248	986,499	4,197,044	1,592,278	2,191,532	599,254	52.2
Feb. 28.....	1,796,739	628,859	2,472,307	988,923	4,269,046	1,617,782	2,188,723	570,941	51.3
Mar. 7.....	1,802,090	630,732	2,438,537	995,415	4,290,627	1,626,147	2,205,462	579,315	51.4
Mar. 14.....	1,789,445	619,306	2,503,095	1,001,238	4,272,540	1,620,544	2,196,737	576,193	51.4
Mar. 21.....	1,768,646	619,026	2,510,687	1,004,275	4,279,333	1,623,301	2,208,578	555,277	51.6
Mar. 28.....	1,741,425	609,499	2,521,776	1,008,719	4,263,201	1,618,209	2,210,524	592,315	51.9
Apr. 4.....	1,703,368	596,178	2,547,670	1,019,068	4,251,036	1,615,246	2,218,628	603,382	52.2
Apr. 11.....	1,777,915	622,270	2,548,588	1,019,435	4,326,508	1,641,705	2,211,989	570,284	51.1
Apr. 18.....	1,735,070	607,275	2,543,704	1,017,482	4,278,774	1,624,757	2,230,859	606,102	52.1
Apr. 25.....	1,752,194	613,268	2,549,552	1,019,821	4,301,746	1,633,089	2,240,152	607,063	52.1
May 2.....	1,772,950	621,233	2,549,040	1,019,616	4,323,990	1,640,849	2,237,210	596,370	51.7
May 9.....	1,765,309	617,858	2,556,749	1,022,700	4,322,058	1,640,558	2,242,784	602,226	51.9
May 16.....	1,865,315	652,860	2,532,099	1,012,818	4,397,354	1,665,676	2,245,857	580,181	51.1
May 23.....	1,797,505	629,127	2,504,253	1,001,701	4,301,758	1,630,828	2,247,953	617,105	52.3
May 29.....	1,830,920	640,822	2,519,292	1,007,717	4,350,212	1,643,539	2,255,106	606,567	51.8
June 6.....	1,712,118	599,241	2,513,037	1,005,215	4,225,155	1,604,456	2,270,343	665,887	53.7
June 13.....	1,794,770	628,170	2,499,285	999,706	4,294,085	1,627,876	2,261,988	634,112	52.7
June 20.....	1,771,329	619,965	2,488,253	995,301	4,250,582	1,615,266	2,234,459	619,193	52.5
June 27.....	1,772,503	620,201	2,552,348	1,020,939	4,324,351	1,641,140	2,195,353	554,213	52.1
July 3.....	1,842,433	644,852	2,538,127	1,015,251	4,380,580	1,660,103	2,180,211	520,103	50.8
July 11.....	1,769,496	619,324	2,512,048	1,004,819	4,281,544	1,624,143	2,177,481	553,398	49.8
July 18.....	1,796,561	628,796	2,504,497	1,001,799	4,301,058	1,630,595	2,161,023	530,423	50.9
July 25.....	1,766,181	618,163	2,506,820	1,002,728	4,273,001	1,620,891	2,156,327	535,436	50.5
Aug. 1.....	1,820,817	637,236	2,532,057	1,012,823	4,359,874	1,650,199	2,152,118	502,009	49.4
Aug. 8.....	1,888,674	591,066	2,540,904	1,016,362	4,229,578	1,607,398	2,151,723	544,325	50.9
Aug. 15.....	1,821,147	587,401	2,553,534	1,021,414	4,174,661	1,588,815	2,142,701	553,886	51.3
Aug. 22.....	1,829,797	570,429	2,580,629	1,032,252	4,210,426	1,602,681	2,135,976	533,295	50.7
Aug. 29.....	1,824,117	568,441	2,611,697	1,044,679	4,235,814	1,613,120	2,136,870	523,750	50.4
Sept. 5.....	1,618,216	566,376	2,621,228	1,048,491	4,239,444	1,614,867	2,138,499	522,632	50.4
Sept. 12.....	1,499,914	524,970	2,621,258	1,048,503	4,121,172	1,573,473	2,162,057	538,584	52.5
Sept. 19.....	1,634,074	571,926	2,635,354	1,062,142	4,289,428	1,634,068	2,187,505	553,497	51.0
Sept. 26.....	1,726,266	604,193	2,708,186	1,083,274	4,434,452	1,687,467	2,205,511	518,044	49.7
Oct. 3.....	1,743,850	610,348	2,741,684	1,086,674	4,485,534	1,707,022	2,202,100	495,078	49.1
Oct. 10.....	1,796,159	628,656	2,752,569	1,101,025	4,545,728	1,729,684	2,199,185	469,501	48.3
Oct. 17.....	1,792,402	627,341	2,753,457	1,101,383	4,545,559	1,728,724	2,214,561	485,837	48.7
Oct. 24.....	1,850,518	647,681	2,752,876	1,101,150	4,603,894	1,748,831	2,205,592	456,761	47.9
Oct. 31.....	1,870,510	654,679	2,806,759	1,122,704	4,677,269	1,777,883	2,187,369	409,986	46.8
Nov. 7.....	1,858,258	650,390	2,808,456	1,123,382	4,666,714	1,773,772	2,200,106	426,334	47.1
Nov. 14.....	1,846,800	646,380	2,817,173	1,126,869	4,663,973	1,773,249	2,186,972	413,723	46.9
Nov. 21.....	1,889,399	661,289	2,852,277	1,140,911	4,741,676	1,802,200	2,159,666	357,466	45.5
Nov. 28.....	1,761,521	616,532	2,881,359	1,152,544	4,642,880	1,769,076	2,154,095	385,019	46.4
Dec. 5.....	1,786,424	625,248	2,907,435	1,162,974	4,693,859	1,788,222	2,160,405	372,163	46.0
Dec. 12.....	1,610,924	563,823	2,938,894	1,195,558	4,599,818	1,759,381	2,154,911	395,530	46.8
Dec. 19.....	1,704,470	596,565	3,057,646	1,223,058	4,762,116	1,819,623	2,135,536	315,913	44.8



TERMS OF SALE.

The following is the second of a series of articles giving data as to current practice and recent history of terms of sale in the principal industries. Acknowledgment is due the many business houses, individuals, and trade associations who have courteously furnished the information.

IRON AND STEEL.

Pig iron, whether steel making, such as basic and Bessemer, or foundry or forge, is sold upon terms of net 30 days from date of invoice or average date of monthly shipments. The larger proportion of the steel making pig iron, however, is transported in molten condition to steel works, and steel products during the initial stages of rolling, such as ingots, blooms, and slabs, are in large measure not commercial products. Terms for billets, blooms and slabs, into which the ingot is rolled, are largely one-half per cent 10 days, net 30 days.

Terms for heavier rolled products differ, standard rails being sold on terms of net 30 days and light rails on terms of one-half per cent 10 days, net 30 days, while the latter terms obtain also for structural shapes and plates. The former are sold to constructors of buildings, and builders of bridges, ships, cars, etc., the latter to the same group, as well as to manufacturers of boilers and tanks. Turning to light-rolled products, such as merchant and sheet bars and wire rods, these generally carry terms of one-half per cent 10 days, net 30 days. Terms for all these items have been in effect for many years. It is stated that about 1900 no discount was given on wire rods. Certain types of merchant bars are sold to hardware jobbers, but large quantities are also sold to manufacturers of agricultural implements, vehicles, etc., and some are further manufactured into bolts, nuts, spikes, etc. Sheet bars are rolled by purchasers into black sheets, used for roofing and making stovepipe receptacles, etc., and into black plate used in the manufacture of tin plate. Wire rods provide the raw material for the wire goods industry.

Rivets (one-half inch and larger in diameter) and spikes carry terms of one-half per cent 10 days, net 30 days, bolts, nuts, and rivets less than one-half inch in diameter, terms of 1 per cent 10 days, net 30 days. Track bolts and specially designed bolts, however, carry in considerable measure terms of net 30 days, though

the former in certain cases bear a cash discount of one-half per cent 10 days. The manufacture of these products is relatively concentrated. There are not over 25 producers of bolts and nuts, of whom all but three or four now adhere to the terms given above. About 1912 an unsuccessful effort was made to reduce the discount and net terms on this item from 2 per cent 10 days, net 60 days, but a similar effort several years later succeeded. This was in spite of the strong resistance of the hardware jobbers, who, however, handle only a small part of the total output, the major part being sold direct by the manufacturers to industrial consumers. It is stated that prior to 1914 or 1915 the discount on rivets was generally 1 per cent.

Wire products, including wire rope and smooth, barbed, and twisted wire, nails, and woven wire goods, carry terms of 2 per cent, 10 days, net 60 days. Similar terms obtain for welded tubes, pipe, and other welded tubular products. In the case of purchasers to whom frequent shipments are made, monthly payment is permitted, terms then being 2 per cent 10th proximo. Seamless tubes and other seamless products carry terms of 2 per cent 10 days, net 30 days, although in the case of contracts for a considerable periodical supply of seamless cylinders the net terms are increased to 60 days. Sheets and tin mill products, including black sheets and tin plate, are sold on terms of 2 per cent 10 days, net 30 days. These terms have been in effect for 12 to 15 years, prior terms having been respectively 2 per cent 10 days, net 60 days and 1 per cent 10 days, net 30 days.

As has been indicated above, terms in general have been in effect for a considerable number of years and substantial uniformity in terms now exists. Prior to 1900, which date may be taken as the beginning of the movement towards consolidation in the industry, terms were considerably more irregular and were often adapted to meet the special needs of the customer, extended terms, such as from 4 to 8 months, with correspondingly high cash discounts, being frequently employed for certain classes of products.

It may be stated broadly that the cash discount is greater for the more highly finished products, which are sold both in smaller lots and to different classes of purchasers than are the semifinished products. It is stated, moreover, that the commodities bearing only a one-half per cent discount are sold on a close margin.

COPPER, LEAD, AND ZINC.

For the present purpose the distinguishing characteristic of the markets for the nonferrous metals in their primary forms may be considered to be the absence of standardization, both in marketing practice¹ and in terms. Strictly speaking, for these metals there are no "regular" terms, such as prevail in many other lines. Moreover, a large speculative interest has always existed in copper and in zinc, in particular in the former. In lead, on the other hand, there is relative concentration of production. The producing companies are only 12 in number, one of them produces 35 per cent or more of the total output, and "its policy is to conduct a business made stable by maintaining regular customers and prices as nearly constant as conditions permit." It is stated that only 5 per cent of pig lead finds its way into the hands of jobbers for resale. In copper and zinc, however, the percentage so handled is much greater. Recent estimates place the figure for copper for 1919 at somewhere around 20 per cent of the total output, and this is stated to have been larger than normal. A very much larger percentage of the output of zinc, estimated at from 50 to 60 per cent, passes through the hands of dealers. The proportion varies considerably from time to time. It is a well-known market fact that the copper producers have recently been limiting strictly the amount sold to jobbers, in order, it is said, to avoid a repetition of the situation some months ago when the jobbing interests to whom sales had been freely made dominated the market. The general practice varies among the different producers, some of them pursuing the same policy as the lead producers. In the matter of terms, the producers of the nonferrous metals, while preferring cash against documents, endeavor to meet the wishes of their customers, and as a rule are willing to sell on the terms preferred by the latter, provided payment is made within 30 days from date of shipment.

Producers' terms on ingot copper vary, instances being cash against documents, cash on delivery, sight or arrival draft, 10, 20, or 30 day draft, and up to 30 days' open account. Formerly 30 days from arrival was also given; but this has recently been changed to 10 days from date of shipment if made from an eastern refinery and 30 days if made from a far western refinery. This eliminates the financing by the

producer required under the earlier terms, also disputes as to what constitutes date of arrival, which were frequent. Prior to the war a discount of one-half per cent 10 days was usually granted large consumers, net terms being 30 days, but this was largely eliminated during the war, copper being sold chiefly on a cash basis. Producers are again allowing large consumers 30-day terms.

Pig lead is sold by the larger producers on terms of cash on arrival at the buyer's plant, a sight draft with bill of lading attached being used in most cases with instructions to the bank to hold the draft awaiting the arrival of the shipment. A small percentage of sales call for cash in 10 or 15 days from date of shipment.

The larger producers' terms on slab zinc are similar to those allowed on lead. Sales of prime western zinc during the early part of the war, when scarcity existed, were almost wholly on sight draft. Cash on arrival or sight draft are, however, by no means exclusively employed. Terms in some cases vary from net 10 days to net 30 days from date of shipment, according to length of time required for delivery. It is stated that since the middle of 1917, when prime western zinc has been in free supply, leading consumers have been able to reestablish such terms. It may be noted that they by no means always involve a longer period than in the case of cash on arrival terms, as shipments from western centers to eastern consuming works are frequently three, four, or five weeks in transit. High-grade zinc, which is used extensively to make the better quality brass and for rolling sheet, largely carries a cash discount of one-half per cent for payment within 10 days from date of shipment or in some cases with sight or 10-day draft. In special cases the terms to purchasers of high standing are made one-half per cent 10 days, net 30 days. There has recently been a movement looking to the formulation of standard terms for the industry.

Jobbers' terms on copper and zinc are stated to be largely one-half per cent 10 days, net 30 days, although on carload lots in competition with producers net cash on arrival may be specified. Pig lead is sold largely on terms of net 30 days.

Turning now to manufactures of the nonferrous metals. Terms on brass and copper products, including rods, wire, sheet and tubing, are largely 1 per cent 10 days, net 30 days, the discount in some cases being given for semi-monthly settlements by the 5th and 20th. These terms have been in effect for many years. In certain cases the discount was re-

¹ Various details on this point have been obtained from Aldrich and Schamuckler, *Prices of Ferroalloys, Nonferrous and Rare Metals, War Industries Board Price Bulletin, No. 34.*

duced during the war to one-half per cent and in some cases later eliminated, although subsequently in general restored to the former figure of 1 per cent.

Trade sheet lead and lead pipe carry terms of 2 per cent 10 days, net 30 days, bar lead and solder carry terms of net 30 days, and chemical sheet lead and chemical lead pipe carry terms of 1 per cent 10 days, net 30 days. The first two classes of items are sold largely to jobbers of plumbing supplies and to plumbers, the last to the chemical trade. The difference in the discount is accounted for by the difference in size and credit standing of purchaser. While a 1 per cent discount is sufficient inducement to the large concerns of first-class credit standing in the chemical trade to generally discount their purchases, it is insufficient in the case of jobbers of plumbing supplies and plumbers.

Rolled zinc products are regularly sold on a cash basis, sight draft against bill of lading being used in many cases. A cash discount of 3 per cent is allowed. These terms have been in effect for many years. By far the larger part of these commodities is sold to jobbers as against consumers, although the proportion varies considerably from month to month.

HARDWARE.

The hardware field is exceedingly complex. A large number of items are included under the term, and the limits are vague and ill-defined at points, merging into other lines. Hardware distributors have extended their activities to include related lines as well, automobile accessories affording the latest instance, while some of the regular hardware items are handled by other merchants also. Within the recognized limits of the field itself, there is no standard classification of items into a number of types. In addition, the lines produced by the individual manufacturers differ greatly. In order to clarify the discussion as far as possible, several of the classifications in actual use will be presented. The war service committee of the American Hardware Manufacturers' Association had the following sections:

- Wire goods and heavy hardware.
- Builders' hardware, metal ware, small castings and stampings.
- Cutlery.
- Hardware tools.
- Agricultural tools.
- General hardware.

The internal organization of the individual hardware jobber, however, by no means follows the same lines. Following are the list of departments of several hardware jobbers; the number of which, of course, will vary with the size of the house.

House No. 1—

- Builders' hardware.
- Mechanics' tools.
- Brass goods, valves, pipe fittings.
- Steel bars, plates, sheets, light rails, etc.
- Wrought pipe and boiler tubes.
- Cutlery, fishing tackle, sporting goods, etc.
- Fire arms and ammunition.
- Nails, horseshoes, barbed wire, etc.
- Household goods, enameled, agate and tin ware, etc.

House No. 2—

- Auto accessories.
- Builders' hardware.
- Cutlery, watches, and clocks.
- Electrical supplies.
- Heating and plumbing.
- Heavy hardware.
- Mill, logging and agricultural.
- Mining and railway.
- Paint and glass.
- Saddlery and shoe findings.
- Sporting goods.
- Stoves and ranges.
- Tents and awnings.
- Tools.
- Toys and novelties.

In the present discussion we shall consider first the general line of shelf hardware and then treat in succession the metals and heavy hardware, builders' hardware, and sporting goods. Automobile accessories and electrical supplies, a smaller portion of which products is distributed through the hardware jobbers than in the case of the lines just mentioned, will be treated separately later. The regular distributive chain in the hardware industry comprises manufacturer, jobber, retailer, and consumer, but it is stated that in the Central West and on the Pacific coast a greater proportion of goods is sold by jobbers to manufacturing and other consumers not individuals than in the other sections.

Activities of the National Hardware Association with respect to terms of sale have dealt both with the purchases and with the sales of hardware jobbers. Although in the 90's the American Hardware Manufacturers' Association gave much consideration to net 30-day terms, and some manufacturers adopted these terms, the strenuous objection on the part of the wholesalers resulted in the abandonment of the attempt to establish these terms, and the recognized terms upon which manufacturers sold continued for many years to be

2 per cent 10 days, net 60 days. The officers of the jobbers' association have always displayed great interest in the maintenance of the discount, and have at once communicated with manufacturers who have announced a decrease in or discontinuance of the same. The reasons for the jobber's advocacy of the cash discount, and the advantages claimed for it, are substantially similar to those put forward by the National Wholesale Grocers' Association, which are given in the December, 1919, issue of the FEDERAL RESERVE BULLETIN. It is generally held that the discount is the source of a considerable part of the net profits of the jobber, which are usually estimated as from 2½ to 3½ per cent of gross sales. The success of the work may be judged from the statement in the 1910 report of the secretary-treasurer that "almost all manufacturers now admit that the usual and ordinary terms are 2 per cent 10 days, net 60 days." From this time on a period of relative quiescence is noted, and the terms of 2 per cent 10 days, net 60 days, became established as the regular hardware terms. For several years correspondence with manufacturers was relatively small and the work was confined largely to representing to members the undesirability of wrongfully deducting the discount when not paying within the 10-day discount period.¹ This period, however, was not of very long duration. A rather widespread movement among manufacturers became manifest several years later, in particular after the outbreak of the war, to either decrease or eliminate the discount. This may be ascribed both to the increase which occurred in the price of the various hardware articles, which accompanied the increase in the cost of production, and to the existence of a seller's market. Strong opposition was aroused among the jobbers, the more so as their cost of doing business had been steadily mounting. At the 1916 convention of the latter's association the resolution of 1899, favoring a cash discount of 2 per cent for payment within 10 days, was again read, and a similar resolution was passed. Both in 1916 and in the succeeding year the question was of prime importance. In the latter year a committee of the jobbers was

¹ Some evidence as to promptness with which collections are made by hardware manufacturers is afforded by the following data contained in a paper advocating the use of trade acceptances, read by Mr. R. H. Treman at the 1916 convention of the National Hardware Association, and reproduced on pages 23-24 of the pamphlet entitled Trade Acceptances, What They Are and How They Are Used, prepared for the American Acceptance Council and published October 1, 1919: "The reports show that when the bills are discounted, instead of being paid in 10 days they have averaged 15 days, and for those who take the option of the 60-day credit period, the average payment is in from 75 to 80 days, and 10 per cent or more of customers take 90 days or more."

appointed to present the matter to the manufacturers' convention. At the same time jobbers were again urged to respect the discount period. With the passing of war conditions the matter has gradually declined in importance, and in 1918 it was stated that "many of the manufacturers who changed their terms during the past year reinstated the discount." The above statement, however, should by no means be construed as indicating that the majority of manufacturers deviated from the regular terms. This occurred more largely in lines where the bulk of the merchandise has been distributed through other than hardware channels, in particular where the bulk of the manufacturers' sales are to large industrial consumers. A prominent illustration is afforded in the case of bolts and nuts, as was mentioned above, also by explosives, where terms have recently been changed to net 10 days. Several reliable estimates agree that at the present time about 80 per cent of hardware items are sold by manufacturers upon the regular terms.

To turn now to specific lines. It should be noted that it makes little difference to the jobber whether net terms are 30 days or 60 days, inasmuch as he generally discounts his purchases. This, however, appears to be the only change which has been generally adopted in any of the distinctly hardware lines. Although the majority of manufacturers of mechanics' hand tools extend 60 days, a considerable number give only 30 days. The latter terms are used also in a few cases for farriers' tools, while they are in general use for heating appliances for mechanical purposes, such as gasoline torches, etc. The terms of manufacturers of cutlery vary from 30 days to 60 days on sales to wholesalers, although 60 days is generally given to retailers, or on sales to distant territory, such as the Pacific coast. A very small percentage is also stated to be sold on an absolutely net basis without cash discount. Certain seasonable goods, such as carvers' and high-priced table knives, sold in the spring for early summer delivery, bear September 1 or October 1 dating. Prior to the war the hardware jobbers in the South and Southwest obtained datings. Wire goods, springs, and fence bear terms of 2 per cent 10 days, net 30 days, whereas 60 days is given on wire cloth and poultry netting in certain cases. The trade acceptance is used to some extent. In certain cases net terms are 60 days to retailers with a trade acceptance in place of 30 days on

open account, while in other cases 30 and more rarely 60 and 90 day acceptances are employed in connection with contract shipments to industrial consumers. Terms given on saws vary, instances of net 30 days, 2 per cent 10 days, net 30 days and 2 per cent 10 days net 60 days being noted. In one case 60 days is given instead of 30 days to southern jobbers. These terms apply on sales of hand and circular saws which fall in the mill goods category as well as on sales of crosscut and hand saws. In the chain industry, terms in the welded, weldless and hardware branches are 2 per cent 10 days net 30 days, while for transmission and conveying chain terms are net 30 days, no discount being given.

Most manufacturers of seasonal goods have continued for many years the policy of offering to the jobbers a dating on shipments on condition that they would permit the manufacturer to ship the goods at his convenience. In the case of agricultural hand tools, while the regular hardware terms prevail, invoices are dated March 1 for hay, manure, grain, and spading forks, garden, field, and wheel hoes, garden rakes, and garden cultivators. Some years ago April 1 dating was given on southern hoes, but this has been discontinued. Corn hooks and knives bear September 1 dating and hay knives November 1 dating. Allowance for prepayment is at the rate of from 6 to 12 per cent per annum. Certain household goods, such as water coolers, oil cook stoves, etc., and oil and wood heaters, stove-pipe, etc., known respectively as spring and fall items, especially where they are of a bulky nature, bear March 1 and September 1 dating. In this industry a recent tendency toward shortening of the net period from 60 days to 30 days is reported. Sales by manufacturers of furnaces, stoves and ranges in general bear a September 1 dating, reduced some years ago from October 1, and the spring dating, usually April 1, which was formerly customary, was also abolished several years ago. Net terms have largely been reduced from 60 days to 30 days, although 60 days' trade acceptance is employed in certain cases where net terms on open account are 30 days. About 10 years ago the discount was reduced from 5 per cent 30 days to 2 per cent 30 days and later to 2 per cent 10 days. It should be noted that manufacturers in this line largely sell direct to retailers, it being estimated that not over 20 per cent of the product is handled through jobbers. Jobbers largely give the usual season dating in

this line, likewise on wire cloth and screen doors.

The regular terms of sale of hardware jobbers have been the same as those upon which their purchases are made, namely, 2 per cent 10 days, net 60 days, but within the past year there has been a movement to reduce the net period to 30 days. The National Hardware Association has considered the question at various times. Parallel with its work of urging all jobbers to respect the cash discount period, similar work was undertaken designed to bring the matter to the attention of the retailer. In 1911 a special committee on cash discount was appointed with this particular function. From about 1912 on emphasis began to be placed upon the 2 per cent as a premium for prepayment, rather than as a discount for cash. The expression, which however dates back at least to 1899, has also been employed in the subsequent dealings with the manufacturers. The report of the cash discount committee in 1912 stated that certain of the markets were badly demoralized on the question of the enforcement of the cash discount period. Mr. R. H. Treman in the address delivered in 1916 to which reference was made above gives the following data:

"As to jobbers (wholesale distributors), the reports show that throughout the country generally from 40 to 50 per cent of buyers discount their bills within 15 days after purchase, while of those who take the 60-day option from 25 to 30 per cent pay 'promptly,' or within one month following the 60-day maturity. Of the remaining 20 per cent, only about one-half pay in the period between three and four months after purchase while the other half pay in from four to six months, or never, notwithstanding that the terms of sale agreed upon were for a credit of only 60 days."

Variation was noted according to locality, jobbers on the Pacific coast having 50 per cent of buyers discount their bills, 20 per cent pay in 75 days, and 30 per cent in from three to four months. In the rural districts the majority of retailers did not discount their bills, and averaged 90 days in place of the 60 days called for by the regular terms. In some cases interest-bearing notes for longer periods were taken by wholesalers. In connection with the respect of the discount period by retailers, attention was directed in 1916 to the fact that the order blank prepared by the retailers' national association contained a clause calling for 2 per cent on receipt of goods. The other problem confronting the jobber in connection with the cash discount has been the question of proximo terms. A growing

tendency in this direction has been evident, although there is no uniformity of practice with respect to the matter. In certain cases semimonthly settlement has been permitted, while in some cases it has been confined to city sales. In other sections, however, for example in Iowa, proximo terms are not favored. It will be evident from the data given above that the question of the enforcement of the net terms has been of equal importance with the enforcement of the cash discount period. As a practical means to the former end, the collection of interest on overdue accounts has often been advocated, in particular by the cash discount committee in 1911 and 1914. It should be noted that in certain sections at least considerable improvement in collections has been observed during the past several years, likewise an increase in the percentage of those taking the cash discount.

Some interest has been manifested in the trade acceptance during the past few years, and the National Hardware Association has distributed considerable literature. As is the case in some other distributive lines, however, no widespread adoption of the acceptance is found, although it was stated in 1918 that quite a few houses, in particular in the South, had put into effect terms of 2 per cent 10 days, net 30 days or 60-day trade acceptance, and that "those who had tried acceptances were very much pleased with them." The matter had previously been discussed at the meetings of the Southern and Texas Associations, which adopted the terms mentioned. The general question of length of terms of sale has been discussed at various conventions of the National Association. In 1918 a resolution was introduced favoring uniform "terms of 2 per cent premium if cash is received within 10 days, or 1 per cent if received in 30 days, or 1 per cent if received before the 10th of the month for aggregate invoices of previous month, or net 60-day trade acceptance or bank note for the previous month's aggregate," and in the discussion which followed the suggestion was made that terms should be adopted not only by the State Associations, but by the National Association as well. It is stated that during the year 1919 there was a tendency to shorten the net terms from 60 days to 30 days.

To consider briefly now the actual terms in use in the several sections of the country. General employment of other than the regular terms is always found in certain markets. At the present time a 2 per cent discount is reg-

ularly given, even on items upon which the manufacturer allows only a lesser discount, with the exception, of course, of distinct lines, such as metals and heavy hardware. In certain sections where the net terms are 60 days, some jobbers have adopted 30 days; for example, in New York State and eastern Pennsylvania. In 1918 it was stated that terms in Texas, outside of the Dallas district, had been reduced to 30 days. Recent advices, however, state that only about one-third of the houses in the State, in particular those stocking principally heavy goods, at the present time sell on terms other than the regular 2 per cent 10 days, net 60 days. There was also stated to be a general tendency to shorten terms in the South, but that it was hindered by the fact that the large middle western centers, such as Chicago, St. Louis, and Louisville, continued on the 60-day basis. At the present time the majority of the southern jobbers still use the latter terms, which are customary also in various other large eastern and middle western markets, such as Cleveland, Pittsburgh, Detroit, Duluth, Kansas City, Omaha, Sioux City, Des Moines, and Denver, and on the Pacific coast.

Distribution of iron and steel products and of heavy hardware is accomplished through one of three channels. There are exclusive metal houses, houses which deal in heavy hardware in addition to iron and steel, and hardware jobbers who have one department of their business dealing in these items. It has been stated that in the East the metal business in general is handled apart from hardware, whereas in other sections it is combined with hardware jobbing. Among the items embraced under the term heavy hardware, including bolts and nuts, horseshoes, nails, heavy tools, such as anvils, vises, and hammers, etc., the more staple have long been known as relatively unprofitable items, the margin of profit being small, but turnover heavy, in the case of nails, estimated in 1911 at from 15 to 20 times a year. The terms on which the general class of items is sold differ according to the type of dealer. Terms on the several classes of rolled-steel products in large measure vary according to the manufacturer's terms. There has been a tendency for jobbers handling hardware, however, to extend hardware terms also on iron and steel. On the other hand, with the tendency of manufacturers during the past several years to decrease the discount allowed, hardware jobbers, a considerable proportion of whose business is in these lines, have shown a tendency to decrease the discount or to shorten terms

on them, while continuing the regular terms on the regular hardware items. Thus in the South in a considerable number of cases net terms are 30 days, with either a 1 or 2 per cent discount for payment within 10 days. Houses which do only a small amount of such business, however, continue the regular hardware terms on these lines.

Builders' hardware is generally considered as a separate line. Owing to the technical knowledge required to properly handle the somewhat intricate details of the business all hardware dealers do not handle it, and a special department is created by the wholesaler, selling to retailers, contractors, and consumers. In the past manufacturers' terms were largely 2 per cent 10 days, net 60 days, but there has been a tendency lately toward reduction of the net terms to 30 days. Builders' hardware in some degree is seasonable, in that consumers make larger purchases in the spring and fall, but datings are rare. Jobbers usually sell the item on the general hardware terms prevalent in the territory. In New York City and vicinity, builders' hardware is sold by the manufacturers, most of whom have branch offices, direct to the contractor or consumer. In exceptional cases this may also apply when New York contractors erect large structures elsewhere. It is the custom to require payment of 85 per cent of each month's deliveries by the 10th of the following month and the remaining 15 per cent in 30 days after the completion of the building operation.

Sporting goods are being handled to an increasing extent through the hardware jobbers. Years ago there were a considerable number of special jobbers confining their activities to the line, but at the present time there are stated to be less than half a dozen such houses in existence. While in general such goods are distributed through the jobber, some manufacturers sell direct to large department stores and others through their own branch stores, and direct to the retailer. Certain manufacturers note a tendency toward the last-named method. The general terms, given both by manufacturers and by jobbers, are the same as in the case of hardware, namely, 2 per cent 10 days, net 60 days. During the war there has been a tendency for the manufacturers of certain lines, such as firearms and ammunition, to decrease the net period to 30 days. In certain cases proximo terms are given by jobbers, though this is not general. The business is distinctly seasonable.

In this connection there are several general branches, each from some manufacturers receiving a distinctive dating, such as fishing tackle, baseball and general athletic goods, and firearms and ammunition. As most of the branches of sporting goods and athletic goods are termed seasonable goods, it is customary not only for the manufacturer but in some cases also for the jobber to extend seasonable datings, and this custom is quite common. Manufacturers of fishing tackle in general extend to jobbers April 1 dating, although this has been withdrawn by many since the opening of the war. Jobbers in turn give the same dating in the Eastern States, while in the North Central States, the dating is frequently May 1 or sometimes later. On base ball and general athletic goods coming into active season about April 1, the majority of manufacturers extend April 1 dating, and likewise with jobbers. Manufacturers of firearms and ammunition generally extend October 1 dating, this being an average of the various opening seasons for game, and the same dating is given by jobbers. At times in the past jobbers have protested against the application of the dating to loaded shells employed for trap shooting in July and August, and in another connection a maximum dating of September 1 has been favored.

Summarizing, where the cash discount is taken, it can be said that 2 per cent is taken and allowed, although a considerable effort is being made on the part of some manufacturers to reduce the cash discount to 1 per cent, or to sell on net terms of 10 or 30 days. Where credit is taken, the generally accepted terms are 60 days. It is stated that there is a growing tendency in many lines where credit is given to require paper to be given instead of the open book account with its indeterminate date of payment.

MILL SUPPLIES AND "MACHINERY."

Because of the unity of dealers' interest, these two classes of goods are generally considered together. The title is not, however, strictly accurate, inasmuch as the term "machinery" refers in this connection rather to machine tools, that is, machines for doing work with cutting tools or utilizing minor tools in fashioning the wood and iron parts of machinery, performing the five operations of planing, boring, turning, milling, and slotting.

Mill supplies, exclusive of the metal lines, on the whole, carry a cash discount of 2 per cent when sold by manufacturers, with net terms

of 30 or 60 days. Many exceptions are however found, and several dealers report that during the last few years quite a few manufacturers eliminated the discount or reduced it to 1 per cent.

Machine tools, on the other hand, are sold by many of the large manufacturers on terms of net 30 days. It is stated from several sources that discounts given are largely by the newer and smaller manufacturers, possessing less financial strength and therefore less desirous of having capital tied up in receivables, but who after several years discontinue the same. Quite a number of well-established manufacturers, however, are stated to allow a cash discount of 1 per cent, and in some cases 2 per cent is given. It is noted that the former discount is given in certain cases on lighter tools, the heavier carrying no discount. It is estimated that of the standard line of machine tools possibly 80 to 85 per cent is sold through dealers and the balance by manufacturers. Direct sales occur more largely in the case of new tools or devices, the manufacturer introducing the same, and then getting the dealers to stock the item. An increasing tendency toward the distribution of both mill supplies and tools through dealers is noted.

There is stated to be an increasing tendency for dealers to handle both classes of goods. It is estimated that perhaps 75 per cent of distributors start as distributors of mill supplies only, later adding lines of machine tools, one at a time. Occasionally, however, machine-tool distributors start without any supply lines, and these are rarely added. Ninety per cent of mill-supply houses in the South handle also machinery. In general, mill supplies and machinery alone are handled, but in the West and in the less-developed sections other lines, such as agricultural machinery, are also handled to a greater or lesser extent. In some cases the mill-supply business is combined with hardware jobbing. Separate departments usually handle mill supplies and machinery. In the handling of the latter, mechanical knowledge is required, and there are therefore separate purchasing agents for both classes, although 90 per cent of the houses buying machinery also buy supplies.

In general, the terms of dealers conform to those upon which they are sold by manufacturers. Machine tools thus generally bear terms of net 30 days, in certain cases with cash discounts of 1 or 2 per cent for payment within 10 days. Mill supplies generally carry terms of 2 per cent 10 days, net 30 days or 60

days, although on certain items, mostly the metal lines, and items such as bolts, nuts, rivets, and some kinds of screws, the discount is only 1 per cent, and on some other items, such as iron and steel bars, no discount is given in certain cases. Proximo terms are used in some cases, likewise the trade acceptance. In certain cases additional time is given for trade acceptance settlement, terms, for example, being net 30 days or 45 days trade acceptance for machine tools. In the South, however, dealers' terms are generally 2 per cent 10 days, net 30 days or 60 days, on sales of both supplies and machinery, these terms applying to approximately 90 per cent of the dealers' total sales. The difference in terms between machine tools and mill supplies has been accounted for by differences in financial strength between the manufacturers of the two classes of goods, and also by the fact that many of the great variety of dealers' customers are small and with uncertain credit ratings. On the larger items, such as machine tools, dealers frequently cover their sales with some form of chattel mortgage or method whereby title is retained. In such cases an initial cash payment, such as one-third or one-half, may be required with order or upon receipt of bill of lading, and the balance covered by interest-bearing notes maturing monthly for three or four months. In some cases six months' time is given.

Collections of dealers as indicated by the average number of days' business represented by accounts receivable, have always been considerably longer than the net period for which terms are nominally made. The average is generally estimated at about 45 days. While certain houses aim to run as close to 30 days as possible, in some cases accounts are carried up to three months, the latter occurring, for example, in the case of builders' business. Large corporations are stated to be no prompter than small firms, due to the fact that "large bodies move slowly." The percentage of dealers' customers who discount their purchases is relatively small. While the figure, of course, will vary with the character of business of the house, information received from several houses indicates that slightly over one-third discount, approximately one-third pay when due, and the remainder run past due. Dealers have tended to shorten the net terms actually taken by insisting upon stricter observance of the nominal terms, and certain houses show a considerable decrease in the number of days' business outstanding. It is

interesting to observe that while "there have been a good many suggestions from dealers to manufacturers looking toward the reintroduction of the cash discount in the machine-tool trade," there has been no active effort comparable to that put forth by jobbers in other lines, such as hardware. It has been suggested that this is due to the fact that dealers in general work very closely with their principals, the manufacturers. It may be observed that dealers as a rule sell machine tools from samples carried in warehouse, which mill supplies are stocked by them.

MACHINERY.

Power machinery, including engines and boilers, and hoisting and conveying machinery have as regular terms net 30 days. However, exception is made to such terms in two cases—where the machinery is to be erected or where the amount of the order is large. In some cases payment of from 50 to 80 per cent of the total amount is specified upon shipment of the material. Subsequent payments are only one, two, or three in number, and a time limit, such as three or four months, is fixed within which final payment shall be made. Thus, for example, it may be specified that 60 per cent is due upon shipment, 20 per cent in 30 days thereafter, and 20 per cent when the material has been erected. In other cases an initial payment upon signing of the order may be specified, though sometimes omitted, then monthly payments, as the work progresses, for 70 per cent or more of the value of goods shipped and labor performed during a month, and a final payment of 10 per cent or more upon the erection of the machinery. In some cases the payments are required for the work done in the shop and the final payment is due upon the shipment of the machinery. Certain manufacturers vary the payment plan according to the size of the order. Thus, for orders under \$5,000, not calling for erection, terms of net 30 days may be specified; for orders of from \$5,000 to \$20,000 not calling for erection, and orders up to \$20,000 calling for erection, payment upon shipment may be required, with balance due in 30 days and upon erection; while for contracts of over \$20,000, whether calling for erection or not, progressive monthly payments may be required, with the balance due upon completion of the work.

Textile machinery is almost entirely sold direct by the manufacturer to the user. The

regular terms on the domestic product are net 30 days from date of invoice. A very small proportion of sales are made upon terms of net 60 days, and very infrequently a cash discount of 2 per cent is given for payment within 10 days. A study made in 1916 indicates that in some cases cotton-mill stock and bonds were accepted.¹ Silk machinery, however, is sold to some extent on a time basis, estimates placing the total so sold at approximately one-fourth to one-third of the output. Provision is made in such cases for the payment of from one-third to one-half cash on delivery, and the balance is covered by notes due in 3, 6, 9, or 12 months. These notes are secured by a lease contract. Material use is made of the plan by new concerns which are usually short of capital, also in some cases for financially weak purchasers of other classes of textile machinery.

Printing machinery is also sold direct by the manufacturer to the user. Either cash or deferred payment is specified. In the latter case an initial cash payment of about 25 per cent is required, and the balance is due within 24 months, being represented by interest-bearing notes maturing monthly and secured by a lien on the machinery. In some cases a discount of 5 per cent is given for cash settlement on erection of the machinery.

RAILWAY EQUIPMENT.

The regular terms on which domestic sales of locomotives are made are net 30 days from date of delivery. A leading manufacturer states that it is in most cases f. o. b. works, and that it refers only occasionally to time from acceptance when dealing with political subdivisions where the statutes specifically require formal acceptance prior to payment for the goods. Where the purchaser has insufficient funds, conditional sales or lease agreements are made. Security is afforded by a lien on the equipment. Such sales occur in particular to contractors or very small railroads, and in normal times only a very small percentage of the business is done on such terms. While the terms of payment vary greatly, provision is generally made for an initial payment ranging from 20 to 33½ per cent. Payment of the balance in equal monthly or quarterly installments is specified, the total period in general running not over two or three years, although in some cases up to five years. The payments are evidenced by notes drawing interest at 6 per cent. No general changes in terms during the past decade are noted, other than a more

¹Bureau of Foreign and Domestic Commerce, Misc. Series No. 34.

frequent formation of equipment trusts. In such cases either the regular terms prevail or cash upon completion or acceptance by the railroad is specified.

Usual terms in car-builder's contracts, covering all classes of freight and passenger cars, call for cash on delivery, that is, for invoices accompanied by inspector's certificate or receipt, or bill of lading of railroad first handling the cars, in lots of 25, 50, or 100 cars. These terms prevail also in cases where equipment trusts are employed, as has been done in recent years by many of the larger railroads. Occasional payment out of current funds by a few railroads with substantial credit is noted, in which case net 30 days from delivery has been specified. In a few cases short-time notes with interest have been taken where the amount involved was not very large. While each case is treated individually, as a general rule a cash payment of approximately 25 per cent is required with the order, and the balance is represented by notes, part of which are due upon the delivery of the cars, and the remainder spread evenly over about one year. The cars remain the property of the builder until paid for.

Terms in the case of sales of street railway, interurban, and subway cars are largely adapted to the particular case in question. While contracts specify cash on shipment, meaning sight draft attached to bill of lading, this is not rigidly adhered to. Ordinarily, however, payment in three equal installments, the last due at the close of three to four months, has represented the maximum terms. Deferred payments bear interest.

SHIPBUILDING.

Terms employed in the case of ship construction for private domestic purchasers provide for an initial payment upon execution of the contract, usually for 5, 10, or 15 per cent and in rare cases 20 per cent of the purchase price. Subsequent payments of equal size are required when certain steps in the building of the vessel have been completed, such as laying of the keel, plating, launching, etc. The number of payments varies with the type of vessel, and estimated time required for completion, but is stated to be approximately 10 or 12. The final installment, varying from 5 to 10 per cent, is generally due upon completion and delivery of the vessel. Prior to 1917 it is reported that it was the general practice in certain cases, such as for large bulk cargo ships, to accept one-half of the purchase price in first serial bonds, maturing in from 1 to 10 years.

Interest Rates on Bank Balances.

A conference of representatives of clearing houses from various parts of the country was held at Washington January 6 for the purpose of discussing the relation of the rates of interest paid on deposits to the Federal Reserve Bank discount rates. At the conclusion of its session the following resolution was adopted:

Whereas the Federal Reserve Board has invited the representatives of the clearing houses from various parts of the country, here assembled, to attend a conference in regard to the interest rates paid on deposits throughout the country, and Governor Harding, of the Federal Reserve Board, has outlined very clearly the present financial situation and the probability of advances in rates by the Federal Reserve Banks, and

Whereas it is the opinion of the conference that the present method in several of the larger centers of the country of regulating interest on bank balances, by a sliding scale, based upon the 90-day Federal Reserve Bank discount rate, is not wholly satisfactory, and

Whereas until more satisfactory regulations are adopted governing the rates of interest to be paid on balances it is most important that existing regulations should not be abrogated, and

Whereas it is the opinion of this conference that the Federal Reserve Banks should always be free to establish their rates of discount without reference to any clearing-house regulations as to the payment of interest, and

Whereas it is the opinion of this conference that the payment of high rates of interest on bank or commercial balances is unsound and is bad banking, and that every effort should be made to avoid such a practice;

Now, therefore, in order to make progress along safe and conservative lines, it is requested that the Federal Reserve Board invite the clearing houses in each Federal Reserve city to select three representatives from its Federal Reserve district to attend a meeting to be held on or about January 23, 1920, at Chicago, Ill., to consider this whole question of interest on balances in order that some basis may be agreed upon that will be mutually satisfactory, conducive to conservative banking, and benefit the entire business and banking community.

Pursuant to the request contained in the foregoing resolution the Federal Reserve Board instructed the chairmen of the several Federal Reserve Banks to invite the clearing house in each Federal Reserve city to select three representatives from its Federal Reserve district to attend such a meeting to be held in Chicago on January 23. At this meeting the following resolution was adopted:

Whereas the Federal Reserve Board has invited representatives of the Federal Reserve districts to this conference to consider the interest rates paid on bank and trust company balances; and

Whereas it is the opinion of this conference that the Federal Reserve Board should always be free to establish its rates of discount without reference to any clearing-house regulations as to the payment of interest; and

Whereas the Federal Reserve Board, through Governor Harding, has expressed its approval of the action of the New York Clearing House in adopting a rate of 2½ per cent as its maximum rate;

Now, therefore, be it resolved, That we recommend to the banks and trust companies in the various Federal Reserve districts that no rate in excess of 2½ per cent be paid on net and available daily balances of banks and trust companies.

Acceptance Liabilities of Member Banks.

In continuation of similar figures printed on page 852 of the September (1919) BULLETIN there are given below data of acceptance liabilities of national and other member banks at the close of 1918 and on selected dates of the calendar year 1919. September 12 figures are available for national banks only, for the reason that other member banks were not required to submit condition reports for that date. Between the close of 1918 and November 17 acceptance liabilities of all member banks increased from \$480,624,000 to \$565,677,000, or a little over \$85,000,000. During the same period member banks in New York City increased their acceptance liabilities from \$240,125,000 to \$281,976,000, or by \$41,851,000; member banks in Boston from \$57,581,000 to \$70,957,000, or by \$13,376,000; and member banks in Chicago from \$44,375,000 to \$47,426,000, or by \$3,051,000. Considerable increases in acceptances outstanding are also shown for the member banks at Baltimore, Cleveland, San Francisco, New Orleans, and Minneapolis, while member banks in Philadelphia and St. Louis report the largest reductions in their acceptance liabilities for the period under review, as may be seen from the following exhibits:

Acceptance liabilities of national and other member banks.
[In thousands of dollars, i. e., 000 omitted.]

	Dec. 31, 1918.	Mar. 4, 1919.	June 30, 1919.	Sept. 12, 1919.	Nov. 17, 1919.
National banks:					
New York.....	120,897	112,762	107,005	128,541	149,413
Boston.....	44,170	41,723	49,429	57,653	56,449
Philadelphia.....	19,995	15,418	18,050	22,372	18,883
Pittsburgh.....	4,664	4,290	5,267	6,538	5,487
Cleveland.....	8,168	6,651	7,279	8,682	9,193
Detroit.....	2,700	1,629	3,098	2,564	2,633
Cincinnati.....	659	2,494	3,487	4,386	3,547
Indianapolis.....	1,718	1,510	1,396	2,249	2,780
Richmond.....	4,815	4,430	2,509	3,013	6,780
Baltimore.....	1,066	1,638	2,930	6,774	3,355
Atlanta.....	984	317	731	365	995
New Orleans.....	2,734	1,982	1,841	1,740	3,822
Charleston, S. C.....	1,505	1,353	821	710	1,293
Chicago.....	29,677	21,032	25,283	26,852	24,199
St. Louis.....	11,837	11,928	6,889	5,471	4,709
Minneapolis.....	3,374	1,635	1,763	5,623	9,849
Dallas.....	2,940	1,325	1,760	200	4,510
San Francisco.....	9,627	11,870	10,613	17,283	15,820
Portland, Oreg.....	3,323	2,864	1,710	2,069	3,950
Seattle.....	1,301	1,089	1,582	1,586	1,584
All other.....	28,947	21,233	18,592	18,555	30,102
Total.....	305,101	269,173	272,035	323,226	359,110
State bank and trust company members:					
New York.....	119,228	124,485	126,376	.....	132,563
Buffalo.....	215	160	1,082	.....	1,110
Boston.....	13,411	14,998	18,919	.....	14,508
Providence.....	784	625	214	.....	1,144
Philadelphia.....	700	725	450	.....	1,750
Pittsburgh.....	2,200	2,627	1,750	.....	2,266
Cleveland.....	3,622	4,654	3,931	.....	5,265
Detroit.....	.....	200	1,200	.....	550
Memphis.....	1,733	700	1,180	.....	1,887
Richmond.....	.....	.....	.....	.....	220
Baltimore.....	50	50	25	.....	.....
Savannah.....	1,330	1,080	631	.....	709

Acceptance liabilities of national and other member banks—Continued.

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

	Dec. 31, 1918.	Mar. 4, 1919.	June 30, 1919.	Sept. 12, 1919.	Nov. 17, 1919.
State bank and trust company members—Continued.					
Atlanta.....	320	100	100	.....	675
New Orleans.....	6,299	4,796	4,932	.....	9,617
Chicago.....	14,698	17,435	24,484	.....	23,227
St. Louis.....	6,734	6,053	5,590	.....	6,365
San Francisco.....	.....	.....	.....	.....	555
Portland, Oreg.....	927	480	447	.....	996
Seattle.....	.....	428	451	.....	175
All other.....	3,222	2,496	2,759	.....	3,485
Total.....	175,523	182,092	194,551	.....	206,567
Total national banks.....	305,101	269,173	272,035	323,226	359,110
Total State banks and trust companies.....	175,523	182,092	194,551	.....	206,567
Grand total.....	480,624	451,265	466,586	.....	565,677

It will be noted that during the first half of 1919 acceptance liabilities slightly decreased, the small increases reported for State bank and trust company members being due probably to the larger number of banks included in later reports, as the result of new accessions to membership.

On the corresponding dates the following amounts of acceptances purchased in the open market were held by the Federal Reserve Banks:

Dec. 31, 1918.....	\$292,196,000
Mar. 4, 1919.....	266,176,000
June 30, 1919.....	315,993,000
Sept. 12, 1919.....	362,005,000
Nov. 17, 1919.....	444,253,000

Of the total Federal Reserve Bank holdings of bills purchased in the open market, all but a few millions are bank acceptances, while of the latter about 70 per cent are composed of member bank acceptances. It is thus possible to determine approximately the increasing proportion of member bank acceptances which during the second part of the year have found their way into the portfolios of the Federal Reserve Banks.

During the last two months of the year this movement was particularly extensive, and on the last of December the Federal Reserve Banks held a total of \$574,103,000 of paper purchased in the open market, composed of \$7,734,000 of trade acceptances and \$566,369,000 of bank acceptances. A little over 70 per cent of the latter, or \$405,339,000, were member bank acceptances, while the remainder, or \$161,060,000, represented bills accepted by nonmember State banks and trust companies, foreign banks and their agencies, and private banking firms.

State Banks and Trust Companies.

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 January.

One thousand two hundred and six State institutions are now members of the system, having a total capital of \$424,775,776, total surplus of \$449,059,518, and total resources of \$9,649,935,391.

	Capital.	Surplus.	Total resources.
<i>District No. 2.</i>			
Bank of Bogota, Bogota, N. J.....	\$50,000	\$10,000	\$122,959
<i>District No. 3.</i>			
Penn Counties Trust Co., Allentown, Pa..	300,000	60,000	1,996,924
<i>District No. 4.</i>			
Atwater Savings Bank Co., Atwater, Ohio.	25,000	5,000	311,538
<i>District No. 6.</i>			
Monroe County Bank, Forsyth, Ga.....	25,000	25,000	415,537
Bank of Ocoee, Ocoee, Fla.....	25,000	2,500	27,500
<i>District No. 7.</i>			
Woodlawn Trust & Savings Bank, Chicago, Ill.....	250,000	100,000	5,111,738
Peoples State Savings Bank, Britton, Mich.....	25,000	5,000	378,369
Spring Lake State Bank, Spring Lake, Mich.....	25,000	3,500	296,979
Oakland County Savings Bank, Pontiac, Mich.....	250,000	70,000	3,415,134
<i>District No. 8.</i>			
Jefferson-Gravois Bank of St. Louis, St. Louis, Mo.....	200,000	70,000	1,719,057
South Side Trust Co., St. Louis, Mo.....	200,000	50,000	2,235,934
<i>District No. 9.</i>			
Merchants & Miners State Bank, Ironwood, Mich.....	100,000	10,000	609,071
<i>District No. 11.</i>			
Bridgeport State Bank, Bridgeport, Tex.	25,000	1,000	153,444
First Guaranty State Bank, Clifton, Tex..	40,000	15,000	410,623
First State Bank, McGregor, Tex.....	50,000	1,000	423,233
Citizens State Bank, Valley Mills, Tex....	30,000	2,000	175,947
<i>District No. 12.</i>			
Imperial Valley Bank, Brawley, Calif....	77,000	34,665	977,701
Los Nietos Valley Bank, Downey, Calif..	50,000	15,000	441,937
Kingsburg Bank, Kingsburg, Calif.....	75,000	30,000	1,044,026
Bank & Trust Co. of Central California, Fresno, Calif.....	300,000	100,000	4,694,832
Bank of Santa Maria, Santa Maria, Calif..	400,000	300,000	5,463,027
Garden City Bank & Trust Co., San Jose, Calif.....	500,000	595,000	9,571,187
Burley State Bank, Burley, Idaho.....	50,000	10,000	910,468
Athena State Bank, Athena, Oreg.....	25,000	5,000	30,000
First Bank of Reedsport, Reedsport, Oreg.	25,000	1,250	150,323
Dallas City Bank, Dallas, Oreg.....	50,000	10,000	702,595
Puyallup State Bank, Puyallup, Wash....	50,000	.....	823,539

CONSOLIDATION.

The First Commercial Bank and the Pontiac Savings Bank, member banks of Pontiac,

Mich., have consolidated under the title "Pontiac Commercial & Savings Bank."

WITHDRAWAL.

The Peru Trust Co., Peru, Ind., has withdrawn from membership.

Directors of Oklahoma Branch Bank.

Announcement was made on January 29, 1920, of the appointment of the following directors of the Oklahoma City branch of the Federal Reserve Bank of Kansas City: Mr. William Mee, Mr. E. K. Thurmond, Mr. L. H. Earhart, Mr. Dorset Carter, Mr. P. C. Dings.

The first two gentlemen have been appointed by the Federal Reserve Board, while the last three are the appointees of the Federal Reserve Bank of Kansas City. Mr. William Mee is president of the Security National Bank of Oklahoma City, and Mr. E. K. Thurmond, also of Oklahoma City, is prominently connected with banking interests in the State of Oklahoma. Mr. L. H. Earhart, formerly assistant cashier of the Federal Reserve Bank of Kansas City, has been appointed manager of the branch. Mr. Dorset Carter is an attorney and president of the Coline Oil Co., and Mr. P. C. Dings is president of the Guaranty State Bank of Ardmore, Okla.

Foreign Branches.

The Board has been advised that the following branches of national banks and international and foreign banks, doing business under agreement with the Federal Reserve Board, have been opened for business recently:

National City Bank of New York:
 Bogota, Colombia.
 Barranquilla, Colombia.
 Antwerp, Belgium.
 Cape Town, South Africa.
 Mercantile Bank of the Americas, New York City:
 Banco Mercantil Americano de Colombia, Bogota, Colombia.

Acceptances to 100 Per Cent.

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

First National Bank, El Paso, Tex.

New National Bank Charters.

The Comptroller of the Currency reports the following increases and reductions in the number and capital of national banks during the period from December 27, 1919, to January 30, 1920, inclusive:

	Banks.	
New charters issued to.....	31	
With capital of.....		\$1,840,000
Increase of capital approved for.....	103	
With new capital of.....		15,480,000
Aggregate number of new charters and banks increasing capital.....	134	
With aggregate of new capital authorized.....		17,320,000
Number of banks liquidating (other than those consolidating with other national banks under the act of June 3, 1864)....	10	
Capital of same banks.....		500,000
Number of banks reducing capital.....	0	
Reduction of capital.....		0
Total number of banks going into liquidation or reducing capital (other than those consolidating with other national banks under the act of June 3, 1864).....	10	
Aggregate capital reduction.....		500,000
Consolidation of national banks under the act of Nov. 7, 1918.....	2	
Capital.....		800,000
The foregoing statement shows the aggregate of increased capital for the period of the banks embraced in statement was.....	17,320,000	
Against this there was a reduction of capital owing to liquidation (other than for consolidation with other national banks under the act of June 3, 1864) and reductions of capital of.....		500,000
Net increases.....		16,820,000

Commercial Failures Reported.

Commercial defaults numbering 399 in the United States during three weeks of January, as reported to R. G. Dun & Co., contrast with 492 in the corresponding period last year, or practically a 19 per cent reduction. The returns for December, 1919, the latest month for which complete statistics are available, disclose 581 business reverses, with liabilities of \$8,300,342, which, as to number, is a less remarkably favorable showing than was made by most months of 1919, but better by a considerable margin the record of any previous December since monthly statements were compiled in 1894. The December indebtedness, while larger than in October, August, and July of last year, is the smallest ever reported for December. Comparing with the 683 insolvencies for \$12,249,483 of December, 1918, decreases of 14.9 per cent in number and 32.2 per cent in liabilities are shown, and fewer defaults than last year appear in the first, second,

seventh, eighth, ninth, tenth, eleventh, and twelfth Federal reserve districts, while in the fourth district there is no change.

Failures during December.

District.	Number.		Liabilities.	
	1919	1918	1919	1918
First.....	71	88	\$1,949,519	\$1,749,269
Second.....	119	129	1,849,643	3,805,610
Third.....	44	27	445,629	432,208
Fourth.....	49	49	513,580	1,045,583
Fifth.....	45	39	581,176	662,400
Sixth.....	43	29	701,224	284,320
Seventh.....	48	93	506,102	1,317,234
Eighth.....	22	36	554,848	178,388
Ninth.....	15	30	207,178	276,666
Tenth.....	23	29	218,959	483,042
Eleventh.....	16	33	186,817	1,191,850
Twelfth.....	86	101	583,667	826,618
Total.....	581	683	8,300,342	12,249,483

Failures in the United States during 1919.

District.	TOTAL COMMERCIAL.					
	1919			1918		
	Number.	Assets.	Liabilities.	Number.	Liabilities.	
First.....	744	\$5,423,712	\$11,884,238	1,285	\$18,963,081	
Second.....	1,185	14,539,344	32,413,538	1,785	44,460,856	
Third.....	360	3,308,926	6,868,575	536	14,543,657	
Fourth.....	587	11,986,436	13,329,257	858	12,413,340	
Fifth.....	355	4,090,683	5,005,832	447	4,896,960	
Sixth.....	455	4,709,751	5,928,220	521	8,142,433	
Seventh.....	770	7,326,121	12,717,628	1,607	24,536,115	
Eighth.....	359	2,924,680	4,021,861	487	4,672,861	
Ninth.....	149	725,701	1,225,952	382	3,497,279	
Tenth.....	271	2,571,886	3,287,855	419	7,417,463	
Eleventh.....	322	2,302,723	3,884,398	423	4,699,007	
Twelfth.....	894	7,128,380	12,130,883	1,232	14,775,927	
Total.....	6,451	67,037,843	113,291,237	9,982	163,019,979	
1918.....	9,982	101,637,798	163,019,979	.....	.....
1917.....	13,855	103,464,805	132,441,371	.....	.....
1916.....	16,993	113,599,026	196,212,256	.....	.....

CLASSIFIED FAILURES, 1919.

Districts.	Manufacturing.		Trading.		Other commercial.	
	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.
First.....	270	\$4,313,314	400	\$4,564,854	74	\$3,006,070
Second.....	455	14,639,848	596	6,988,065	134	10,785,625
Third.....	111	2,832,242	222	2,453,649	27	1,577,684
Fourth.....	168	8,653,220	358	2,889,495	61	1,786,542
Fifth.....	71	2,423,119	252	2,422,854	32	759,859
Sixth.....	75	2,395,503	355	3,146,429	25	386,288
Seventh.....	247	6,683,050	467	4,065,601	56	1,968,977
Eighth.....	58	1,239,001	261	1,874,280	40	908,580
Ninth.....	32	281,522	102	748,624	15	193,806
Tenth.....	58	1,380,303	191	1,670,470	22	237,082
Eleventh.....	24	504,153	280	2,809,704	18	570,541
Twelfth.....	296	6,263,941	529	4,086,418	69	1,325,524
Total.....	1,865	51,614,216	4,013	37,670,443	573	24,006,578
1918.....	2,766	73,372,653	6,494	57,921,757	722	31,725,569
1917.....	3,691	79,543,507	9,430	70,116,669	734	32,781,195
1916.....	4,196	72,999,580	11,923	91,373,825	874	31,838,848

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 Federal Reserve Board during the month of January, 1920.

DISTRICT No. 1.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

Citizens National Bank, Boston, Mass.

Trustee, executor, administrator, registrar of stocks and bonds, and guardian of estates:

Colonial National Bank, Hartford, Conn.

Trustee, executor, administrator, and registrar of stocks and bonds:

Hartford-Aetna National Bank, Hartford, Conn.

Ticonic National Bank, Waterville, Me.

DISTRICT No. 2.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

First National Bank, South Amboy, N. J.

First National Bank, Montclair, N. J.

DISTRICT No. 4.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:

Commercial National Bank, Tiffin, Ohio.

Piqua National Bank, Piqua, Ohio.

DISTRICT No. 6.

Registrar of stocks and bonds:

First National Bank, Panama City, Fla.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

St. Augustine National Bank, St. Augustine, Fla.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:

First National Bank, Kingsport, Tenn.

Trustee:

First National Bank, Athens, Ga.

DISTRICT No. 7.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:

First National Bank, Bushnell, Ill.

First National Bank, Peru, Ind.

DISTRICT No. 8.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver and committee of estates of lunatics:

First National Bank, Louisville, Ky.

DISTRICT No. 9.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

Northfield National Bank, Northfield, Minn.

Yellowstone National Bank, Billings, Mont.

Merchants National Bank, Fargo, N. Dak.

Trustee, executor, administrator, registrar of stocks and bonds, and guardian of estates:

First National Bank, Chatfield, Minn.

DISTRICT No. 10.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

First National Bank, King City, Mo.

American National Bank, Cheyenne, Wyo.

Hamilton National Bank, Denver, Colo.

Registrar of stocks and bonds:

Stock Yards National Bank, South Omaha, Nebr.

Trustee, executor, administrator, guardian of estates, assignee, and receiver:

Merchants National Bank, Sallisaw, Okla.

DISTRICT No. 11.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver, and committee of estates of lunatics:

American Exchange National Bank, Dallas, Tex.

Trustee, executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, and receiver:

First National Bank, El Paso, Tex.

Executor, administrator, registrar of stocks and bonds, guardian of estates, assignee, receiver and committee of estates of lunatics:

Farmers & Merchants National Bank, Fort Worth, Tex.

DISTRICT No. 12.

Trustee, executor, administrator, guardian of estates, assignee and receiver:

First National Bank of Southern Oregon, Grants Pass, Oreg.

RULINGS OF THE FEDERAL RESERVE BOARD.

Preferential rates of discount on member bank notes.

The Federal Reserve Board may, under the terms of section 14 of the Federal Reserve Act, approve a preferential rate of discount upon member bank notes secured by certificates of indebtedness of the United States, by Liberty bonds, or by Victory notes. A Federal Reserve Bank, in the exercise of its discretion, may decline to make an advance upon such a note of a member bank unless the certificates of indebtedness, Liberty bonds, or Victory notes pledged as security are actually owned by the member bank and unless the Government deposit of such bank, if any, is secured by certificates of indebtedness, Liberty bonds, or Victory notes actually owned by it.

(See opinion of General Counsel, in the Law Department.)

Exchange charges on member bank's own acceptance.

The question has been presented to the Federal Reserve Board whether a member bank may lawfully make an exchange charge on one of its own acceptances presented to it for collection by the Federal Reserve Bank of its district.

The Federal Reserve Board is of the opinion that a banker's acceptance is a draft within the meaning of that part of section 13 which reads as follows:

That nothing in this or any other section of this act shall be construed as prohibiting a member or nonmember bank from making reasonable charges to be determined and regulated by the Federal Reserve Board, but in no case to exceed 10 cents per \$100 or fraction thereof, based on the total of checks and drafts presented at any one time for collection or payment of checks and drafts and remission therefor by exchange or otherwise; but no such charges shall be made against the Federal Reserve Banks.

It is clear, therefore, that a member bank has no authority in law to deduct exchange in accounting to the Federal Reserve Bank for one of its own acceptances forwarded to it for collection by the Federal Reserve Bank.

Acceptance of drafts drawn by an American manufacturer for the purpose of financing the purchase of goods from a foreign seller.

The Board has been asked for a ruling as to the right of a member bank to accept drafts drawn under the following circumstances:

An American importer of merchandise receives advices from the foreign seller that he is making a shipment of the goods bought. This advice, which is accompanied by a bill for the goods, usually comes through before the arrival of the bill of lading or the goods themselves. In order to procure funds to pay the

bill which accompanied the advice, the importer draws a 90-day draft upon his bank, although at that time the goods sold may be unshipped or lying in a foreign port awaiting shipment, or afloat, or in this country.

The question is whether such a draft is eligible for acceptance under that part of section 13 of the Federal Reserve Act, which permits any member bank to accept drafts drawn upon it "which grow out of transactions involving the importation or exportation of goods."

The Federal Reserve Board has frequently had occasion to rule that a draft drawn by an importer of goods for the purpose of procuring funds with which to pay the foreign seller of those goods is eligible for acceptance by a member bank whether or not the bill of lading covering the goods is attached to the draft and whether or not the goods have actually been shipped by the seller at the time the draft is drawn. In such a case, that is, where there has been an actual sale of goods for export, the draft which is to procure funds with which to pay for those goods is one which clearly grows out of a transaction involving the importation of goods within the meaning of section 13, and as such is eligible for acceptance by a member bank, provided, of course, that it complies in other respects with the terms of the law and the regulations of the Federal Reserve Board.

This ruling is not intended in any way to apply to the case of a draft drawn by an American manufacturer for the purpose of financing the purchase of goods not from a foreign seller but from an American importer.

Eligibility of drafts drawn by a cotton factor.

The Federal Reserve Board has considered the question whether or not a draft drawn by a cotton factor is eligible for acceptance by a member bank if secured at the time of acceptance by a warehouse receipt covering cotton consigned to the cotton factor for the purpose of sale and, if eligible for acceptance by a member bank, whether it is eligible for rediscount by a Federal Reserve Bank after acceptance.

The Board is of the opinion that any draft drawn under the circumstances described, where it appears that the proceeds are to be used by the factor not for a commercial purpose but rather for the purpose of lending to his customers, is not eligible for acceptance under the terms of section 13 of the Federal Reserve Act and in consequence is not eligible for rediscount by a Federal Reserve Bank as an acceptance.

LAW DEPARTMENT.

The following opinion of General Counsel has been authorized for publication by the Board since the last edition of the BULLETIN:

Preferential rates of discount on member bank notes.

The Federal Reserve Board may, under the terms of section 14 of the Federal Reserve Act, approve a preferential rate of discount upon member bank notes secured by certificates of indebtedness of the United States, by Liberty bonds, or by Victory notes. A Federal Reserve Bank, in the exercise of its discretion, may decline to make an advance upon such a note of a member bank unless the certificates of indebtedness, Liberty bonds, or Victory notes pledged as security are actually owned by the member bank and unless the Government deposit of such bank, if any, is secured by certificates of indebtedness, Liberty bonds, or Victory notes actually owned by it.

An opinion has been asked upon the following question: If the Federal Reserve Board approves a Federal Reserve Bank's recommendation of preferential rates of discount for member bank notes secured by certificates of indebtedness of the United States, or by Liberty bonds or Victory notes, may the Federal Reserve Bank make advances at those rates only when the certificates of indebtedness, bonds, or notes pledged as security are actually owned by the member bank procuring the advance and only when the Government deposit of such bank, if any, at the time that the advance is made is also secured respectively by certificates of indebtedness, Liberty bonds, or Victory notes actually owned by the bank.

There is no doubt that a Federal Reserve Bank may establish and the Federal Reserve Board may approve preferential rates of discount upon member bank notes secured by certificates of indebtedness, Liberty bonds, or Victory notes; that has already been done in previous instances. There is also no doubt that the exercise of the power conferred upon a Federal Reserve Bank to make advances upon member bank notes secured by certificates of indebtedness, Liberty bonds, or Victory notes is purely optional with the Federal Re-

serve Bank and not mandatory. The Federal Reserve Board has frequently had occasion to rule that the word "may" as used in the Federal Reserve Act in contradistinction to the word "shall" is permissive, and that powers conferred upon Federal Reserve Banks by that word may or may not be exercised, in the discretion of the board of directors of the Federal Reserve Bank. In the exercise of that discretion, however, the board of directors is required by the terms of section 4 of the Federal Reserve Act to—

"administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements, and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks."

From a legal standpoint, therefore, it is apparent that if a Federal Reserve Bank establishes and the Federal Reserve Board approves preferential rates upon member bank notes secured by certificates of indebtedness, Liberty bonds, or Victory notes, the Federal Reserve Bank may, as a matter of administration, refuse to make an advance on such notes unless the certificates of indebtedness, bonds, or notes pledged as security are actually owned by the member bank applying for the advance and unless the Government deposit of such bank, if any, at the time such advance is made is also secured respectively by certificates of indebtedness, Liberty bonds, or Victory notes actually owned by it.

The Federal Reserve Board in transmitting its approval of a rate may, of course, advise the Federal Reserve Bank of the nature of its powers referred to above. An expression of the Board's opinion in that respect may be helpful to the reserve bank in the effective administration of its preferential rates.

Tables are presented below showing the monthly index numbers of wholesale prices of some of the leading countries of the world computed on the basis of prices in 1913=100. In all cases except that of the United States the original basis upon which the index number has been computed has been shifted to the 1913 base. The monthly and yearly index numbers are therefore only approximate. These index numbers are constructed by the various foreign statistical offices according to methods described in the January BULLETIN. The December figures are subject to correction.

Arrangements are being made at the present time for these index numbers to be cabled to the Federal Reserve Board as soon as they are compiled in order that the information published in the BULLETIN may be as timely as possible. It is hoped that the cable service will be installed within the course of the next two months.

Index numbers of wholesale prices (all commodities).

[1913=100.]

	United States; Bureau of Labor Statistics (328 quotations).	United Kingdom; Statist (45 commodities).	France; Bulletin de la Statistique Generale (45 commodities).	Italy; Prof. Bachi (40 commodities).	Sweden; official.	Japan; Bank of Japan for Tokyo (56 commodities).	Australia; Commonwealth Bureau Census and Statistics (92 commodities).	Canada; Department of Labor (272 quotations).
1913.....	100	100	100	100	100	100	100	100
1914.....	100	101	102	95	116	95	106	101
1915.....	101	126	140	133	145	97	147	110
1916.....	124	159	187	202	185	117	138	135
1917.....	174	206	262	299	244	149	153	177
1918.....	197	226	339	413	339	197	178	206
1919.....								
January...	203	224	348	328	369	214	177	212
February...	197	220	340	323	358	213	.....	207
March.....	201	217	337	326	354	206	.....	205
April.....	203	217	332	330	339	207	.....	206
May.....	207	229	325	337	.....	215	.....	210
June.....	207	235	329	355	.....	228	.....	210
July.....	219	243	349	359	.....	247	.....	218
August.....	226	250	347	367	.....	251	.....	223
September	221	253	360	369	.....	257	.....	223
October...	223	264	382	386	.....	271	.....	222
November	230	272	405	.....	.....	280	.....	227
December.	238	276	417	.....	.....	.....	.....	240

¹ Quarter.

Wholesale prices continued to rise during the month of December in the United States, England, and Canada, according to index numbers prepared by the United States Bureau of Labor Statistics, The Statist, and the Canadian Department of Labor. The rate of increase in the United Kingdom was less than during the two preceding months, in the United States approximately the same, while in Canada the increase was considerably greater than in any

single preceding month since the 1919 rise in prices began. It should be noted in connection with the British situation that the index number compiled by the Economist shows an increase in prices during December greater than during November.

The index number of the Bank of Japan shows an increase of 9 points during November as compared with 14 points during October. The increase in prices in France during December was not so great as during the two preceding months, according to the index number of the Statistique Generale. The percentage of advance between August and December amount to 20 per cent. The most recent figures available show Italian prices as high as French prices in October. No additional figures have been received during the past month to show the wholesale price level in Sweden or Australia. The Swedish retail price index computed with July, 1914, prices as 100, has moved in the following fashion, however, during the year 1919:

January.....	339
February.....	334
March.....	331
April.....	336
May.....	328
June.....	319
July.....	310
August.....	313
September.....	309
October.....	307

Retail prices usually do not fluctuate over such a wide range as wholesale prices, but their general upward or downward movement may be expected to follow that of wholesale prices. It may be assumed, therefore, that wholesale prices have been declining in Sweden in contrast with the situation in other countries included in the above table. This is doubtless due to the very advantageous financial and trade position in which Sweden has found herself during the past year. This leaves Italy and France in the most marked condition as to expansion of any of the eight countries whose prices are being followed, with prices in France in December 417 per cent of those in 1913, appear to be in approximately the same condition of 1913 prices. United States and Canada appear to be in approximately the same condition, with prices 240 per cent of the prewar level.

One of the most notable things in the recent movement of individual commodity prices is the increase in the price of lumber and other building material in England, the United States, and Canada. In the last two countries the first important increases since the war

occurred in June. Between June and December prices had increased 40 per cent. We have not sufficient data to judge whether building materials have been in sufficient demand in France to cause prices to rise. Quotations for a typical grade of pine, however, were decreased in July but advanced again in December, 1919.

Metals of all sorts seem to be in very heavy demand and prices are increasing in France and England as well as in America. In England an increase in freight rates the first of the year is given as the partial reason for an increase in the price of pig iron. Copper, tin, zinc, and lead have all shown spectacular increases in both England and France during the last two months.

Coal prices for home consumption and coastal shipping were lowered in December in England. Fuel prices rose considerably in Canada, but in the United States they were at the same level that has prevailed throughout the fall and early winter.

Textiles continue to advance in all countries where we have statistics. In the United States the prices of commodities in the cloths and clothing group have advanced approximately 30 per cent between June and December, and in England 26 per cent between June and November. During December a slight drop occurred in the price of wool in England. Silk prices in France have soared during the last six months, the unfavorable exchange situation and the small 1919 crop of cocoons being given as the cause. Wool and cotton have also been advancing in the French market.

December food prices in England are slightly higher than those for November, but prices in this line have not kept pace with those in the building and equipment lines. Apparently the same general statement may be made regarding conditions in France. This is due in part to the fact that wheat, rye, and sugar are still under control there.

Group index numbers—United States Bureau of Labor Statistics.

[1913=100.]

Date.	Farm products.	Food, etc.	Cloths and clothings.	Fuel and lighting.	Metals and metal products.	Lumber and building materials.	Chemicals and drugs.	House furnishing goods.	Miscellaneous.
1913.....	100	100	100	100	100	100	100	100	100
1914.....	103	102	98	96	88	93	101	99	98
1915.....	106	105	99	92	94	94	109	99	99
1916.....	119	124	123	114	142	100	157	115	117
1917.....	189	173	181	175	208	124	198	145	153
1918.....	219	191	240	163	181	152	221	195	192
1919.									
January.....	222	209	234	170	172	161	191	218	212
February.....	218	197	223	169	168	163	185	218	208
March.....	228	205	216	168	162	165	183	218	217
April.....	235	212	217	167	152	162	178	217	216
May.....	240	216	227	167	152	164	179	217	213
June.....	231	206	258	170	154	175	174	233	212
July.....	246	218	282	171	158	186	171	245	221
August.....	243	228	303	175	161	209	172	259	225
September.....	226	212	306	181	160	229	173	262	217
October.....	230	211	313	181	161	231	174	264	220
November.....	240	219	325	179	164	236	176	299	220
December.....	244	234	335	181	169	253	179	303	220

Group index numbers—United Kingdom Statist.

[1913=100.]

Date.	Vegetable foods.	Animal foods.	Sugar, coffee, tea.	Food-stuffs.	Minerals.	Textiles.	Sundries.	Materials.
1913.....	100	100	100	100	100	100	100	100
1914.....	110	100	107	105	90	97	105	98
1915.....	155	125	130	137	109	111	131	119
1916.....	193	152	161	169	140	152	163	153
1917.....	252	192	212	218	153	228	213	198
1918.....	248	210	238	229	167	265	243	225
1919.								
January.....	249	226	221	234	159	246	246	218
February.....	250	226	221	235	156	242	235	212
March.....	240	205	238	224	154	235	246	213
April.....	243	206	228	224	154	239	243	213
May.....	244	208	236	226	177	253	258	230
June.....	246	208	243	229	182	258	271	239
July.....	244	208	275	231	202	256	284	250
August.....	254	208	318	242	206	272	283	254
September.....	258	208	327	244	206	286	279	257
October.....	260	226	322	253	222	305	284	270
November.....	266	226	331	258	226	325	292	280
December.....	269	228	335	260	234	334	296	286

Group index numbers—France and Italy.

Date.	France, Bulletin de la Statistique Generale. [1913=100.]		Italy, ¹ Prof. Bachi. [1913=100.]				
	Foods (20).	Materials (25).	Cereals and meats.	Other food-stuffs.	Textiles.	Minerals and metals.	Other goods.
1913.....	100	100	100	100	100	100	100
1914.....	104	101	102	84	96	100	96
1915.....	131	145	132	93	113	207	133
1916.....	167	206	156	135	184	380	197
1917.....	225	291	215	171	326	596	266
1918.....	281	387					
1919.							
January.....	313	376	304	300	330	306	422
February.....	316	360	300	307	328	306	384
March.....	337	337	292	312	331	355	362
April.....	336	330	294	330	333	358	349
May.....	319	330	293	336	375	366	340
June.....	313	344	320	343	381	419	336
July.....	338	358	334	331	401	420	342
August.....	323	367	332	351	423	421	341
September.....	334	381	319	354	430	446	342
October.....	353	405	326	364	500	465	341
November.....	369	435					
December.....	375	458					

¹ Group index numbers January-September, 1918, not available in this country.

Group index numbers—Sweden, official.

[1913=100.]

Date.	Vegetable food.	Animal food.	Raw materials for agriculture.	Coal.	Metals.	Building material.	Paper pulp.	Hides and leather.
1913-14.....	100	100	100	100	100	100	100	100
1914 ¹	136	101	114	123	109	104		118
1915.....	151	140	161	177	166	118	116	158
1916.....	152	182	180	266	272	165	233	229
1917.....	181	205	198	551	405	215	267	206
1918.....	221	419	304	856	398	275	300	195
1919.								
January.....	276	483	356	810	373	293	323	208
February.....	276	448	356	784	341	293	323	208
March.....	276	438	356	814	317	288	323	174
April.....	276	423	367	769	287	288	323	172

¹ Average for the six months ending Dec. 31, 1914.

Group index numbers—Canadian Department of Labor.¹

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	160	149	233	180	201	168	217	174	118	163	236
1918.....	231	195	168	214	213	273	169	229	213	147	188	250
1919.												
January.....	198	191	191	206	223	293	171	204	229	154	209	240
February.....	192	191	178	188	218	281	162	189	229	155	202	233
March.....	199	196	171	189	219	282	162	172	229	156	199	212
April.....	217	209	184	198	213	284	166	162	223	153	206	210
May.....	231	213	181	209	213	277	202	162	223	153	192	208
June.....	238	213	179	221	215	274	211	161	226	158	194	197
July.....	240	216	186	200	218	278	235	166	226	168	194	195
August.....	243	215	189	210	224	277	260	171	228	170	199	196
September.....	232	201	193	195	227	282	256	171	231	183	200	197
October.....	232	180	204	178	228	289	252	165	225	188	201	198
November.....	240	175	221	240	230	298	252	171	232	194	201	181
December.....	251	182	230	240	232	306	231	181	232	224	209	190

¹ Unimportant groups omitted.

WHOLESALE PRICES.

In continuation of figures shown in the January BULLETIN there are presented below monthly index numbers of wholesale prices for the period January, 1919, to December, 1919, compared with like figures for December of previous years; also for July, 1914, the month immediately preceding the outbreak of the great war. The general index number is that of the United States Bureau of Labor Statistics. In addition there are presented separate numbers for certain particular classes of commodities in accordance with plans announced in previous issues of the BULLETIN.

Quotations for three commodities, namely gingham (Amoskeag, 27-inch), sheetings (bleached, 10-4, Pepperell), and tickings (Amoskeag, 32-inch), have been omitted. On the other hand, quotations for alcohol (denatured, 180 proof, New York), which had been dropped temporarily, have been secured for the month of November and December, and the commodity was again included in the calculation of the index numbers for the latter month. Index numbers for December are provisional, due to the fact that certain data were not received in time to render them available for use in the calculations.

A considerable increase in wholesale prices is again noted for the month of December. The general index number of the Bureau of Labor Statistics stands at 238, an increase of 8 points over the record figure for the month of November. The index numbers for each of the three principal classes of commodities again show an increase, and each establishes a new record for the group. The increase is greatest in the case of producers' goods, namely, 5.8 per cent from 216 to 229. Among the commodities included in the group, decrease in price occurred only for a small number of commodities, among which may be mentioned copper wire, harness and sole oak leather, rosin, and tallow. These decreases were more than offset by increases in price for an extensive list of commodities, in particular sugar, steel billets, silver, bar iron, nails, and cast-iron pipe, cotton and worsted yarns, cotton thread, glazed kid, glycerin, linseed oil, brick, lath, red-cedar shingles, and bran.

The index number for the group of con-

sumers' goods shows an increase of 3.6 per cent, from 236 to 244, the latter being 3 points in excess of the previous record of 241, the figure for the month of August. Decrease in price occurred only in the case of a relatively small number of commodities, in particular coffee, cottonseed oil, peanuts, apples, lemons and oranges, onions, butter (Chicago quotation), lard, and bacon. These decreases by no means served to offset the increases in price which occurred for an extended list of commodities, among which may be noted granulated sugar, wheat and rye flour, cornmeal, molasses, potatoes, vinegar, milk and eggs, ham, lamb and mutton, pork and poultry, various textiles, such as print cloths, sheetings, shirtings, denims, underwear and suitings, and vici calf shoes.

The index number for the group of raw materials for the month of December stands at 233, an increase of 7 points, or 2.9 per cent over the record figure for the previous month. The number for only one of the subgroups included under the head of raw materials, namely, animal products, shows a decrease from 212 to 209, or 1.3 per cent. Increases in the prices of silk, goatskins, poultry (Chicago quotation), ewes and lambs, were more than offset by decreases in the prices of good to choice steers, hogs, poultry (New York quotation), calfskins, and packer hides. The index number for the subgroup of mineral products has increased 1.3 per cent, from 183 to 185, due to increases in the prices of coke, petroleum, pig iron, lead, and zinc, which were not offset by the decrease in the price of copper. Considerable increases are shown in the index numbers for both the farm products and forest products subgroups. The figure for the latter group shows an increase of 8.4 per cent, from 239 to the new record figure of 259, due to increases in the prices of Douglas fir, maple, white oak, white and yellow pine, poplar, and hemlock. The index number for the farm products subgroup has increased from 276 to 288, or 4.3 per cent, the December figure likewise establishing a new record. Decreases in the prices of corn and cotton (New York quotation) were more than offset by increases in the prices of cotton (New Orleans quotation), wheat, oats, rye, barley, flax, alfalfa, timothy, and tobacco.

Index numbers of wholesale prices in the United States for principal classes of commodities.

[Average price for 1913=100.]

Year and month.	Raw materials.					Producers' goods.	Consumers' goods.	All commodities (Bureau of Labor Statistics index number).
	Farm products.	Animal products.	Forest products.	Mineral products.	Total raw materials.			
July, 1914.....	102	106	97	91	99	93	103	100
December, 1914.....	98	99	94	91	96	93	102	98
December, 1915.....	110	97	93	104	102	116	107	106
December, 1916.....	155	131	99	180	144	164	142	147
December, 1917.....	235	178	130	162	180	181	185	183
December, 1918.....	237	210	150	185	200	199	221	207
1919.								
January.....	234	208	147	179	196	196	216	203
February.....	224	210	148	175	194	192	205	197
March.....	237	217	149	173	199	190	210	201
April.....	246	224	145	170	202	186	214	203
May.....	255	225	146	170	205	189	219	207
June.....	250	217	156	173	203	196	217	207
July.....	261	233	166	177	214	202	230	219
August.....	251	235	193	180	218	212	241	226
September.....	240	215	227	184	216	212	226	221
October.....	254	212	234	184	220	211	228	222
November.....	276	212	239	183	226	216	236	230
December.....	288	209	259	185	233	229	244	238

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, covering the period January, 1919, to December, 1919, compared with like figures for December of previous years; also for July, 1914, the month immediately preceding the outbreak of the great war. The actual average monthly prices shown in the table have been abstracted from the records of the United States Bureau of Labor Statistics.

Average monthly wholesale prices of commodities.

[Average price for 1913=100.]

Year and month.	Corn, No. 3, Chicago.		Cotton, middling, New Orleans.		Wheat, No. 1, northern spring, Minneapolis.		Wheat, No. 2, red winter, Chicago.		Cattle, steers, good to choice, Chicago.		Hides, packers', heavy native steers, Chicago.	
	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.
July, 1914.....	\$0.7044	114	\$0.1331	105	\$0.8971	103	\$0.8210	83	\$9.2188	108	\$0.1938	105
December, 1914.....	.6340	103	.0721	57	1.1921	136	1.2023	122	8.9125	105	.2250	122
December, 1915.....	.6794	110	.1185	93	1.1311	129	1.2322	125	8.4875	100	.2575	140
December, 1916.....	.9125	148	.1757	138	1.7611	202	1.7275	175	10.2917	121	.3350	182
December, 1917.....	1.5875	258	.2894	228	2.1700	248	2.1700	220	13.2350	156	.3500	190
December, 1918.....	1.4290	232	.2958	233	2.2205	254	2.3088	234	18.3600	216	.2900	158
January, 1919.....	1.3750	223	.2850	224	2.2225	254	2.3788	241	18.4125	216	.2800	152
February, 1919.....	1.2763	207	.2694	212	2.3250	256	2.3450	238	18.4688	217	.2800	152
March, 1919.....	1.4588	237	.2681	211	2.3275	266	2.3575	239	18.5750	218	.2763	150
April, 1919.....	1.5955	259	.2670	210	2.5390	296	2.6300	267	18.3250	215	.2950	160
May, 1919.....	1.7613	286	.2947	232	2.5925	297	2.7800	282	17.7438	209	.3513	191
June, 1919.....	1.7563	285	.3185	251	2.4575	281	2.3613	239	15.4600	182	.4075	222
July, 1919.....	1.9075	310	.3377	266	2.6800	307	2.2580	229	16.8688	198	.4860	264
August, 1919.....	1.9213	312	.3125	246	2.5250	289	2.2394	227	17.6375	207	.5200	283
September, 1919.....	1.5410	250	.3078	242	2.5350	290	2.2385	227	16.8050	198	.4638	252
October, 1919.....	1.3888	226	.3538	279	2.6250	301	2.2394	227	17.5938	207	.4820	262
November, 1919.....	1.4375	242	.3963	312	2.8250	323	2.2881	232	17.5000	206	.4688	255
December, 1919.....	1.4485	235	.3990	314	3.0300	347	2.4490	248	17.0750	201	.4100	223

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, anthracite, stove, New York, tidewater.		Coal, bituminous, run of mine, Cincinnati.	
	Average price per 100 pounds.	Relative price.	Average price per pound.	Relative price.	Average price per M feet.	Relative price.	Average price per M feet.	Relative price.	Average price per long ton.	Relative price.	Average price per short ton.	Relative price.
July, 1914.....	\$8.7563	104	\$0.4444	94	\$24.5000	101	\$42.0000	94	\$4.9726	98	\$2.2000	100
December, 1914.....	7.1313	84	.4361	103	24.2500	100	41.0000	92	5.1796	102	2.2000	100
December, 1915.....	6.2438	74	.6429	136	21.2500	88	38.0000	85	5.1710	102	2.2000	100
December, 1916.....	6.7500	115	.7286	155	24.5000	101	41.0000	92	5.6801	112	4.5000	205
December, 1917.....	16.7150	198	1.3571	288	30.5000	126	57.0000	128	6.4736	128	3.7500	170
December, 1918.....	17.4400	206	1.4365	305	.....	.....	63.0000	141	7.9500	157	4.1000	186
January, 1919.....	17.4125	206	1.1200	255	36.0000	149	63.0000	141	7.9500	157	4.1000	186
February, 1919.....	17.4638	207	1.0909	232	36.0000	149	64.0000	144	7.9500	157	4.0000	182
March, 1919.....	18.8550	223	1.2000	255	36.0000	149	64.0000	144	7.9044	156	4.0000	182
April, 1919.....	20.3813	241	1.0909	232	36.0000	149	64.0000	144	7.9045	156	4.0000	182
May, 1919.....	20.7000	245	1.0727	228	36.0000	149	65.0000	146	7.9857	158	4.0000	182
June, 1919.....	20.7800	246	1.1818	251	36.0000	149	68.0000	152	8.1174	160	4.0000	182
July, 1919.....	22.3875	265	1.2364	283	41.0000	169	73.0000	164	8.1881	162	4.0000	182
August, 1919.....	21.6125	256	1.2364	283	.....	.....	78.0000	175	8.3145	164	4.0000	182
September, 1919.....	18.2100	215	1.2182	259	43.0000	177	95.0000	213	8.4020	166	4.5000	205
October, 1919.....	14.7250	174	1.2694	268	44.0000	182	100.0000	224	8.4135	166	4.5000	205
November, 1919.....	14.1438	167	1.2545	266	44.0000	182	100.0000	224	8.4273	167	4.1000	186
December, 1919.....	13.6800	162	1.2545	266	48.0000	198	112.0000	251	8.4098	166	4.1000	186

Year and month.	Coal, Pocahontas, Norfolk.		Coke, Connellsville.		Copper, ingot, electrolytic, New York.		Lead, pig, desilverized, New York.		Petroleum, crude, Pennsylvania, at wells.		Pig iron, basic.	
	Average price per long ton.	Relative price.	Average price per short ton.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per long ton.	Relative price.
July, 1914.....	\$3.0000	100	\$1.8750	77	\$0.1340	85	\$0.0390	89	\$1.7500	71	\$13.0000	88
December, 1914.....	3.0000	100	1.6250	67	.1275	81	.0380	86	1.4500	59	12.5000	85
December, 1915.....	2.8500	95	2.3000	94	.1975	126	.0525	119	2.0000	82	17.5000	119
December, 1916.....	6.0000	200	5.7500	236	3.4500	219	.0730	166	2.6000	106	30.0000	204
December, 1917.....	4.4120	147	6.0000	246	2.3500	149	.0650	148	3.5000	143	33.0000	224
December, 1918.....	4.6320	154	6.0000	246	2.5400	161	.0667	152	4.0000	163	33.0000	224
January, 1919.....	4.6320	154	5.7813	237	2.038	130	.0558	127	4.0000	163	30.0000	204
February, 1919.....	4.6320	154	5.2188	214	1.731	110	.0508	115	4.0000	163	30.0000	204
March, 1919.....	4.9000	163	4.4688	183	1.509	96	.0524	119	4.0000	163	28.9375	197
April, 1919.....	4.9000	163	3.9000	160	1.530	97	.0507	115	4.0000	163	25.7500	175
May, 1919.....	4.9000	163	3.8437	158	1.600	102	.0508	115	4.0000	163	25.7500	175
June, 1919.....	5.1400	171	4.0000	164	1.756	112	.0530	120	4.0000	163	25.7500	175
July, 1919.....	5.1400	171	4.0950	168	2.150	137	.0561	128	4.0000	163	25.7500	175
August, 1919.....	.....	.....	4.2188	173	2.281	145	.0579	132	4.0000	163	25.7500	175
September, 1919.....	.....	.....	4.5920	188	2.220	141	.0609	138	4.2500	173	25.7500	175
October, 1919.....	5.1400	171	4.8250	198	2.172	138	.0643	146	4.2500	173	25.7500	175
November, 1919.....	4.6320	154	5.9375	243	2.038	130	.0676	154	4.4375	181	28.3125	193
December, 1919.....	4.6320	154	6.0500	248	1.873	119	.0718	163	4.6000	188	34.6000	235

Year and month.	Cotton yarns, northern cones, 10/1.		Leather, sole, hemlock No. 1.		Steel billets, Bessemer, Pittsburgh.		Steel plates, tank, Pittsburgh.		Steel rails, open hearth, Pittsburgh.		Worsted yarns, 2-32's cross-bred.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per pound.	Relative price.
July, 1914.....	\$0.2150	97	\$0.3050	108	\$19.0000	74	\$0.0113	76	\$30.0000	100	\$0.6500	84
December, 1914.....	.1600	72	.....	.....	19.0000	74	.0105	71	30.0000	100	.6200	80
December, 1915.....	.2100	95	.3250	115	30.6000	119	.0180	122	30.0000	100	.8800	115
December, 1916.....	.3850	174	.5700	202	57.5000	223	.0425	287	40.0000	133	1.2000	154
December, 1917.....	.4950	224	.5000	177	47.5000	184	.0325	220	40.0000	133	2.0000	257
December, 1918.....	.5500	249	.4900	174	45.1000	175	.0310	209	57.0000	190	2.0000	258
January, 1919.....	.5000	226	.4900	174	43.5000	169	.0300	208	57.0000	190	1.7500	225
February, 1919.....	.4164	188	.4900	174	43.5000	169	.0300	208	57.0000	190	1.7000	219
March, 1919.....	.4132	187	.4900	174	42.2500	164	.0291	197	54.5000	182	1.5000	193
April, 1919.....	.4300	194	.4900	174	38.5000	149	.0265	179	47.0000	157	1.5000	193
May, 1919.....	.4826	218	.4900	174	38.5000	149	.0265	179	47.0000	157	1.5000	193
June, 1919.....	.5608	253	.5100	181	38.5000	149	.0265	179	47.0000	157	1.6000	206
July, 1919.....	.5912	267	.5300	188	38.5000	149	.0265	179	47.0000	157	1.6000	206
August, 1919.....	.6130	277	.5700	202	38.5000	149	.0265	179	47.0000	157	1.6242	209
September, 1919.....	.5903	267	.5700	202	38.5000	149	.0253	171	47.0000	157	1.7500	225
October, 1919.....	.6111	276	.5700	202	38.5000	149	.0261	176	47.0000	157	1.7500	225
November, 1919.....	.6648	300	.5700	202	41.3750	160	.0265	179	47.0000	157	.....	.....
December, 1919.....	.6986	316	.5700	202	46.4000	180	.0265	179	47.0000	157	.....	.....

Average monthly wholesale prices of commodities—Continued.

[Average price for 1913=100.]

Year and month.	Beef, carcass, good native steers, Chicago.		Coffee, Rio No. 7.		Flour, wheat, standard patents, 1914-1917, 1919; standard war, 1918, Minneapolis.		Hams, smoked, Chicago.		Illuminating oil, 150° fire test, New York.		Sugar, granulated, New York.	
	Average price per pound.	Relative price.	Average price per pound.	Relative price.	Average price per barrel.	Relative price.	Average price per pound.	Relative price.	Average price per gallon.	Relative price.	Average price per pound.	Relative price.
July, 1914.....	\$0.1350	104	\$0.0882	79	\$4.5938	100	\$0.1769	106	\$0.1200	97	\$0.0420	98
December, 1914.....	.1428	110	.0631	57	5.9500	130	.1633	98	.1200	97	.0483	113
December, 1915.....	.1375	106	.0763	69	6.2250	136	.1556	94	.1300	105	.0592	139
December, 1916.....	.1375	106	.0925	83	8.6813	189	.1988	120	.1200	97	.0692	162
December, 1917.....	.1870	144	.0756	68	10.1313	221	.3016	181	.1400	114	.0804	188
December, 1918.....	.2450	189	.1725	155	10.2100	223	.3670	221	.1750	142	.0882	207
January, 1919.....	.2450	189	.1547	139	10.2750	224	.3494	210	.1750	142	.0882	207
February, 1919.....	.2450	189	.1544	139	10.5500	230	.3338	201	.1750	142	.0882	207
March, 1919.....	.2450	189	.1602	144	11.2125	245	.3381	203	.1810	147	.0882	207
April, 1919.....	.2450	189	.1695	152	12.2150	266	.3595	216	.1850	150	.0882	207
May, 1919.....	.2430	188	.1931	173	12.4188	271	.3769	227	.1850	150	.0882	207
June, 1919.....	.2025	156	.2114	190	12.0125	262	.3806	229	.2000	162	.0882	207
July, 1919.....	.2075	160	.2303	207	12.1550	265	.3835	230	.2050	166	.0882	207
August, 1919.....	.2350	181	.2150	193	12.0063	262	.3838	231	.2180	177	.0882	207
September, 1919.....	.2275	176	.1663	149	11.6200	254	.3480	209	.2200	178	.0882	207
October, 1919.....	.2290	177	.1650	148	12.0313	262	.2900	174	.2200	178	.0882	207
November, 1919.....	.2350	181	.1697	152	12.9500	283	.2859	172	.2200	178	.0882	207
December, 1919.....	.2350	181	.1518	136	14.0250	306	.2888	174	.2200	178	.1085	254

DISCOUNT AND INTEREST RATES.

The following tables are presented actual discount and interest rates prevailing in the various cities in which the several Federal Reserve Banks and their branches are located during the periods ending December 15, 1919, and January 15, 1920. Quotations are given for prime commercial paper, both customers' and purchased in the open market, interbank loans, bankers' acceptances, and paper secured by prime stock exchange or other current collateral. Separate rates are quoted for paper of longer or shorter maturities in the first-named and last-named classes. In addition, quotations are given for commodity paper secured by warehouse receipts and for cattle loans, as reported from centers in which such paper is current.

Quotations are also given of rates charged on ordinary loans to customers secured by Liberty bonds and certificates of indebtedness, as well as quotations in New York for demand paper secured by prime bankers' acceptances. Quotations for new types of paper will be added from time to time as deemed of interest.

A continuance of the pronounced upward movement in interest rates is noted in the majority of centers during the period under review, although

in certain centers, in particular in districts Nos. 6 and 11, rates show little or no such change. The increase is again most pronounced in the case of commercial paper purchased in the open market and of bankers' acceptances. While remarked in the changes in high, low, and customary rates for these classes of paper, in the case of customers' commercial paper and of interbank loans, it is found largely only in an increase in the low rates, and in the case of paper secured by Liberty bonds and certificates of indebtedness largely in the low and customary rates. Increase in the high rates on loans secured by stock exchange or other current collateral is noted in a number of centers. Comparison with rates prevailing for the period ending January 15, 1919, reveals the fact that in the case of commercial paper purchased in the open market, present low and customary rates are higher in a considerable number of centers, likewise low rates on interbank loans, high, low, and customary rates on bankers' acceptances and on paper secured by Liberty bonds and certificates of indebtedness, and in a lesser number of centers on collateral loans secured by prime stock exchange or other current collateral.

Discount and interest rates prevailing in various centers.

DURING 30-DAY PERIOD ENDING DEC. 15, 1919.

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.	Secured by Liberty bonds and certificates of indebtedness.
		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.....	6 5/8	6 5/8	6 5/8	6 5/8	6 5 5/8	4 7/8 4 7/8 4 7/8	5 4 7/8 4 7/8 5 1/2	8 6 6	6 6 6	6 6 6	H. L. C.	H. L. C.	6 4 1/2 5
No. 2....	New York.....	6 5 5/8-5 1/2	6 5 5/8-6	6 5 1/2-5 1/2	6 5 1/2-5 1/2	6 5 5 1/2-5 1/2	5 4 1/8 4 1/8 4 1/8	6 4 1/8 4 1/8 5 1/2	15 5 6	6 5 1/2	6 5 6			6 4 1/2 5-5 1/2
	Buffalo.....	6 5 6	6 5 6	6 5 5 1/2-6	6 5 5 1/2-6	6 5 6	6 5 1/2 6	6 5 1/2 6	6 5 6	6 5 6	6 5 6			6 5 5 1/2-6
No. 3....	Philadelphia.....	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	6 5 5 1/2	4 1/2 4 1/2 5 1/2	5 1/2 4 1/2 5 1/2	6 5 6	6 5 6	6 5 1/2 6			6 5 5 1/2
No. 4....	Cleveland.....	6 5 1/2	6 6 6	6 5 1/2	6 5 1/2	6 5 5 1/2	4 1/2 4 1/2 4 1/2	5 1/2 4 1/2 5 1/2	6 5 6	6 5 6	6 5 1/2 6		6 6 6	6 6 6
	Pittsburgh.....	6 5 6	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	5 1/2 4 1/2 4 1/2	5 1/2 4 1/2 4 1/2	6 5 6	6 5 6	6 5 1/2 6		6 6 6	6 5 6
	Cincinnati.....	6 5 1/2	6 5 1/2	6 5 1/2	6 6 6	6 5 1/2	4 1/2 4 1/2 4 1/2	5 1/2 4 1/2 5 1/2	6 5 6	6 5 6	6 5 1/2 6		6 6 6	6 5 1/2 6
No. 5....	Richmond.....	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	6 5 5 1/2			6 5 1/2	6 5 1/2	6 5 6		6 6 6	6 4 1/2 5
	Baltimore.....	6 5 1/2	6 5 1/2	5 1/2 5 1/2	5 1/2 5 1/2	5 1/2 5 1/2	6 6 6		6 5 1/2	6 5 1/2	6 5 1/2 6			5 1/2 5 1/2 5 1/2
No. 6....	Atlanta.....	7 5 6	7 5 6	6 5 1/2	6 5 1/2	7 5 6	7 5 1/2 6	6 5 1/2 6	7 5 6	7 5 6	7 5 6		8 6 6	8 4 1/2 6
	Birmingham.....	8 6 6	8 6 6	8 5 1/2	8 5 1/2	8 6 6	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6		8 6 6	6 4 1/2 6
	Jacksonville.....	8 6 7	8 6 7	6 5 1/2	6 5 1/2	6 6 6	6 6 6	7 6 7	8 6 7	8 7 7	8 7 7		7 6 6	7 6 6
	New Orleans.....	7 5 6-6 1/2	6 1/2 5 6	5 1/2 5 1/2	5 1/2 5 1/2	6 5 1/2	6 1/2 4 1/2 5 1/2-6	6 5 1/2 6	7 5 1/2 6-7	7 5 1/2 6	7 5 1/2 6		7 5 1/2 6-6 1/2	7 4 1/2 5 1/2-6
	Nashville.....	6 5 1/2	6 6 6			6 5 1/2 5 1/2			6 6 6	6 6 6	6 6 6		6 6 6	6 5 1/2 5 1/2
No. 7....	Chicago.....	6 5 1/2-6	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	5 4 1/2	5 4 1/2	6 5 1/2	6 5 1/2	6 5 1/2		6 5 1/2	6 5 1/2
	Detroit.....	6 6 6	6 6 6	6 5 1/2	6 5 1/2	6 5 1/2	4 1/2 4 1/2 4 1/2	5 4 1/2 4 1/2	6 6 6	6 6 6	6 6 6			6 6 6
No. 8....	St. Louis.....	6 5 5 1/2	6 5 6	6 5 1/2	6 5 1/2	6 5 1/2	5 4 1/2	5 4 1/2	6 5 1/2	6 5 1/2	6 5 1/2			6 4 1/2 5 1/2
	Louisville.....	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	5 5 5	5 1/2 4 1/2 5	5 1/2 4 1/2 5	6 5 1/2	6 5 1/2	6 5 1/2		6 5 1/2	6 5 5 1/2
	Memphis.....	6 5 6	6 6 6			6 5 6			6 5 1/2	6 5 1/2	6 6 6		6 6 6	6 4 1/2 6
	Little Rock.....	7 6 6 1/2	7 1/2 6 7	6 5 1/2	6 5 1/2	6 6 6	6 6 6	6 6 6	8 6 6-7	7 1/2 6 7	7 1/2 6 7			7 6 6 1/2
No. 9....	Minneapolis.....	6 5 1/2	6 1/2 6 6	6 5 1/2	6 1/2 6 6	6 5 1/2 5 1/2	5 4 1/2 4 1/2	6 5 1/2 5 1/2	8 6 7	8 6 7	8 7 7		6 1/2 6 6	6 5 1/2 5 1/2
No. 10....	Kansas City.....	7 5 6	7 5 6	5 1/2 5 1/2	5 1/2 5 1/2	7 5 6			6 5 6	8 5 6	8 5 6		8 6 6-7	6 4 1/2 6
	Omaha.....	6 5 1/2	6 5 1/2	6 5 1/2	6 5 1/2	7 5 1/2			6 5 1/2 5 1/2	6 5 1/2 6	6 5 1/2 6		7 6 6	6 5 6
	Denver.....	8 5 1/2	8 5 1/2	6 5 1/2-6	6 5 1/2-6	7 6 6			8 6 6	8 6 6	8 6 6		8 6 6	8 4 1/2 6
No. 11....	Dallas.....	8 6 6	8 6 6			6 6 6			6 6 6	6 6 6	6 6 6		8 6 8	8 6 6
	El Paso.....	8 6 8	8 6 8	6 6 6	6 6 6	8 6 8			8 6 8	8 6 8	8 6 8		8 8 8	8 6 8
	Houston.....	7 5 6	7 6 6	8 6 7	8 6 7	6 5 6			7 6 7	8 6 7	8 6 7		8 6 7	8 5 8

No. 12...	San Francisco	6 5 5½-6	6 5½ 6	5½ 5½ 5½	5½ 5½ 5½	6 5 5½	5 4½ 5	6 4½ 6	6 6 6	6 5 6	6 6 6	6 5 6
	Portland	7 6 6	7 6 6	5½ 5 5½	5½ 5 5½	6 6 6	4½ 4½ 4½	6 4½ 6	7 6 6	7 6 6	6 6 6	7 6 6
	Seattle	8 5 7	8 5½ 7	6 5½ 5½	6 5½ 5½	6 6 6	6 4½ 6	6 4½ 5	8 5½ 7	8 6 7	8 6 7	8 5 7
	Spokane	8 5½ 7	8 6 7	6 5½ 5½	6 5½ 5½	6 6 6	6 4½ 6	6 6 6	8 5½ 7	8 6 8	8 6 8	8 4½ 6
	Salt Lake City	8 6 7	8 6 7	6 6 6	6 6 6	7 6 6	6 4½ 6	6 6 6	8 6 7	8 6 7	8 6 7	7 5 6

DURING 30-DAY PERIOD ENDING JAN. 15, 1920.

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.	Secured by Liberty bonds and certificates of indebtedness.
		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. 6 5½ 6	H. L. C. 7 6 6	H. L. C. 6 5½ 6	H. L. C. 7 6 6	H. L. C. 6 5½ 5½	H. L. C. 5½ 5 5½	H. L. C. 5½ 5 5½	H. L. C. 10 6 8	H. L. C. 6 6 6	H. L. C. 6 6 6	H. L. C. 6 6 6	H. L. C. 6 6 6	H. L. C. 6 6 6	H. L. C. 6 4½ 5½
No. 2...	New York ²	6 5½ 6	6 5½ 6	6 6 6	6 6 6	6 5 5-5½	6 4½ 4½-5½	6 4½ 5-5½	25 5½ 6	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5-6
	Buffalo	6 5 6	6 5 6	6 6 6	6 6 6	6 5 6	6 5½ 6	6 5½ 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6
No. 3...	Philadelphia	6 5½ 5½	6 5½ 5½	6 6 6	6 6 6	5½ 5½ 5½	5½ 4½ 5½	5½ 5 5½	6 6 6	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½
No. 4...	Cleveland	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	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6
	Pittsburgh	6 5 6	6 5½ 6	6 6 6	6 5½ 6	6 5½ 6	5½ 4½ 5	5½ 5 5½	6 6 6	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½
	Cincinnati	6 5½ 6	6 5½ 6	6 5½ 6	6 6 6	6 5½ 6	5 4½ 4½	5 4½ 5	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6
No. 5...	Richmond	6 5 6	6 6 6	6 6 6	6 6 6	6 5 5½	4½ 4½ 4½	4½ 4½ 4½	6 5½ 6	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½	6 6 5½
	Baltimore	6 5½ 6	6 5½ 6	6 6 6	6 6 6	6 5½ 5½	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	7 5½ 6	6 6 5½ 6	6 5½ 6	6 5½ 6	6 6 6	6 5½ 6	6 5½ 6	8 5½ 6	8 5½ 6	8 5½ 6	8 5½ 6	8 5½ 6	8 5½ 6	8 5½ 6
	Birmingham	8 6 6	8 6 6	8 5½ 6	8 5½ 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6
	Jacksonville	8 6 7	8 6 7	8 6 7	8 6 7	8 6 6	8 6 6	8 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
	New Orleans	7 5 6-6½	7 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	7 5 6-6½	7 5 6-6½	7 5 6-6½	7 5 6-6½	7 5 6-6½	7 5 6-6½	7 5 6-6½
	Nashville	6 5½ 6	6 6 6	6 6 6	6 6 6	6 5½ 5½	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. 7...	Chicago	6 5 5½-6	6 5½ 6	6 6 6	6 5½ 6	6 5½ 5½	5½ 4½ 5	5½ 4½ 5	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6	6½ 5½ 6
	Detroit	6 5 6	6 5 6	6 6 6	6 6 6	6 5 5½	5½ 4½ 5	5½ 4½ 5	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6
No. 8...	St. Louis	6 5½ 6	6 5½ 6	6 6 6	6 6 6	6 5½ 6	5 4½ 4½	5 4½ 5	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6
	Louisville	6 5½ 6	6 5½ 6	6 6 6	6 6 6	5 5 5	5½ 5½ 5½	5½ 4½ 5	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6
	Memphis	6 5½ 6	6 5½ 6	6 6 6	6 6 6	6 5½ 6	6 6 6	6 6 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6	6 5½ 6
	Little Rock	7 6 6	8 6 6-7	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
No. 9...	Minneapolis	6 5½ 6	6 6 6	6 6 6	6 6 6	6 5½ 6	5½ 4½ 5	5½ 5½ 5½	7 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
No. 10...	Kansas City	7 5 6	7 5 6	5½ 5½ 5½	5½ 5½ 5½	7 5 6	6 6 6	6 6 6	6 5 6	8 5 6	8 5 6	8 5 6	8 5 6	8 5 6	8 5 6
	Omaha	7 5½ 6	7 5½ 6	6 6 6	6 6 6	7 6 6	6 6 6	6 6 6	6 5½ 6	7 5½ 6	7 5½ 6	7 5½ 6	7 5½ 6	7 5½ 6	7 5½ 6
	Denver	8 5½ 6	8 5½ 6	6 6 6	6 6 6	7 6 6	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6
No. 11...	Dallas	8 6 6	8 6 6	5½ 5½ 5½	5½ 5½ 5½	6 6 6	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6	8 6 6
	El Paso	8 6 8	8 6 8	6 6 6	6 6 6	8 6 6	8 6 6	8 6 6	8 6 8	8 6 8	8 6 8	8 6 8	8 6 8	8 6 8	8 6 8
	Houston	7 5 6	7 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	7 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
No. 12...	San Francisco	6 5½ 6	6 5 6	6 5½ 5½	6 5½ 5½	6 5½ 5½	6 5 5	5½ 4½ 5	6 5½ 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6	6 5 6
	Portland	7 6 6	7 6 6	6 5 5½	6 5 5½	6 6 6	6 4½ 4½-5	6 4½ 5	7 6 6	7 6 6	7 6 6	7 6 6	7 6 6	7 6 6	7 6 6
	Seattle	8 6 7	8 6 7	6½ 5½ 6	6½ 5½ 6	8 6 6	7 5½ 6	6 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
	Spokane	8 5½ 7	8 6 7	6 5½ 5½	6 5½ 5½	6 6 6	6 6 6	6 6 6	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7	8 6 7
	Salt Lake City	8 7 7	8 7 7	6 6 6	6 6 6	7 6 7	6 6 6	6 6 6	8 7 7	8 7 7	8 7 7	8 7 7	8 7 7	8 7 7	8 7 7

¹ Rates for demand paper secured by prime bankers' acceptances, high, 6; low, 4½.
² Rates for demand paper secured by prime bankers' acceptances, high 6, low 4, customary, 4-5½.

PHYSICAL VOLUME OF TRADE.

In continuation of tables in the January 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.

Live-stock movements.

[Bureau of Markets.]

	Receipts.					Shipments.				
	Cattle and calves, 60 markets.	Hogs, 60 markets.	Sheep, 60 markets.	Horses and mules, 44 markets.	Total, all kinds.	Cattle and calves 54 markets.	Hogs, 54 markets.	Sheep, 54 markets.	Horses and mules, 44 markets.	Total, all kinds.
	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.	Head.
1918.										
December.....	2,134,979	5,589,886	1,595,515	71,493	9,391,873	805,802	1,449,781	1,610,355	71,513	3,937,451
1919.										
January.....	2,111,704	5,861,685	1,567,613	110,411	9,651,413	761,168	1,546,875	608,016	106,459	3,022,518
February.....	1,440,329	4,404,751	1,131,805	82,526	7,059,411	523,326	1,288,134	418,827	76,512	2,311,799
March.....	1,501,597	3,632,874	1,216,988	68,938	6,420,397	563,893	1,272,654	481,907	64,332	2,382,786
April.....	1,751,943	3,668,210	1,388,732	50,770	6,859,655	698,599	1,107,411	575,136	49,634	2,430,780
May.....	1,822,410	3,862,785	1,425,018	33,977	7,144,190	788,086	1,181,745	614,275	34,658	2,618,764
June.....	1,580,256	3,812,466	1,685,236	40,067	7,118,025	709,637	1,373,824	828,046	36,889	2,948,396
July.....	2,007,266	2,998,836	2,177,942	48,691	7,232,735	706,843	963,662	997,338	43,738	2,711,581
August.....	2,019,139	2,103,609	3,211,331	81,917	7,415,996	894,816	690,821	2,014,267	74,268	3,674,172
September.....	2,377,054	2,401,677	3,810,441	140,848	8,730,020	1,150,183	860,614	2,466,937	135,724	4,613,458
October.....	2,989,090	3,144,831	3,605,198	124,497	9,863,616	1,532,297	1,103,837	2,159,531	125,701	4,921,366
November.....	2,680,042	3,775,589	2,751,421	140,192	9,347,244	1,374,452	1,308,095	1,587,007	134,679	4,414,233
December.....	2,169,631	5,024,650	2,393,632	86,666	9,674,579	967,348	1,608,292	2,409,482	86,534	5,071,656

Receipts and shipments of live stock at 15 western markets.

Chicago, Kansas City, Oklahoma City, Omaha, St. Louis, St. Joseph, St. Paul, Sioux City, Cincinnati, Cleveland, Denver, Fort Worth, Indianapolis, Louisville, Wichita.]

RECEIPTS.

[Monthly average, 1911-1913=100.]

	Cattle and calves.		Hogs.		Sheep.		Horses and mules.		Total, all kinds.	
	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.	Head.	Relative.
1918.										
December.....	1,706,945	169	4,197,313	191	1,114,761	82	36,153	79	7,055,172	153
1919.										
January.....	1,656,046	164	4,603,335	209	1,079,377	79	56,631	123	7,395,419	160
February.....	1,096,118	116	3,451,894	168	774,881	61	48,786	114	5,371,679	125
March.....	1,094,614	109	2,842,663	129	847,842	62	41,805	91	4,826,924	105
April.....	1,255,379	125	2,823,434	128	970,070	71	31,509	68	5,080,442	110
May.....	1,262,065	125	3,049,223	139	934,613	68	21,345	46	5,237,246	114
June.....	1,122,782	111	3,061,338	139	1,116,003	82	28,418	62	5,329,041	115
July.....	1,527,881	152	2,411,539	110	1,558,767	114	37,866	82	5,536,053	120
August.....	1,541,133	153	1,595,759	73	2,220,229	162	57,206	124	5,414,327	117
September.....	1,871,042	186	1,704,944	78	2,890,831	212	88,283	192	6,555,100	142
October.....	2,317,487	230	2,160,079	98	2,405,511	176	79,240	172	6,962,317	151
November.....	2,046,664	203	2,715,955	124	1,743,189	128	84,018	183	6,589,826	143
December.....	1,650,315	164	3,785,870	172	1,589,237	116	53,453	116	7,078,875	153

SHIPMENTS.

1918.										
December.....	588,425	145	787,461	163	445,987	89	37,072	90	1,858,945	129
1919.										
January.....	589,362	145	988,035	204	357,386	71	56,282	137	1,991,065	139
February.....	404,296	107	881,507	195	240,815	51	47,829	125	1,574,447	118
March.....	423,819	104	925,802	191	289,742	58	41,837	102	1,681,200	117
April.....	506,835	125	748,437	154	319,625	63	29,974	73	1,604,871	112
May.....	530,153	130	787,009	162	290,803	58	18,865	46	1,626,830	113
June.....	503,354	124	1,005,505	208	465,776	93	25,322	62	1,999,957	139
July.....	515,071	127	691,283	143	694,942	138	32,836	80	1,934,132	135
August.....	650,252	160	455,705	94	1,352,252	269	49,996	122	2,508,205	175
September.....	872,043	214	501,856	104	1,849,958	367	83,264	203	3,307,121	230
October.....	1,154,995	284	654,755	135	1,382,419	275	80,828	197	3,272,997	228
November.....	993,148	244	788,107	163	945,992	188	78,889	192	2,806,136	195
December.....	686,325	169	1,003,682	207	682,439	136	55,831	136	2,428,277	169

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.
1918.														
December...	7,776,239	1,174	34,161,848	2,754	3,786,847	142	126,437,385	755	33,939,568	261	37,724,398	86	2,025,778	46
1919.														
January....	12,636,060	1,907	17,436,495	1,406	6,030,937	226	101,000,122	603	54,846,433	367	37,850,338	86	2,273,683	51
February....	8,151,723	1,318	13,729,993	1,186	3,635,120	146	114,842,525	735	49,283,053	354	68,972,779	168	1,956,362	47
March.....	8,997,073	1,358	14,651,276	1,181	3,749,394	140	151,086,397	902	85,712,426	574	97,239,435	221	2,141,508	48
April.....	2,890,759	437	21,639,915	1,744	2,673,681	100	141,814,255	847	109,569,968	734	86,555,951	197	2,494,454	56
May.....	5,669,232	856	14,872,987	1,199	2,957,163	111	68,957,465	412	49,707,874	333	55,807,234	127	2,095,072	47
June.....	6,574,766	992	15,212,094	1,225	4,768,308	178	172,441,100	1,030	96,854,552	649	114,323,804	260	3,121,639	71
July.....	5,392,104	814	8,680,524	700	3,320,564	124	117,679,193	703	47,452,334	318	68,163,734	155	2,392,515	54
August.....	2,894,361	437	8,075,306	651	2,494,118	93	84,150,778	502	40,147,727	269	48,968,628	111	2,117,796	48
September..	1,213,709	185	7,285,951	587	3,523,837	132	57,179,511	341	18,209,239	122	30,960,364	84	2,792,439	68
October....	1,793,784	271	31,173,216	2,513	3,402,422	127	56,462,312	337	13,690,972	88	41,016,518	93	3,894,230	86
November..	1,393,238	210	15,694,002	1,265	2,997,652	112	65,288,694	390	16,844,285	113	42,106,359	96	4,934,696	101
December..	1,886,835	285	6,061,769	489	3,135,069	117	58,982,754	352	15,688,297	105	63,645,722	145	4,125,550	93

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.
1918.																
December...	55,257,503	205	18,008,635	80	30,773,422	152	6,807,076	615	8,792,752	123	119,639,388	154	1,935,524	99	128,349,246	148
1919.																
January....	24,652,641	91	28,731,387	128	22,945,659	114	5,615,054	507	8,943,782	125	90,888,523	117	1,396,888	71	97,174,519	112
February....	14,049,055	56	13,034,852	62	15,961,423	85	2,406,029	233	6,556,594	98	52,007,953	72	1,032,368	56	56,653,609	70
March.....	13,768,496	51	13,431,797	60	17,076,822	85	4,955,130	448	11,723,691	163	60,955,936	78	1,485,320	76	67,639,876	78
April.....	11,208,305	42	18,301,721	82	20,063,678	99	5,498,493	497	9,634,405	134	64,706,602	83	1,990,349	102	73,663,173	85
May.....	11,625,657	43	10,301,200	46	19,206,465	95	4,280,911	387	8,416,141	117	53,830,374	69	2,447,200	125	64,842,774	75
June.....	8,125,034	30	21,098,146	94	24,576,968	122	2,791,618	252	12,878,517	180	69,470,285	89	1,894,599	97	77,995,979	90
July.....	49,612,116	184	12,549,219	58	25,233,109	125	3,105,486	281	8,627,091	120	99,127,020	127	1,572,420	80	106,202,910	122
August....	80,714,559	299	8,503,282	38	29,774,582	147	3,824,263	345	6,638,871	93	129,455,557	166	2,283,145	117	131,738,702	152
September..	69,953,295	260	16,267,145	72	26,721,030	132	5,446,371	492	5,294,256	74	123,682,097	159	3,275,034	107	137,510,750	159
October....	51,006,164	189	12,490,107	56	21,323,974	120	4,472,397	404	4,369,326	61	96,691,968	124	3,073,034	157	112,271,510	129
November..	35,729,832	133	14,606,137	65	17,699,925	88	2,579,579	233	3,582,873	50	74,198,346	95	3,541,957	131	90,137,153	104
December..	30,582,779	113	23,983,657	107	15,592,282	77	2,876,636	260	3,769,859	53	76,805,213	99	2,371,262	121	87,475,892	101

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.	
1918.																	
Dec'ber...	36,932,880	239	9,996,598	71	23,850,316	157	2,136,274	302	4,300,906	110	77,216,974	156	4,241,406	125	96,303,301	149	
1919.																	
January...	9,934,531	64	13,488,569	95	19,769,237	130	794,028	112	4,718,631	121	48,704,996	99	2,796,463	83	61,289,080	95	
February...	8,876,844	62	8,649,063	65	13,603,691	96	404,365	61	6,006,178	165	37,540,141	81	1,932,258	61	46,235,302	77	
March.....	14,857,872	96	7,544,393	53	16,183,222	107	3,720,930	526	6,049,703	155	48,356,120	98	3,039,020	90	62,031,710	96	
April.....	30,764,328	199	15,708,842	111	16,019,086	105	8,143,580	1,150	6,632,763	170	77,268,599	156	3,532,772	104	93,166,073	144	
May.....	31,901,327	207	7,784,931	55	17,069,617	112	7,525,794	1,063	6,677,608	171	70,959,177	144	4,320,146	128	90,399,834	140	
June.....	8,151,872	53	8,629,052	61	15,638,317	103	2,740,593	387	9,588,195	246	44,748,029	91	3,130,825	92	58,836,746	91	
July.....	12,423,422	81	8,192,275	57	15,628,503	103	1,546,100	218	9,133,000	234	46,833,304	95	2,589,176	76	58,484,596	90	
August...	36,986,491	240	5,135,459	36	17,919,623	118	1,436,377	203	5,028,674	129	66,506,624	135	3,805,273	112	83,630,353	129	
Sept'ber...	37,730,048	245	6,622,779	47	16,651,580	110	2,317,740	327	2,943,167	75	66,265,314	134	4,787,300	141	87,808,164	136	
October...	25,813,130	167	7,116,502	50	16,705,015	110	1,426,528	202	3,087,951	79	54,149,126	110	5,975,261	176	81,087,801	125	
Nov'ber...	20,877,718	135	6,609,629	47	15,582,081	103	3,110,541	439	2,827,956	73	49,007,925	99	5,604,616	165	74,328,697	115	
Dec'ber...	17,383,075	113	11,509,719	81	12,433,716	82	2,255,139	319	2,624,376	67	46,206,025	94	4,470,22	132	66,321,574	103	

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

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.	
1918.																	
Dec'ber...	24,221,863	192	1,273,489	36	9,817,268	207	1,107,437	779	1,915,831	115	38,335,888	169	3,258,924	312	53,001,046	193	
1919.																	
January...	9,768,801	78	1,411,366	40	9,275,187	195	566,101	398	1,738,326	105	22,759,871	100	2,026,246	194	31,877,976	116	
February...	7,806,811	66	783,263	24	4,713,794	106	2,299,684	1,734	995,454	64	16,597,986	78	1,302,061	134	22,457,261	88	
March.....	13,789,851	109	636,127	18	3,254,914	69	3,880,424	2,731	2,285,954	138	23,847,270	105	1,644,676	157	31,248,312	114	
April.....	12,581,074	100	1,089,425	31	4,604,521	97	5,089,529	3,568	1,853,372	112	25,197,921	111	2,549,370	244	36,670,086	134	
May.....	14,157,852	112	1,588,571	45	5,642,176	119	7,061,048	4,970	3,561,412	215	32,011,059	141	2,535,547	249	43,421,021	158	
June.....	10,260,075	81	1,051,177	30	10,249,644	216	3,670,055	2,583	6,564,620	306	31,795,371	140	2,340,158	224	42,326,282	154	
July.....	5,806,227	46	901,842	25	6,959,186	146	1,479,951	1,042	9,723,852	586	24,871,058	110	1,514,135	145	31,684,666	116	
August...	26,902,757	214	815,132	23	5,676,984	119	64,510	45	4,993,395	301	38,452,778	169	1,385,762	133	44,688,707	163	
Sept'ber...	28,010,858	222	512,072	14	5,345,464	113	535,701	377	2,171,521	131	36,875,616	161	2,306,213	221	46,953,575	171	
October...	14,755,827	117	507,065	14	4,335,038	91	1,718,701	1,210	796,839	48	22,113,470	97	2,521,329	241	33,459,451	122	
Nov'ber...	9,152,534	73	438,147	12	3,998,525	84	1,391,024	98	851,651	51	15,831,881	70	1,552,796	149	22,819,463	83	

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

[Bushels.]

	Wheat.	Corn.	Oats.	Rye.	Barley.	Total grain.
1918.						
December.....	14,359,694	302,980	6,074,067	2,248,272	2,767,606	25,752,619
1919.						
January.....	15,365,491	645,317	5,495,937	1,972,696	3,047,346	26,526,787
February.....	12,635,613	417,520	6,110,159	1,735,876	3,930,465	24,829,633
March.....	12,732,472	346,543	5,650,120	1,920,348	4,403,665	25,053,148
April.....	7,448,992	464,503	5,335,971	3,434,873	5,420,013	22,104,352
May.....	7,913,162	448,020	4,047,059	1,690,860	4,263,510	18,362,611
June.....	4,180,160	214,079	5,475,856	514,252	6,783,798	17,168,145
July.....	5,557,644	265,196	3,760,063	867,491	5,528,176	15,978,570
August.....	17,396,269	155,491	2,216,989	578,250	5,414,183	25,761,182
September.....	21,171,440	172,254	1,901,510	516,142	4,061,830	27,823,176
October.....	25,322,242	82,240	1,898,271	483,270	3,079,360	30,865,353
November.....	18,728,730	155,490	2,504,833	1,264,494	2,351,012	25,004,559

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

Cotton.

[New Orleans Cotton Exchange.]

[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.
1918-19.										
August.....	401,860	32	226,242	25	50,482	48	372,394	82	1,306,868	111
September.....	988,156	79	536,190	58	42,028	40	352,025	77	1,644,690	140
October.....	1,632,921	130	779,371	85	158,768	151	697,623	154	2,189,007	186
November.....	1,710,666	136	641,283	70	217,450	207	1,007,892	222	2,745,815	233
December.....	1,709,734	136	690,782	75	157,038	149	929,491	205	2,697,141	229
January.....	1,392,468	111	705,493	77	157,270	149	705,353	155	2,637,908	224
February.....	768,444	61	477,696	52	106,368	101	383,157	84	2,689,379	228
March.....	601,858	48	460,066	50	75,489	72	202,556	45	2,604,549	221
April.....	494,106	39	462,363	50	79,700	76	149,566	33	2,484,852	211
May.....	536,139	43	502,082	55	99,041	94	193,016	42	2,417,631	205
Season, total.....	11,724,104	78	6,735,898	61	1,528,262	121	5,850,715	107	1,928,959	164
1919-20.										
August.....	313,301	25	238,271	26	49,630	47	302,238	67	1,412,048	120
September.....	584,776	47	260,698	28	26,138	25	300,001	66	1,501,805	127
October.....	1,779,927	142	1,029,331	112	110,202	105	621,784	137	2,340,831	199
November.....	2,369,177	189	1,178,443	128	245,237	233	1,155,324	254	2,616,383	222
December.....	2,070,597	165	1,069,693	116	167,004	159	1,138,401	251	2,765,040	235

California shipments of citrus and deciduous fruits.

	Oranges.		Lemons.		Total citrus fruits.		Total deciduous fruits.
	Carloads.	Relative.	Carloads.	Relative.	Carloads.	Relative.	Carloads.
1918.							
December.....	3,565	146	722	178	4,287	150	267
1919.							
January.....	3,120	121	531	131	3,651	128	109
February.....	3,180	129	658	174	3,838	144	198
March.....	5,113	209	897	221	6,010	211	67
April.....	5,450	221	1,038	256	6,488	228	36
May.....	5,888	241	1,501	371	7,389	259	276
June.....	3,648	149	1,520	375	5,168	181	896
July.....	2,568	105	1,038	256	3,606	127	4,199
August.....	1,785	73	436	108	2,221	78	6,601
September.....	1,840	75	414	102	2,254	79	6,781
October.....	2,706	111	572	141	3,278	115	5,529
November.....	3,257	133	442	109	3,699	130	2,141
December.....	3,592	147	271	67	3,863	136	197

Sugar.

[Data of International Sugar Committee for ports of Boston, New York, Philadelphia, Savannah, New Orleans, Galveston, San Francisco.]

[Tons of 2,240 pounds.]

	Receipts.	Meltings.	Raw stocks at close of month.		Receipts.	Meltings.	Raw stocks at close of month.
1918.				1919.			
December.....	92,785	123,091	13,774	June.....	429,617	493,293	151,692
1919.				July.....	394,557	435,247	115,341
January.....	243,806	197,145	66,189	August.....	333,686	356,048	85,650
February.....	389,815	337,420	122,757	September.....	352,345	385,618	55,644
March.....	355,710	361,010	106,889	October.....	279,962	279,348	55,333
April.....	450,938	387,548	185,315	November.....	183,084	180,425	55,073
May.....	471,205	446,685	201,301	December.....	73,504	113,917	14,587

[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.		
1918.				1919.				1919.							
December.....	58,751	32	92,000	50	11,490	7	June.....	271,875	148	313,000	171	85,193	49		
1919.				July.....	264,782	144	292,000	159	57,975	34					
January.....	172,054	93	147,000	80	36,544	21	August.....	246,419	134	229,000	125	75,394	44		
February.....	283,172	165	229,000	134	90,716	53	September.....	262,137	142	292,000	159	45,531	26		
March.....	232,471	126	261,000	142	62,187	36	October.....	233,650	127	216,000	118	63,181	37		
April.....	318,492	173	277,000	151	107,582	62	November.....	154,674	84	177,000	96	40,855	24		
May.....	325,736	177	307,000	167	126,318	73	December.....	96,342	52	126,765	69	10,432	6		

Naval stores.

[Data for Savannah, Jacksonville, and Pensacola.]

[In barrels.]

[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.
1918.					1919.				
December.....	11,435	127,888	53,196	280,182	June.....	31,904	33,733	63,456	221,612
1919.					July.....	27,747	30,656	77,062	235,707
January.....	7,645	125,541	34,835	285,808	August.....	21,013	24,756	74,402	203,812
February.....	5,533	121,676	22,154	259,974	September.....	21,574	27,021	72,616	190,580
March.....	4,226	97,450	14,338	243,813	October.....	19,367	27,339	67,080	186,231
April.....	8,379	75,546	19,493	225,637	November.....	18,757	28,741	77,125	204,281
May.....	26,358	47,115	50,435	229,404	December.....	17,252	30,924	77,221	200,333

Lumber.

[From reports of manufacturers' associations.]

[M feet.]

	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.
1918.															
December.....	204	310,068	322,831	27,46	63,315	63,823	127	222,389	221,720	11	799	14,176	43	26,728	21,570
1919.															
January.....	200	330,137	325,241	21,49	40,354	68,910	122	225,688	227,129	13	7,565	15,172	40	28,629	23,896
February.....	195	328,069	309,494	24,48	46,037	71,103	122	228,031	238,035	15	6,802	17,081	39	25,806	18,034
March.....	198	378,752	361,125	27,48	71,426	81,328	120	254,650	255,544	11	7,118	17,525	41	32,110	22,672
April.....	203	397,005	397,677	43,49	124,341	97,679	114	264,623	266,308	11	11,431	14,020	38	22,369	21,877
May.....	205	414,899	460,238	45,48	140,037	127,730	111	345,984	388,803	11	24,548	17,136	31	14,375	17,393
June.....	204	360,084	426,193	49	156,561	139,923	115	300,410	327,364	12	29,741	26,525	38	20,733	28,865
July.....	206	401,939	466,786	48	143,533	140,680	114	268,634	301,050	9	27,382	22,470	35	22,326	34,191
August.....	204	417,036	423,002	48	152,748	140,236	118	416,422	397,290	11	20,247	26,839	36	27,177	30,159
September.....	202	416,640	372,727	51	154,102	138,537	126	332,905	261,797	12	16,913	22,574	35	33,146	35,468
October.....	201	421,025	356,124	52	156,828	143,252	124	419,108	339,321	10	12,888	18,139	26	24,055	22,079
November.....	202	391,347	344,717	51	110,525	117,472	126	324,511	241,301	11	2,786	21,596	27	19,048	26,241
December.....				51	65,989	93,377	129	227,331	176,935	11	4,776	17,840			

RECEIPTS AND SHIPMENTS OF LUMBER AT CHICAGO.

[Chicago Board of Trade.]

[Monthly average, 1911-1913=100.]

	Receipts.		Shipments.			Receipts.		Shipments.	
	M feet.	Relative.	M feet.	Relative.		M feet.	Relative.	M feet.	Relative.
1918.					June.....	184,862	87	80,762	105
December.....	163,908	77	60,831	79	July.....	200,148	94	90,134	118
1919.					August.....	170,385	80	87,953	115
January.....	134,604	63	47,922	62	September.....	205,909	97	93,120	121
February.....	97,511	49	45,585	64	October.....	208,638	98	95,674	125
March.....	124,040	59	46,902	61	November.....	176,972	83	70,175	92
April.....	144,253	68	59,055	77	December.....	226,617	107	79,553	104
May.....	162,365	77	66,001	86					

Coal and coke.

[Bituminous coal and coke, U. S. Geological Survey; Anthracite coal, Anthracite Bureau of Information.]

[Monthly average, 1911-1913=100.]

	Bituminous coal, estimated monthly production.		Anthracite coal, shipments over 9 roads.		Coke, estimated monthly production.					
	Short tons.	Relative.	Long tons.	Relative.	Beehive.		By-product.		Total.	
					Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
1918.										
December.....	40,184,000	108	5,736,260	102	2,255,296	86	2,562,048	291	4,817,344	138
1919.										
January.....	41,485,000	112	5,934,241	105	2,401,567	92	6,779,482	257	12,772,392	122
February.....	31,566,000	91	3,871,932	74	1,822,894	75				
March.....	33,719,000	91	3,938,908	70	1,768,449	68				
April.....	32,164,000	87	5,224,715	93	1,316,960	50				
May.....	37,547,000	101	5,711,915	101	1,135,840	43				
June.....	37,055,000	100	5,619,591	100	1,170,752	45				
July.....	42,754,000	115	6,052,334	108	1,512,178	58				
August.....	42,880,000	116	6,144,144	109	1,733,971	66				
September.....	47,403,000	128	5,687,401	101	1,790,466	68				
October.....	54,579,000	147	6,560,150	117	1,551,980	59				
November.....	20,303,000	55	5,971,671	106	1,680,775	64				
December.....	36,612,000	99	6,138,460	109	1,721,000	66				

Movement of crude petroleum in United States.

[U. S. Geological Survey.]

[Barrels of 42 gallons each.]

	Marketed.		Stocks at end of month (barrels).		Marketed.		Stocks at end of month (barrels).
	Barrels.	Relative.			Barrels.	Relative.	
December..... 1918.	28,071,000	146	128,311,000	June..... 1919.	31,644,000	165	133,995,000
January..... 1919.	30,196,000	158	127,777,000	July.....	33,394,000	177	140,093,000
February.....	26,910,000	150	126,982,000	August.....	33,862,000	177	136,467,000
March.....	30,234,000	158	129,213,000	September.....	33,667,000	176	137,131,000
April.....	29,386,000	153	130,729,000	October.....	33,319,000	174	135,461,000
May.....	29,985,000	156	130,321,000	November.....	32,114,000	168	131,601,000
				December.....	32,503,000	170	129,022,000

Total output of oil refineries in United States.

[Bureau of Mines.]

	Crude oil run (barrels).	Gasoline (gallons).	Kerosene (gallons).	Gas and fuel (gallons).	Lubricating (gallons).
November..... 1918.	27,411,636	312,068,640	169,278,105	604,403,494	72,178,602
January..... 1919.	26,967,332	303,710,556	158,501,260	589,630,056	68,304,613
February.....	25,232,876	283,518,194	164,181,787	553,853,753	62,503,072
March.....	27,866,775	311,306,755	170,290,930	574,774,156	67,068,995
April.....	27,775,217	319,807,838	183,453,728	588,808,408	70,954,128
May.....	30,267,227	354,472,377	190,345,026	652,166,738	76,442,252
June.....	28,920,764	338,336,985	178,974,224	632,205,805	64,636,153
July.....	31,202,522	342,491,757	205,727,289	638,185,469	67,037,414
August.....	32,362,057	326,846,167	219,502,888	685,702,461	72,920,214
September.....	32,601,044	339,582,564	199,244,293	683,409,674	70,236,692
October.....	33,682,968	363,456,747	227,104,346	690,158,446	73,658,410
November.....	32,213,754	338,667,570	214,829,925	663,309,514	75,962,212

STOCKS AT CLOSE OF MONTH.

Nov. 30..... 1918.	15,222,401	270,072,011	397,804,012	583,777,918	132,923,478
Jan. 31..... 1919.	15,380,185	383,212,692	332,393,181	646,411,414	158,370,431
Feb. 28.....	14,820,601	458,449,187	303,062,436	692,816,000	152,297,163
Mar. 31.....	15,106,361	546,062,429	294,677,623	749,067,806	165,495,254
Apr. 30.....	15,184,844	593,616,170	276,356,837	807,895,498	170,122,088
May 31.....	16,372,314	594,035,688	244,635,631	788,740,572	173,754,109
June 30.....	16,775,723	593,896,610	252,542,434	811,790,637	175,384,775
July 31.....	15,304,915	514,919,358	279,855,061	817,809,519	173,884,303
Aug. 31.....	15,131,549	434,531,446	296,065,646	830,329,785	170,572,819
Sept. 30.....	13,925,441	371,125,419	311,843,057	862,135,385	158,967,070
Oct. 31.....	14,091,945	354,160,071	329,160,795	828,745,452	152,536,736
Nov. 30.....	13,983,716	378,133,185	347,070,560	791,052,991	149,193,143

Iron and steel.

[Great Lakes iron ore movements, Marine Review; pig iron production, Iron Age; steel ingot production, American Iron and Steel Institute.]

[Monthly average, 1911-1913=100; iron ore, monthly average, May-November, 1911-1913=100.]

	Iron ore shipments from the upper Lakes.		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.	Gross tons.	Relative.
December 1918.....	6,836		3,433,617	148	2,992,306	125	7,379,152	140
January 1919.....			3,302,260	143	3,082,427	130	6,684,268	127
February.....			2,940,168	136	2,638,011	120	6,010,787	114
March.....			3,090,243	133	2,662,265	110	5,430,572	103
April.....	1,412,239		2,478,218	107	2,239,711	93	4,300,685	91
May.....	6,615,341	109	2,108,056	91	1,929,024	80	4,282,310	81
June.....	7,980,839	132	2,114,863	91	2,219,219	92	4,592,855	93
July.....	9,173,429	151	2,428,541	105	2,508,176	104	5,578,661	106
August.....	4,423,133	73	2,748,838	118	2,746,081	114	6,109,103	116
September.....	8,178,483	135	2,437,965	107			6,284,638	119
October.....	6,201,883	102	1,867,558	80			6,472,668	123
November.....	3,152,319	52	2,392,350	103			7,128,330	135
December.....			2,633,268	114			8,265,366	157

Imports of pig tin.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Pounds.		Relative.		Pounds.		Relative.
December 1918.....	5,887,063	65		June 1919.....	112,000	1	
January 1919.....				July.....	113,120	1	
February.....	8,461,444	93		August.....	9,872,459	109	
March.....	6,271,977	74		September.....	11,087,403	122	
April.....	8,284,970	91		October.....	16,210,512	178	
May.....	504,903	6		November.....	15,233,671	168	
	449,270	5		December.....	12,940,125	142	

Raw stocks of hides and skins.

[Bureau of Markets.]

[In pieces.]

	Cattle hides.	Calfskins.	Kipskins.	Goat.	Kid.	Cabretta.	Sheep and lamb.
Jan. 31 1919.....	5,922,514	1,294,949	515,523	4,239,381	245,815	601,686	6,844,680
Feb. 28.....	5,791,095	1,266,021	429,704	5,633,535	227,513	843,344	9,033,943
Mar. 31.....	5,108,516	1,219,935	415,832	7,987,277	181,952	559,576	8,264,864
Apr. 30.....	5,256,384	1,845,254	421,474	12,080,410	724,209	1,520,522	9,035,816
May 31.....	4,549,004	2,273,368	386,244	15,121,868	1,245,075	2,044,524	8,039,531
June 30.....	4,696,332	2,285,015	558,033	16,991,195	2,521,016	1,697,754	8,118,702
July 31.....	4,966,031	2,389,368	554,516	15,839,944	1,964,828	2,767,694	6,515,160
Aug. 31.....	6,498,844	2,145,320	585,269	18,263,446	830,276	2,348,769	7,129,885
Sept. 30.....	6,153,289	2,055,084	947,546	12,930,167	829,740	2,655,774	8,661,215
Oct. 31.....	6,436,765	2,007,208	1,007,039	15,302,942	2,239,604	2,574,499	10,122,930
Nov. 30.....	6,918,534	1,844,737	1,088,173	14,248,671	331,389	2,684,084	9,398,712
Dec. 31.....	7,206,911	2,059,794	1,107,891	16,981,468	726,819	2,092,029	9,138,679

NOTE.—Figures for Dec. 31 are provisional.

Textiles.

[Silk, Department of Commerce; cotton, Bureau of the Census; wool, Bureau of Markets; idle machinery, January-September, 1918, inclusive, National Association of Wool Manufacturers.]

[Cotton, monthly average crop, years 1912-1914=100; silk, monthly average 1911-1913=100.]

	Cotton consumption.		Cotton spindles active during month.	Wool consumption (pounds).	Percentage of idle woolen machinery on first of month to total reported.						Imports of raw silk.	
	Bales.	Relative.			Looms.		Sets of cards.	Combs.	Spinning spindles.		Pounds.	Relative.
					Wider than 50-inch reed space.	Under 50-inch reed space.			Woolen.	Worsted.		
1918.												
December.....	472,908	105	33,657,960	32,355,081	22.5	24.9	13.8	17.8	16.1	27.4	2,680,863	131
1919.												
January.....	556,721	124	33,856,472	32,573,970	40.3	32.6	32.2	30.7	36.5	37.5	1,461,827	71
February.....	433,516	103	33,282,583	23,186,818	52.3	41.5	38.7	39.8	41.1	48.6	1,742,812	91
March.....	433,720	96	32,642,376	29,320,063	58.1	42.4	39.1	47.8	41.8	52.7	1,784,412	87
April.....	475,753	106	33,213,026	39,159,945	48.4	35.9	26.5	34.2	28.4	36.1	2,988,838	146
May.....	487,998	109	33,556,011	45,084,834	56.6	32.9	17.1	22.5	16.8	25.8	4,878,646	238
June.....	474,407	105	33,943,405	48,849,892	29.6	26.6	15.4	12.8	15.2	21.1	3,848,354	188
July.....	509,793	113	34,184,407	54,973,093	22.0	26.0	9.7	7.6	8.9	13.5	6,202,407	264
August.....	502,536	112	34,187,310	48,938,476	22.1	24.9	9.4	6.5	8.9	10.9	3,802,500	186
September.....	491,313	109	34,216,662	52,985,961	19.9	22.8	8.1	5.5	7.9	12.8	6,755,271	330
October.....	555,344	123	34,307,367	60,018,415	16.0	20.7	8.2	5.9	7.7	7.2	3,955,845	193
November.....	490,688	109	34,483,775	52,428,854	14.8	18.2	7.6	5.3	6.7	6.7	4,841,407	237
December.....	511,585	114	34,594,214	55,566,253	13.9	19.1	10.5	5.3	8.4	6.2	3,576,585	175
1920.												
January.....					14.5	18.5	8.8	7.2	9.1	10.2		

Production of wood pulp and paper.

[Federal Trade Commission.]

[Net tons.]

	Wood pulp.	News-print.	Book.	Paper board.	Wrapping.	Fine.		Wood pulp.	News-print.	Book.	Paper board.	Wrapping.	Fine.
1918.							1919.						
December.....	273,973	100,935	60,525	127,523	49,064	26,721	June.....	277,142	114,896	71,938	152,957	60,656	27,122
1919.							July.....	260,685	113,929	75,613	169,593	63,769	30,036
January.....	233,270	116,154	70,443	140,859	50,490	27,675	August.....	260,987	113,413	82,737	189,782	64,861	33,122
February.....	238,228	103,243	62,616	125,208	45,480	24,600	September.....	266,915	111,434	81,024	184,897	63,353	31,923
March.....	278,675	114,746	63,699	136,175	48,069	23,514	October.....	308,710	125,216	89,440	202,524	67,110	34,808
April.....	284,984	116,273	67,628	133,802	48,158	22,470	November.....	147,672	116,603	84,085	182,940	63,394	32,468
May.....	294,067	105,819	76,821	151,651	56,579	25,010	December.....	306,617	122,781	88,779	174,649	62,288	31,014

Sale of revenue stamps for manufacturers of tobacco in the United States (excluding Porto Rico and Philippine Islands).

[Commissioner of Internal Revenue.]

	Cigars.		Cigarettes.	Chewing and smoking tobacco.		Cigars.		Cigarettes.	Chewing and smoking tobacco.
	Large.	Small.	Small.			Large.	Small.	Small.	
1918.					1919.				
October.....	Number. 594,764,527	Number. 63,111,160	Number. 3,027,300,975	Pounds. 39,440,893	April.....	Number. 510,357,494	Number. 73,314,273	Number. 2,650,182,742	Pounds. 29,883,710
1919.					May.....	Number. 551,659,749	Number. 57,611,547	Number. 2,767,699,400	Pounds. 33,340,102
January.....	Number. 518,706,482	Number. 72,458,974	Number. 3,079,212,253	Pounds. 29,308,616	June.....	Number. 576,976,572	Number. 48,855,070	Number. 3,140,393,217	Pounds. 31,312,150
February.....	Number. 476,329,947	Number. 60,138,630	Number. 3,126,274,662	Pounds. 27,472,269	July.....	Number. 569,908,339	Number. 47,500,287	Number. 3,585,030,983	Pounds. 33,838,667
March.....	Number. 549,098,351	Number. 84,493,873	Number. 3,845,079,275	Pounds. 29,227,678	August.....	Number. 533,227,393	Number. 54,953,647	Number. 3,918,403,687	Pounds. 35,568,246
					September.....	Number. 575,777,829	Number. 53,735,960	Number. 4,283,247,887	Pounds. 36,623,005
					October.....	Number. 677,622,154	Number. 64,170,793	Number. 5,028,875,337	Pounds. 39,335,546

Output of locomotives and cars.

[Locomotives, United States Railroad Administration; cars, Railway Car Manufacturers' Association.]

	Locomotives.		Output of cars.				Locomotives.		Output of cars.		
	Domestic shipped.	Foreign completed.	Domestic.	Foreign.	Total.		Domestic shipped.	Foreign completed.	Domestic.	Foreign.	Total.
	Number.	Number.	Number.	Number.	Number.		Number.	Number.	Number.	Number.	Number.
1918.						1919.					
December	281	177	7,876	3,402	11,278	June	160	44	1,785	5,307	7,092
1919.						July	121	73	2,777	6,936	9,713
January	282	84	8,172	3,635	11,807	August	100	173	18,509	5,015	23,524
February	135	164	6,623	4,657	11,280	September	111	51	19,980	4,302	24,282
March	258	128	5,978	5,795	11,773	October	89	55	10,445	3,715	14,160
April	197	36	7,777	7,373	15,150	November	39	23	8,967	2,622	11,589
May	207	31	4,578	8,533	13,106	December	103	42	4,506	2,428	6,934

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.
1918.				1919.			
December	153	283,359	1,173	June	272	422,839	1,750
1919.				July	245	397,628	1,645
January	132	264,346	1,094	August	238	455,338	1,884
February	135	271,430	1,203	September	202	378,858	1,568
March	186	298,005	1,233	October	210	357,519	1,479
April	201	375,605	1,554	November	143	347,051	1,436
May	250	395,408	1,636	December	149	294,064	1,213

Tonnage of vessels cleared in the foreign trade.

[Department of Commerce.]

[Monthly average, 1911-1913=100.]

	Net tonnage.				Per-centage of American to total.	Rela-tive.		Net tonnage.				Per-centage of American to total.	Rela-tive.
	American.	Foreign.	Total.	Rela-tive.				American.	Foreign.	Total.	Rela-tive.		
1918.							1919.						
December	1,141,319	2,053,517	3,194,836	82	35.7	141	June	2,339,320	2,511,501	4,850,821	125	48.2	191
1919.							July	2,362,571	2,920,247	5,282,818	136	44.7	177
January	1,166,391	1,896,123	3,062,514	78	38.1	151	August	2,957,249	2,797,818	5,755,067	148	51.4	203
February	1,262,487	1,671,070	2,933,557	75	43.0	170	September	2,627,480	2,481,676	5,109,156	131	51.4	203
March	1,161,416	1,737,171	2,898,587	75	40.1	158	October	2,645,778	2,073,560	4,719,338	121	56.1	222
April	1,744,753	2,053,220	3,802,973	98	45.9	181	November	2,251,871	1,910,489	4,162,360	107	54.1	214
May	2,424,837	2,469,194	4,894,031	126	49.5	196	December	2,043,675	1,733,923	3,777,598	97	54.1	214

Net ton-miles, revenue and nonrevenue.

[United States Railroad Administration.]

	1918.	1919.
December	33,639,389,000	31,953,366,000
1919.		
January	30,383,169,000	34,914,294,000
February	25,681,943,000	36,361,653,000
March	28,952,925,000	38,860,311,000
April	28,629,739,000	40,343,750,000
May	32,440,708,000	32,539,248,000
June		33,462,298,000
July		
August		
September		
October		
November		
December		

Commerce of canals at Sault Ste. Marie.

[Monthly average, May–November, 1911–1913=100.]

EASTBOUND.

	Grain other than wheat.		Wheat.		Flour.		Iron ore.		Total.	
	Bushels.	Relative.	Bushels.	Relative.	Barrels.	Relative.	Short tons.	Relative.	Short tons.	Relative.
December 1918.....	3,663,693		22,164,222		594,320		79,307		918,496	
April 1919.....	4,176,041		16,729,000				1,139,326		1,756,266	
May.....	9,370,374	105	29,096,116	151	910,524	78	6,622,227	112	7,895,542	113
June.....	6,694,901	75	6,402,051	33	1,031,630	89	8,004,897	135	8,554,979	122
July.....	7,100,008	80	2,391,840	12	915,420	79	8,912,609	150	9,343,396	133
August.....	5,284,741	59	1,487,218	8	935,700	81	4,727,994	80	5,080,651	72
September.....	2,918,591	33	10,180,991	53	917,420	79	7,978,562	134	8,525,794	122
October.....	4,351,059	49	22,252,196	116	1,544,510	133	6,059,450	102	7,063,120	101
November.....	8,654,903	97	17,388,391	90	1,402,260	121	3,299,532	56	4,201,881	60
December.....	4,183,727		7,807,045		430,080		40,880		409,576	

WESTBOUND.

	Hard coal.		Soft coal.		Total.		Total freight.	
	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.	Short tons.	Relative.
December 1918.....	57,750		9,300		84,262		1,002,758	
April 1919.....	142,864		415,824		616,897		2,373,163	
May.....	248,263	80	2,239,738	117	2,670,784	107	10,566,326	111
June.....	227,200	73	2,266,984	118	2,664,437	107	11,219,416	118
July.....	344,462	111	2,037,265	106	2,572,756	103	11,916,152	125
August.....	185,387	60	1,189,558	62	1,529,310	61	6,609,961	70
September.....	231,030	75	1,156,841	60	1,677,123	67	10,202,917	107
October.....	498,505	161	1,848,511	96	2,650,799	107	9,713,919	102
November.....	466,135	150	307,241	16	932,615	37	5,134,496	54
December.....	69,143				89,616		499,192	

BANK TRANSACTIONS DURING DECEMBER-JANUARY.

In the table below are shown debits to individual account for the four weeks ending January 21, 1920, and for the corresponding period ending a year earlier, as reported by over 150 of the country's more important clearing houses. There is also given a recapitulation, by Federal Reserve districts, for those centers that have reported data on a uniform basis for each of the eight weeks under review.

Total debits to individual account during the week ending December 31, 1919, were about 625 millions less than during the immediately preceding week. End-of-year interest and dividend payments, together with the redemption by the Treasury of the outstanding portion of loan certificates maturing January 2 and the flotation of a new issue of tax

certificates, were mainly responsible for the increase during the following week to 10½ billions, the high mark of the period. A decline of over 300 millions from this large total is shown for the next week under review, followed by a partial recovery of about 190 millions for the fourth week, ending January 21, during which the Treasury redeemed the outstanding portion of loan certificates maturing January 15.

Debits to individual account for the period under review range from 16 to 42 per cent higher than a year earlier. Figures for a year ago show a large increase for the second week as compared with the first week of the period, due largely to the end-of-year interest and dividend payments.

Debits to individual account at clearing-house banks.

[In thousands of dollars.]

Federal Reserve district.	Week ending—				Week ending—			
	Jan. 21, 1920.	Jan. 14, 1920.	Jan. 7, 1920.	Dec. 31, 1919.	Jan. 22, 1919.	Jan. 15, 1919.	Jan. 8, 1919.	Dec. 31, 1918.
No. 1—Boston:								
Bangor.....	3,395	3,614	3,903	2,903	2,808	2,744	2,940	3,320
Boston.....	355,216	350,074	346,266	342,182	293,855	241,858	288,651	205,667
Fall River.....	9,333	11,424	10,011	9,864	6,957	6,338	6,800	6,995
Hartford.....	24,654	23,413	34,702	21,281	20,473	17,486	24,828	18,313
Holyoke.....	4,198	4,467	4,118	3,869	3,358	3,027	3,276	2,760
Lowell.....	5,700	5,612	5,837	6,822	5,346	4,283	5,219	5,185
New Bedford.....	9,045	8,994	9,959	7,603	6,272	6,422	6,618	5,118
New Haven.....	20,565	19,571	22,357	16,130	17,067	18,045	17,879	14,884
Portland.....	7,595	8,217	8,101	7,206	—	—	—	8,421
Providence.....	45,842	44,842	45,836	49,463	35,796	31,749	34,612	27,781
Springfield.....	19,335	16,529	16,526	17,077	11,143	9,907	13,836	9,765
Waterbury.....	7,687	8,024	8,135	6,903	7,059	7,067	10,200	6,184
Worcester.....	19,630	18,497	19,718	17,710	18,904	14,171	17,890	13,367
No. 2—New York:								
Albany.....	17,832	16,217	24,507	19,860	19,562	16,065	26,719	18,011
Binghamton.....	4,082	4,608	4,482	3,582	2,809	2,917	3,341	2,497
Buffalo.....	76,336	75,031	74,716	67,075	59,953	62,656	72,506	54,988
New York.....	5,412,377	5,347,254	5,545,691	5,388,508	4,298,679	3,805,735	4,843,795	3,562,715
Passaic.....	5,513	6,111	5,680	5,356	4,193	3,481	4,206	3,955
Rochester.....	31,333	31,706	36,705	29,046	24,249	24,022	32,220	21,621
Syracuse.....	16,047	17,894	22,190	16,762	14,454	14,043	20,859	12,226
No. 3—Philadelphia:								
Altoona.....	2,715	3,689	2,805	2,812	2,202	2,548	2,767	2,192
Chester.....	5,497	5,120	5,356	3,976	4,725	4,658	5,158	4,197
Harrisburg.....	4,239	4,100	3,579	3,500	4,721	6,183	5,981	5,938
Johnstown.....	3,275	3,220	3,311	2,694	2,918	3,064	3,273	2,503
Lancaster.....	5,881	5,633	5,914	4,786	3,977	3,812	4,335	3,248
Philadelphia.....	387,236	361,896	385,293	345,200	327,248	286,392	362,478	228,384
Reading.....	5,451	5,620	5,474	4,433	3,205	4,462	3,382	2,414
Scranton.....	12,169	15,312	15,705	12,426	11,573	11,717	14,510	10,883
Trenton.....	11,183	11,599	11,764	12,440	10,207	8,938	9,695	8,855
Wilkes-Barre.....	8,188	8,765	8,130	8,473	6,420	5,970	8,002	6,096
Williamsport.....	3,806	3,860	3,632	3,504	3,224	3,121	3,153	2,727
Wilmington.....	8,942	12,905	11,143	9,257	10,108	8,266	7,023	15,854
York.....	4,046	4,010	4,319	3,680	3,007	2,984	3,495	2,672
No. 4—Cleveland:								
Akron.....	28,832	26,774	25,760	22,364	16,122	14,620	14,433	13,555
Cincinnati.....	69,333	63,121	63,680	77,276	61,537	52,840	63,163	54,782
Cleveland.....	157,648	179,193	221,120	186,198	132,446	133,582	154,467	143,687
Columbus.....	33,013	30,973	32,285	31,240	23,255	22,119	24,520	19,597
Dayton.....	12,573	12,481	14,438	11,674	11,204	12,126	13,110	12,366
Erie.....	7,569	6,975	7,437	5,864	6,911	5,893	7,283	6,305
Greensburg.....	3,725	3,068	3,779	1,675	2,558	2,712	2,740	2,755
Lexington.....	13,470	12,486	11,517	7,093	9,373	10,040	8,129	4,045
Oil City.....	2,874	3,202	3,202	2,464	2,836	2,889	3,818	1,918
Pittsburgh.....	190,526	180,701	193,928	195,539	189,723	159,276	166,352	150,902

Debits to individual account at clearing-house banks—Continued.

[In thousands of dollars.]

Federal Reserve district.	Week ending—				Week ending—			
	Jan. 21, 1920.	Jan. 14, 1920.	Jan. 7, 1920.	Dec. 31, 1919.	Jan. 22, 1919.	Jan. 15, 1919.	Jan. 8, 1919.	Dec. 31, 1918.
No. 4—Cleveland—Continued.								
Springfield.....	4,109	3,757	4,423	4,212	3,115	3,111	3,290	3,521
Toledo.....	33,000	30,141	31,868	27,327	23,482	20,690	29,957	23,680
Wheeling.....	8,714	8,290	9,920	7,751	8,267	6,667	7,266	6,457
Youngstown.....	14,072	17,072	18,698	12,869	12,351	16,513	19,714	11,700
No. 5—Richmond:								
Baltimore.....	111,390	105,421	124,618	103,898	85,574	75,922	94,712	71,030
Charleston.....	11,744	12,796	11,782	10,701	10,742	7,849	9,210	5,200
Charlotte.....	11,326	11,485	11,769	7,929	6,500	7,300	7,700	5,016
Columbia.....	10,286	8,062	9,890	7,246	6,291	7,792	8,259	5,828
Norfolk.....	22,899	20,429	24,795	16,943	16,951	17,103	18,615	16,371
Raleigh.....	5,900	6,700	6,900	5,800	2,800	4,250	5,580	4,000
Richmond.....	35,642	31,202	33,848	28,308	28,976	25,184	27,743	24,632
No. 6—Atlanta:								
Atlanta.....	35,379	35,800	40,704	32,309	33,370	25,930	27,557	22,433
Augusta.....	13,255	15,921	13,365	8,395	6,442	7,428	8,605	5,871
Birmingham.....	16,347	16,857	21,577	14,452	12,376	13,319	18,419	11,157
Chattanooga.....	13,380	15,096	16,699	10,485	9,081	9,609	12,266	8,413
Jacksonville.....	14,048	14,048	15,045	12,581	9,506	9,809	13,849	8,944
Knoxville.....	7,377	7,139	8,578	6,312	5,700	5,660	7,150	4,400
Macon.....	9,314	10,224	8,891	6,315	5,377	5,363	5,746	4,436
Mobile.....	9,334	9,960	11,424	7,363	5,377	6,002	8,018	6,297
Montgomery.....	6,933	7,350	6,322	5,230	7,621	6,292	5,437	3,335
Nashville.....	25,885	29,164	29,572	21,905	19,559	23,643	23,924	19,637
New Orleans.....	91,781	102,289	100,342	81,942	71,969	78,465	74,701	59,866
Pensacola.....	2,809	2,500	3,112	1,939	1,946	2,055	1,638	1,638
Savannah.....	23,556	26,230	22,438	21,275	14,558	13,723	17,652	13,986
Tampa.....	5,926	6,540	6,434	4,935	4,969	4,733	3,495	4,287
Vicksburg.....	2,592	2,531	2,677	1,716	2,321	2,069	2,658	1,620
No. 7—Chicago:								
Bay City.....	3,907	3,538	3,893	2,945	2,866	2,603	3,387	2,706
Bloomington.....	2,711	3,109	3,481	2,302	2,803	3,118	2,609	2,160
Cedar Rapids.....	8,505	7,305	9,847	7,907	5,739	3,494	6,000	3,917
Chicago.....	808,752	767,844	791,374	683,870	640,873	621,317	671,265	524,333
Davenport.....	6,852	7,139	10,545	6,594	7,244	6,915	8,858	6,741
Decatur.....	4,709	4,378	5,176	3,384	3,842	3,590	2,907	2,281
Des Moines.....	29,280	23,872	21,350	19,368	19,959	17,167	17,746	14,397
Detroit.....	181,862	146,076	164,688	113,822	102,211	112,736	110,846	84,843
Dubuque.....	3,889	4,153	3,097	2,319	2,035	2,004	2,400	1,750
Flint.....	13,000	5,700	8,000	8,378	5,456	3,699	4,732	2,894
Fort Wayne.....	7,517	7,539	6,896	6,940	5,220	4,587	5,413	5,389
Grand Rapids.....	23,558	19,487	20,497	17,717	13,208	18,018	17,836	15,661
Indianapolis.....	40,497	40,733	35,602	31,292	32,181	32,966	36,499	28,023
Jackson.....	5,088	4,560	4,349	3,721	3,052	3,344	4,050	2,833
Kalamazoo.....	4,581	4,659	4,618	4,652	3,497	3,565	3,876	2,673
Lansing.....	5,870	5,597	6,131	6,015	5,277	5,839	59,475	46,591
Milwaukee.....	74,922	72,744	79,346	50,870	58,277	53,839	59,475	46,591
Peoria.....	11,918	10,510	12,664	8,650	12,184	12,623	14,211	10,999
Rockford.....	5,718	7,977	7,394	5,237	4,752	4,461	4,930	3,677
Sioux City.....	16,870	16,584	14,634	12,659	18,321	17,904	.....	.....
South Bend.....	3,230	3,421	3,982	4,065	3,309	3,133	5,491	2,959
Springfield.....	4,135	4,590	5,100	5,211	3,885	4,378	4,248	2,886
Waterloo.....	3,563	3,470	3,701	3,390	3,393	3,309	3,410	2,797
No. 8—St. Louis:								
Evansville.....	5,825	6,359	6,704	5,387	3,900	3,126	5,293	4,800
Little Rock.....	10,462	11,136	10,039	8,121	7,500	8,353	8,558	6,766
Louisville.....	41,756	41,373	47,604	34,460	45,649	40,452	40,705	41,436
Memphis.....	50,258	48,975	55,294	39,180	31,103	36,069	39,150	28,482
St. Louis.....	169,946	164,782	178,999	142,134	144,850	149,425	174,877	134,711
No. 9—Minneapolis:								
Aberdeen.....	1,597	1,914	2,062	1,409	1,287	1,254	1,642	1,039
Billings.....	2,429	2,416	2,851	2,280	2,037	2,181	2,400	2,498
Duluth.....	19,084	18,299	16,087	14,248	31,924	34,780	41,287	34,563
Fargo.....	3,116	3,021	3,328	2,786	2,365	2,523	2,717	1,559
Grand Forks.....	1,554	1,939	2,178	1,669	1,384	1,507	1,683	1,162
Great Falls.....	2,693	3,214	2,895	2,095	2,893	3,118	3,529	3,071
Helena.....	2,403	2,639	3,096	2,437	2,711	3,892	3,237	1,835
Minneapolis.....	97,751	103,142	88,359	93,795	80,296	77,668	94,098	77,442
St. Paul.....	36,804	40,310	37,961	38,058	44,421	33,730	35,504	39,379
Superior.....	2,024	1,896	2,036	1,795	1,995	1,775	2,285	1,669
Winona.....	1,130	1,360	2,217	1,287	815	1,254	.....	.....
No. 10—Kansas City:								
Atchison.....	570	690	684	514	.....	.....	.....	.....
Bartlesville.....	3,819	2,864	3,290	3,463	2,723	1,703	2,548	2,904
Cheyenne.....	2,132	2,063	2,579	2,335	.....	.....	.....	.....
Colorado Springs.....	3,054	3,333	3,739	3,209	2,154	2,124	2,628	1,752
Denver.....	58,476	60,646	52,063	59,096	30,107	29,295	33,460	27,618
Joplin.....	3,732	3,907	3,904	2,993	3,143	3,758	3,404	2,755
Kansas City, Kans.....	4,622	4,481	3,700	3,734	4,936	6,062	5,404	2,816
Kansas City, Mo.....	110,001	94,924	79,946	90,756	98,183	87,604	94,446	70,093

Debits to individual account at clearing-house banks—Continued.

Federal Reserve district.	Week ending—				Week ending—			
	Jan. 21, 1920.	Jan. 14, 1920.	Jan. 7, 1920.	Dec. 31, 1919.	Jan. 22, 1919.	Jan. 15, 1919.	Jan. 8, 1919.	Dec. 31, 1918.
No. 10—Kansas City—Continued.								
Muskogee.....	7,855	5,753	8,567	6,099	3,569	4,143	3,786	3,105
Oklahoma City.....	21,574	19,437	20,951	16,580	15,188	15,538	16,496	12,623
Omaha.....	64,569	66,099	58,523	50,639	63,484	47,491	47,991	48,049
Pueblo.....	4,094	4,811	7,026	5,055	4,498	3,737	4,618	3,991
St. Joseph.....	25,856	24,249	22,544	13,282	23,071	24,316	23,664	12,961
Topeka.....	5,989	5,995	7,363	6,143	5,023	5,154	5,181	3,764
Tulsa.....	23,031	29,781	28,447	32,333	20,090	20,071	20,842	24,606
Wichita.....	13,957	14,841	17,409	10,861	8,300	7,691	9,359	7,231
No. 11—Dallas:								
Albuquerque.....	1,961	2,014	2,153	1,581	1,360	1,574	1,639	1,324
Austin.....	4,450	4,300	4,303	3,997	3,742	3,818	3,930	3,930
Beaumont.....	4,785	5,085	4,900	4,133	4,802	4,139	5,231	3,391
Dallas.....	57,987	55,024	59,090	54,135	31,251	34,704	33,879	30,944
El Paso.....	9,070	9,825	9,951	8,230	6,405	5,615	7,086	5,244
Fort Worth.....	24,497	24,484	27,084	33,841	18,931	19,436	18,019	17,033
Galveston.....	12,559	7,944	10,649	10,727	7,873	8,854	12,559	7,528
Houston.....	33,777	33,953	39,025	37,595	24,294	36,345	27,214	24,140
San Antonio.....	9,241	9,334	9,516	8,032	.....	.....	.....	.....
Shreveport.....	10,771	10,120	10,183	7,067	5,324	7,652	6,758	4,606
Texarkana.....	2,380	1,844	2,332	1,816	1,517	1,249	1,935	1,260
Tucson.....	1,624	1,660	1,964	1,349	1,595	1,521	1,512	1,198
Waco.....	4,250	4,376	5,650	3,700	3,034	3,554	4,275	3,526
No. 12—San Francisco:								
Berkeley.....	3,018	3,461	3,652	2,227	.....	.....	.....	.....
Boise.....	3,470	4,011	3,707	3,986	2,600	2,937	3,199	2,239
Fresno.....	11,258	11,793	13,453	9,892	6,014	7,196	7,346	5,613
Long Beach.....	5,570	5,773	6,067	4,704	2,331	2,607	3,212	2,077
Los Angeles.....	106,205	95,980	99,068	84,790	61,230	56,377	66,551	53,012
Oakland.....	29,541	29,314	19,815	16,359	11,853	13,107	13,605	11,466
Ogden.....	5,106	4,551	5,098	5,071	4,353	2,870	5,184	4,270
Pasadena.....	5,626	5,722	5,422	4,057	2,831	2,577	3,013	1,960
Portland.....	50,295	47,142	44,931	45,303	39,691	35,172	42,848	37,935
Reno.....	3,305	2,386	3,902	2,804	1,083	1,852	2,145	2,021
Sacramento.....	14,788	16,132	19,817	15,924	14,208	13,882	13,459	12,284
Salt Lake City.....	20,372	19,947	20,146	19,363	17,785	15,048	17,096	16,087
San Diego.....	8,033	8,376	7,490	7,286	5,732	5,645	6,493	3,834
San Francisco.....	226,592	215,137	198,313	189,300	182,947	143,389	161,114	142,378
San Jose.....	5,386	6,501	7,464	5,453	.....	.....	.....	.....
Seattle.....	51,187	47,676	51,315	45,260	43,839	49,040	49,612	42,036
Spokane.....	13,907	13,413	14,121	11,868	9,861	8,782	9,730	7,926
Stockton.....	6,439	7,010	6,187	5,592	4,001	4,000	4,154	4,373
Tacoma.....	10,013	11,244	10,015	9,460	12,314	11,146	11,871	11,378
Yakima.....	3,117	3,440	3,858	3,999	1,757	1,957	2,438	1,623

RECAPITULATION BY FEDERAL RESERVE DISTRICTS.

[In thousands of dollars.]

Federal Reserve district.	Number of centers included.	Week ending—				Week ending—			
		Jan. 21, 1920.	Jan. 14, 1920.	Jan. 7, 1920.	Dec. 31, 1919.	Jan. 22, 1919.	Jan. 15, 1919.	Jan. 8, 1919.	Dec. 31, 1918.
Boston.....	12	524,650	515,061	527,373	501,807	429,038	363,097	432,749	319,339
New York.....	7	5,563,520	5,498,821	5,713,971	5,530,189	4,423,899	3,928,919	5,003,646	3,676,013
Philadelphia.....	13	462,628	445,729	466,425	417,181	393,535	352,116	433,237	295,963
Cleveland.....	14	579,466	577,974	642,055	593,546	503,210	463,078	518,247	455,270
Richmond.....	7	209,187	196,095	223,192	180,825	154,434	145,400	171,819	132,077
Atlanta.....	15	278,216	301,669	314,270	236,855	209,256	214,296	231,532	177,570
Chicago.....	21	1,239,474	1,153,891	1,138,292	994,657	940,586	920,526	987,359	769,565
St. Louis.....	5	278,247	272,625	298,640	229,282	230,007	237,455	268,613	216,195
Minneapolis.....	10	169,455	178,790	160,853	160,550	171,313	162,518	188,382	164,217
Kansas City.....	14	355,629	341,121	317,472	284,246	289,469	258,687	272,067	224,268
Dallas.....	12	173,111	166,129	177,234	168,171	110,133	128,461	128,987	104,124
San Francisco.....	18	565,824	540,552	532,725	484,998	424,430	382,584	425,070	362,517
Total.....	148	10,413,049	10,201,620	10,512,552	9,782,307	8,294,322	7,557,136	9,061,728	6,897,118

DISCOUNT AND OPEN MARKET OPERATIONS OF THE FEDERAL RESERVE BANKS DURING DECEMBER AND THE CALENDAR YEAR 1919.

Discount operations of the Federal Reserve Banks during the month of December totaled \$7,290,872,591, compared with \$7,414,498,375 during November, and \$6,215,083,531 during December, 1918. The totals are exclusive of bills discounted for other Federal Reserve Banks, which totaled 117 millions for the month under review, 58 millions in November, and 107.1 millions in December, 1918.

Discount operations during the month at the New York bank show a decrease since November of 584.7 millions, a larger increase under the head of 15-day war paper being offset to some extent by increases in other classes of discounts; smaller reductions in discount operations for the month are also reported by the Atlanta, St. Louis, and Dallas banks. On the other hand, the eastern banks outside of New York report considerably larger discount operations during December than for the month before.

Total discounts for the year 1919 were 79,174 millions, compared with 39,753 millions in 1918, the large increase for the year just passed being due exclusively to the growth of the volume of war paper discounted, from 33,390 to 74,188 millions. Of the 1919 total the New York share of war paper was over 91 per cent, as against 67 per cent in 1918.

For the month of December war paper constituted about 85 per cent of the total paper discounted, as against 90 per cent for the preceding two months. Discounts of trade acceptances during December totaled \$23,560,893 as against \$21,923,920 in November. Of the larger total, \$834,193 were based upon transactions in the foreign trade, while the remainder were domestic trade acceptances. An increase from \$2,052,898 to \$62,145,690 in the discounts of bankers' acceptances is due apparently to the rise in open-market rates which made it more profitable for member banks to discount bankers' bills than to sell them in the open market. Discounts of ordinary commercial paper, because of the partial elimination of the differential between war paper and other paper, show an increase from \$613,002,521 to \$982,387,419, or of nearly 60 per cent.

Over 92 per cent of the December discounts were made up of 15-day paper; i. e., bills maturing within 15 days from date of discount or rediscount with the Federal Reserve Bank. Six-month paper, composed of agri-

cultural and live-stock paper, totaled \$12,380,465, compared with \$11,838,214 for November and \$9,645,742 for October. The average maturity of all the paper discounted during the month works out at 11.52 days, compared with 11.36 days in November, 9.54 days in October, the month preceding rate revision, and 10.13 days for the entire calendar year. About 53 per cent of the December discounts took the 4½ per cent rate and nearly 40 per cent the 4¾ per cent rate, while in November about 78 per cent of all discounts took the 4½ per cent and only 8 per cent the 4¾ rate. As a result the average rate of discount charged during December works out at 4.67 per cent, as against 4.53 per cent in November, 4.19 per cent in October, and 4.26 per cent for the calendar year.

Holdings of discounted paper on the last Friday in December totaled \$2,194,878,000, compared with a total of \$2,214,139,000 of discounted bills held on the last Friday in November and \$1,702,938,000 held on the corresponding date in December, 1918. About 68.9 per cent of the holdings at the close of the month under review was made up of war paper, compared with about 78 per cent at the close of November and 82.2 per cent about the close of 1918. Discounted trade acceptances held about the end of December totaled \$33,697,000, compared with \$27,694,000 at the close of November and \$15,985,000 on the last Friday in 1918. Holdings of agricultural paper totaled \$24,825,000, as against \$27,023,000 at the end of November and \$29,384,000 about a year previous, while holdings of live-stock paper were \$26,243,000, compared with \$25,527,000 at the close of the previous month and \$27,335,000 at the close of the previous year. Of the total agricultural paper held about 80 per cent represented the combined share of the Chicago and Kansas City banks, while of the total live-stock paper holdings over 72 per cent is credited to the Kansas City and Minneapolis banks.

During the month under review the membership of the system shows a net increase from 9,009 to 9,069 institutions, while the number of member banks accommodated through discount of paper rose from 3,649 in November to 3,659 in December. In the following exhibit are shown the number of member banks in each Federal Reserve district at the end of November and December, also the

number in each district accommodated during each of these two months.

Federal Reserve Bank.	Number of member banks in district.		Number of member banks accommodated.	
	Dec. 31.	Nov. 30.	December.	November.
Boston.....	432	430	277	265
New York.....	753	748	434	405
Philadelphia.....	678	676	405	375
Cleveland.....	843	841	276	282
Richmond.....	584	583	255	252
Atlanta.....	427	427	173	185
Chicago.....	1,375	1,366	586	613
St. Louis.....	536	533	205	211
Minneapolis.....	921	915	270	280
Kansas City.....	1,039	1,032	365	354
Dallas.....	758	758	200	235
San Francisco.....	723	700	213	192
Total.....	9,069	9,009	3,659	3,649

Bills purchased in the open market during December, largely by the New York and Boston banks for their own account and for account of other Federal Reserve Banks, totaled \$400,708,093, compared with \$340,695,505 purchased in November and \$335,261,712 in October. Of the total bills purchased during the month, \$392,933,917 were bankers' acceptances, of which about 78 per cent were based upon foreign-trade transactions. Bills purchased during the year 1919 totaled 2,825.2 millions, compared with 1,809.5 millions in 1918. Over 98 per cent of the total bills purchased during the more recent year were bankers' acceptances.

Purchases of trade acceptances reported for the month by four banks totaled \$5,080,924,

compared with \$3,686,930 in November. About 60 per cent of the larger amount was drawn in the foreign trade. Nearly one-half of the acceptances bought was composed of paper of more than 60 days' maturity at the time of purchase by the Federal Reserve Banks, the average maturity of all the bills bought being 57.11 days in December, compared with 55.55 days in November and 48.36 days in October. About 27 per cent of the bills purchased in December were charged a rate of 4½ per cent, while 38 per cent of the bills purchased took the 4¾ per cent rate. The average rate of discount charged on these bills works out at 4.84 per cent, compared with 4.47 per cent in November and 4.26 per cent in October. On the last of December the Federal Reserve Banks held a total of \$574,103,000 of purchased bills, compared with \$501,910,000 on the last of November and \$292,197,000 at the close of 1918. Of the most recent total, all but \$7,734,000 were bankers' acceptances, of which \$405,339,000 were bills accepted by member banks, \$65,334,000 bills accepted by non-member banks and trust companies, \$55,537,000 bills accepted by private banks, and \$40,159,000 bills accepted by foreign banks and their agencies. Of the \$7,734,000 of purchased trade acceptances, held at the end of the year, \$2,540,000 were domestic trade acceptances and \$5,194,000 foreign-trade acceptances. The latter are largely acceptances drawn by exporters in the Far East, and are reported for the most part by the Boston, New York, and San Francisco banks.

Total investment operations of each Federal Reserve Bank during the month of December, 1919 and 1918.

Federal Reserve Bank.	Bills discounted for member banks.	Bills bought in open market.	Municipal warrants.	United States bonds.	United States Victory notes.	United States certificates of indebtedness.	Total United States securities.	Total investment operations.	
								December, 1919.	December, 1918.
Boston.....	\$525,878,389	\$39,438,586	.....	¹ \$250	\$100	\$4,257,000	\$4,257,350	\$570,574,325	\$456,202,416
New York.....	3,881,496,274	210,272,820	.....	.....	.....	555,628,000	555,628,000	4,647,397,094	5,508,007,483
Philadelphia.....	844,024,277	2,678,026	.....	.....	.....	5,336,000	5,336,000	352,038,303	516,200,472
Cleveland.....	328,554,767	27,622,483	.....	.....	.....	67,199,000	67,199,000	421,376,250	339,369,955
Richmond.....	374,952,860	6,743,120	.....	¹ 100	.....	400,000	400,100	382,096,080	299,680,044
Atlanta.....	151,148,637	6,019,116	.....	.....	.....	² 846	² 846	157,168,599	172,763,597
Chicago.....	505,552,032	42,017,209	.....	³ 500	.....	92,002,500	92,003,000	639,572,241	296,880,658
St. Louis.....	179,379,614	5,381,753	.....	.....	3,250	3,857,500	3,860,750	188,622,117	140,181,080
Minneapolis.....	95,743,302	1,547,985	.....	.....	.....	5,548,500	5,548,500	102,839,787	17,623,363
Kansas City.....	147,156,135	10,337,197	.....	.....	.....	5,406,500	5,406,500	162,899,832	86,837,955
Dallas.....	59,601,991	940,460	.....	.....	.....	3,575,000	3,575,000	64,117,451	95,104,214
San Francisco.....	198,384,313	47,709,338	.....	.....	.....	15,150,500	15,150,500	261,244,151	189,882,582
Total, Dec., 1919.....	7,290,872,591	400,708,093	.....	850	3,350	758,361,346	758,365,546	8,449,946,230	.....
Total, Dec., 1918.....	6,215,083,531	155,733,438	.....	36,850	.....	1,747,880,000	1,747,916,850	.....	8,118,733,819
Total, 12 months ending Dec. 31, 1919.....	79,173,971,930	2,825,177,002	\$1,000	1,328,975	377,600	4,732,188,846	4,733,895,421	86,733,045,353	.....
Total, 12 months ending Dec. 31, 1918.....	39,752,933,847	1,809,538,795	1,709,602	73,996,313	.....	5,776,352,160	5,850,348,473	.....	47,414,530,717

¹ 4½ per cent Liberty bonds.

² U. S. war savings certificate.

³ 3½ per cent Liberty bonds.

Average amount of earning assets held by each Federal Reserve Bank during December, 1919, earnings from each class of earning assets and annual rate of earnings on basis of December, 1919, returns.

Federal Reserve Bank.	Average daily holdings of the several classes of earning assets.			
	Discounted bills.	Purchased bills.	United States securities.	Total.
Boston.....	\$170,522,598	\$29,844,159	\$22,478,212	\$222,844,969
New York.....	759,737,480	160,543,353	89,578,445	1,009,859,278
Philadelphia.....	206,825,892	4,442,339	32,541,239	243,809,470
Cleveland.....	162,522,519	57,490,252	27,950,279	247,963,050
Richmond.....	106,920,025	13,946,473	13,468,697	134,335,195
Atlanta.....	95,766,349	13,917,379	16,044,867	125,728,595
Chicago.....	293,668,441	101,259,035	46,547,213	441,474,689
St. Louis.....	72,393,861	33,645,456	18,495,070	124,534,387
Minneapolis.....	65,132,000	16,582,000	8,736,000	90,450,000
Kansas City.....	90,817,568	17,475,801	23,843,311	132,136,680
Dallas.....	48,653,660	9,481,245	13,097,226	71,232,131
San Francisco.....	84,060,930	91,331,625	14,463,482	189,856,037
Total: December, 1919.....	2,157,021,323	549,959,117	327,244,041	3,034,224,481
December, 1918.....	1,749,155,925	344,329,057	204,807,343	2,298,292,325
Year, 1919.....	1,908,197,564	325,231,333	254,053,087	2,487,583,982
Year, 1918.....	1,140,053,148	288,422,390	128,232,322	1,557,058,490

Federal Reserve Bank.	Earnings from--			
	Discounted bills.	Purchased bills.	United States securities.	Total.
Boston.....	\$656,614	\$116,750	\$39,692	\$813,056
New York.....	2,953,443	616,327	176,593	3,746,363
Philadelphia.....	799,565	16,940	59,194	875,699
Cleveland.....	630,522	217,235	52,425	900,182
Richmond.....	413,606	54,109	22,987	490,702
Atlanta.....	386,501	56,122	28,308	470,931
Chicago.....	1,029,649	387,816	82,067	1,499,532
St. Louis.....	281,720	129,365	32,525	443,610
Minneapolis.....	267,799	64,457	14,889	347,145
Kansas City.....	381,614	68,106	48,508	498,222
Dallas.....	199,719	37,241	24,882	261,842
San Francisco.....	331,981	356,537	26,427	714,945
Total: December, 1919.....	8,332,733	2,121,005	608,492	11,062,229
December, 1918.....	6,379,428	1,273,946	418,321	8,071,695
Year, 1919.....	80,768,144	13,986,778	5,761,300	100,416,307
Year, 1918.....	48,343,852	11,939,786	3,828,801	64,126,661

Federal Reserve Bank.	Calculated annual rate of earnings from--			
	Discounted bills.	Purchased bills.	United States securities.	Total.
Boston.....	<i>Per cent.</i> 4.53	<i>Per cent.</i> 4.61	<i>Per cent.</i> 2.08	<i>Per cent.</i> 4.30
New York.....	4.58	4.46	2.32	4.37
Philadelphia.....	4.55	4.48	2.14	4.22
Cleveland.....	4.56	4.45	2.21	4.27
Richmond.....	4.55	4.57	2.01	4.30
Atlanta.....	4.60	4.60	2.01	4.27
Chicago.....	4.64	4.51	2.08	4.32
St. Louis.....	4.58	4.53	2.07	4.17
Minneapolis.....	4.84	4.58	2.01	4.52
Kansas City.....	4.95	4.59	2.40	4.44
Dallas.....	4.76	4.62	2.23	4.32
San Francisco.....	4.65	4.60	2.15	4.43
Total: December, 1919.....	4.55	4.54	2.19	4.29
December, 1918.....	4.29	4.33	2.40	4.14
Year, 1919.....	4.23	4.30	2.26	4.04
Year, 1918.....	4.24	4.14	2.99	4.12

Bills discounted during the month of December, 1919, distributed by classes; also average rates and maturities of bills discounted by each Federal Reserve Bank.

Federal Reserve Bank.	Customers' paper secured by Government war obligations.	Member banks' collateral notes.		Trade acceptances.	Bankers' acceptances.	All other discounts.	Total.	Average maturity in days.	Average rate (365-day basis).
		Secured by Government war obligations.	Otherwise secured.						
Boston.....	\$30,340,410	\$445,343,550	\$361,155	\$3,297,357	\$3,767,547	\$43,768,370	\$526,878,389	13.28	Per cent. 4.64
New York.....	58,374,365	3,321,651,381	.....	* 8,229,306	57,287,275	435,953,947	3,881,496,274	7.40	4.63
Philadelphia.....	32,334,764	708,969,108	.....	543,565	.....	102,176,840	844,024,277	9.04	4.61
Cleveland.....	9,213,946	261,223,690	213,000	2,993,438	.....	52,910,693	326,554,767	17.61	4.68
Richmond.....	6,510,418	345,054,060	1,457,547	2,011,330	.....	19,919,505	374,952,800	9.93	4.64
Atlanta.....	2,899,987	128,959,975	2,775,000	693,112	.....	15,820,563	151,148,637	18.70	4.61
Chicago.....	4,089,135	340,611,100	326,000	1,334,383	.....	159,191,414	505,552,032	27.04	4.69
St. Louis.....	6,325,716	130,880,580	950,000	1,662,475	881,823	38,679,020	179,379,614	16.73	4.64
Minneapolis.....	1,269,847	49,327,350	896,744	151,139	.....	44,098,222	95,743,302	35.23	4.88
Kansas City.....	2,960,765	101,066,255	12,653,860	349,753	187,445	29,938,057	147,156,135	27.66	5.02
Dallas.....	269,305	53,925,419	361,200	* 344,859	.....	4,701,208	59,601,991	19.46	4.80
San Francisco.....	2,321,457	158,271,500	590,000	1,950,176	21,600	35,229,580	198,384,313	15.28	4.62
Total: December, 1919..	156,910,115	6,045,283,968	20,584,506	23,560,893	62,145,690	982,387,419	7,290,872,591	11.52	4.67
December, 1918.....	139,208,402	5,620,088,999	51,586,141	11,912,831	719,812	391,537,646	6,215,083,531	8.54	4.21
Year: 1919.....	1,898,051,245	72,290,093,321	257,922,911	138,572,840	71,543,310	4,517,788,303	79,173,971,930	10.13	4.26
1918.....	1,247,674,180	32,142,405,711	865,382,519	187,372,579	19,940,200	5,290,158,658	39,752,933,847	11.81	4.26

* Includes \$266,717 of trade acceptances in the foreign trade.
 * Includes \$493,424 of trade acceptances in the foreign trade.

* Includes \$74,052 of trade acceptances in the foreign trade.

Bankers' and trade acceptances in the foreign and domestic trade and dollar exchange purchased during the month of December, 1919; also average rates and maturities of total bills purchased by each Federal Reserve Bank.

Federal Reserve Bank.	Bankers' acceptances.			Trade acceptances.			Dollar exchange.	Total bills purchased.	Average maturity in days.	Average rate (365-day basis).
	In the domestic trade.	In the foreign trade.	Total.	In the domestic trade.	In the foreign trade.	Total.				
Boston.....	\$14,295,204	\$24,202,724	\$38,497,928	.....	\$540,658	\$540,658	\$400,000	\$39,438,586	55.49	Per cent. 4.92
New York.....	35,473,532	169,527,806	205,001,338	\$1,594,621	1,683,609	3,278,230	1,993,252	210,272,820	48.31	4.81
Philadelphia.....	562,815	2,095,211	2,658,026	.....	20,000	20,000	.....	2,678,026	74.12	4.75
Cleveland.....	5,869,236	21,102,206	26,971,442	278,923	372,118	651,041	.....	27,622,483	66.39	4.84
Richmond.....	1,851,600	4,891,620	6,743,220	.....	.....	.....	.....	6,743,120	67.74	4.82
Atlanta.....	3,438,490	2,580,626	6,019,116	.....	.....	.....	.....	6,019,116	66.54	4.60
Chicago.....	9,232,885	32,784,324	42,017,209	.....	.....	.....	.....	42,017,209	71.26	4.87
St. Louis.....	2,421,802	2,959,951	5,381,753	.....	.....	.....	.....	5,381,753	61.65	4.80
Minneapolis.....	237,414	1,310,571	1,547,985	.....	.....	.....	.....	1,547,985	73.27	4.76
Kansas City.....	3,005,839	7,281,358	10,287,197	.....	.....	.....	50,000	10,337,197	65.26	4.79
Dallas.....	102,400	838,060	940,460	.....	.....	.....	.....	940,460	36.80	5.01
San Francisco.....	9,860,550	37,007,793	46,868,343	133,541	457,454	590,995	250,000	47,709,338	73.39	4.88
Total.....	86,351,667	306,582,250	392,933,917	2,007,085	3,073,839	5,080,924	2,693,252	400,708,093	57.11	4.84

Amounts of bills discounted and acceptances bought by each Federal Reserve Bank during October, November, and December, 1919 and 1918, distributed by maturities.

Federal Reserve Bank.	15-day maturities.			30-day maturities.			60-day maturities.		
	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.
Boston.....	\$1,142,489,264	\$28,447,394	\$1,170,936,658	\$23,828,357	\$15,111,710	\$38,940,067	\$45,277,294	\$44,109,728	\$89,387,022
New York.....	12,552,276,843	164,256,709	12,716,533,552	25,939,502	81,626,724	107,566,226	69,887,815	82,653,601	152,541,416
Philadelphia.....	2,555,098,902	474,455	2,555,573,357	13,589,151	93,430	13,682,581	26,419,745	625,710	27,045,455
Cleveland.....	848,605,624	4,452,585	853,058,209	19,308,397	7,652,509	26,961,206	25,756,856	22,382,941	48,139,797
Richmond.....	903,991,373	886,800	904,878,173	16,178,287	2,439,424	18,617,711	15,737,307	3,072,500	18,809,807
Atlanta.....	467,810,503	175,220	467,985,723	9,462,357	2,178,652	11,641,009	22,248,785	7,727,446	29,976,231
Chicago.....	1,052,180,517	15,140,557	1,067,321,074	58,553,206	8,067,233	66,620,439	109,826,298	30,942,461	140,768,759
St. Louis.....	521,914,533	4,810,144	526,724,677	11,160,320	1,053,580	12,213,900	17,719,734	3,850,043	21,569,777
Minneapolis.....	196,967,684	20,502	196,988,186	13,296,992	704,780	14,001,772	34,263,493	10,089,673	44,353,166
Kansas City.....	377,692,939	145,898	377,838,837	12,254,392	1,197,966	13,452,358	24,207,751	2,297,630	26,505,381
Dallas.....	246,043,379	985,020	247,028,399	2,711,233	482,400	3,193,633	7,044,382	1,063,060	8,107,442
San Francisco.....	501,559,121	717,069	502,276,190	6,796,067	14,681,277	21,477,344	12,223,136	44,603,907	56,827,043
Total, 3 months ending:									
Dec. 31, 1919.....	21,366,630,682	220,512,353	21,587,143,035	213,078,261	135,289,985	348,368,246	410,612,596	253,418,700	664,031,296
Dec. 31, 1918.....	16,364,977,627	77,758,451	16,442,736,078	104,503,759	119,393,542	223,897,301	225,016,799	173,374,177	398,390,976

Amounts of bills discounted and acceptances bought by each Federal Reserve Bank during October, November, and December, 1919 and 1918, distributed by maturities—Continued.

Federal Reserve Bank.	90-day maturities.			Over 90-day maturities.			Total.		
	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.	Discounts.	Acceptances.	Total.
Boston.....	\$127,961,739	\$59,829,303	\$187,791,042	\$60,547	.....	\$60,547	\$1,339,617,201	\$147,498,135	\$1,487,115,336
New York.....	172,006,539	179,405,315	351,411,854	17,694	.....	17,694	12,820,128,393	507,942,349	13,328,070,742
Philadelphia.....	84,341,028	4,537,624	88,878,652	4,277	.....	4,277	2,679,453,103	5,731,219	2,685,184,322
Cleveland.....	34,678,083	39,605,071	74,283,154	201,308	.....	201,308	928,550,278	74,993,406	1,002,643,684
Richmond.....	22,118,168	9,106,532	31,224,700	44,460	.....	44,460	958,069,595	15,505,256	973,574,851
Atlanta.....	31,391,540	9,990,384	41,381,924	118,510	.....	118,510	531,061,695	20,071,702	551,103,397
Chicago.....	136,126,189	54,379,009	190,505,198	8,280,081	\$24,083	8,304,174	1,304,966,301	108,553,343	1,473,519,644
St. Louis.....	28,830,223	4,608,625	33,438,848	151,588	.....	151,588	579,776,398	14,317,392	594,093,790
Minneapolis.....	36,556,054	12,710,175	49,266,229	4,078,863	.....	4,078,863	285,162,086	23,525,130	308,687,216
Kansas City.....	34,897,769	6,695,703	41,593,472	15,217,219	.....	15,217,219	464,270,070	10,337,197	474,607,267
Dallas.....	8,956,923	1,405,000	10,361,923	2,748,994	.....	2,748,994	267,504,911	3,985,480	271,440,391
San Francisco.....	23,639,710	85,152,448	108,792,158	2,940,870	.....	2,940,870	547,158,904	145,154,741	692,313,605
Total, 3 months ending:									
Dec. 31, 1919.....	741,502,975	467,420,189	1,208,923,164	33,864,421	24,083	33,888,504	22,765,688,935	1,076,665,310	23,842,354,245
Dec. 31, 1918.....	543,464,168	241,526,791	784,990,959	35,676,275	4,895,307	40,574,582	17,273,638,628	616,951,268	17,890,601,259

Rediscounts and sales of discounted and purchased paper between Federal Reserve Banks from Oct. 1 to Dec. 31, 1919.

[In thousands of dollars.]

Discounted or purchased by Federal Reserve Bank of—	Rediscounted or sold by Federal Reserve Bank of—												
	Boston.		New York.		Philadelphia.			Richmond.		Atlanta.		Chicago.	Minneapolis.
	November.	December.	October.	November.	October.	November.	December.	October.	December.	October.	November.	October.	October.
New York.....												24	10
Cleveland.....			10,043	15,022									
Richmond.....	5,080												
Atlanta.....		5,065							5,000				
Chicago.....	15,210	10,097	20,032	25,002	48,000	48,500	49,500	15,000	5,000	19,500	1,000		
St. Louis.....	15,113	5,061	5,014	10,056		8,500							
Minneapolis.....								10,000					
Kansas City.....				10,006									
Dallas.....	5,065			5,012			31,000						
San Francisco.....		10,081	11,386										
Total.....	40,473	30,304	46,475	65,098	48,000	57,000	80,500	25,000	10,000	19,500	1,000	24	10
Purchased bills.....	40,473	30,304	46,475	65,098	48,000	57,000	80,500	25,000	10,000	19,500	1,000	24	10
Discounted bills.....													

Discounted or purchased by Federal Reserve Bank of—	Rediscounted or sold by Federal Reserve Bank of—			Rediscounted or sold by all Federal Reserve Banks.								
	Kansas City.	Dallas.	San Francisco.	During October, November, and December, 1919.						Total during year 1919.		
	December.	October.	December.	October.	November.	December.	Total.	Purchased bills.	Discounted bills.	Total.	Purchased bills.	Discounted bills.
New York.....			515	34		515	549	549		55,827	15,827	40,000
Cleveland.....				10,043	15,022		25,065	25,065		284,317	55,300	229,017
Richmond.....					5,080		5,080	10,145		5,080	5,080	
Atlanta.....						10,065	10,065		5,000	10,065	5,065	5,000
Chicago.....		34,000		136,532	89,712	64,597	290,841	70,341	220,500	1,423,811	95,477	1,328,334
St. Louis.....				5,014	33,674	5,061	43,749	35,249	8,500	180,529	40,320	140,209
Minneapolis.....				10,000			10,000		10,000	447,895	19,282	428,613
Kansas City.....				10,006			10,006			50,099	45,099	5,000
Dallas.....	26,500			10,077		57,500	67,577	10,077	57,500	67,577	10,077	57,500
San Francisco.....				11,386		10,081	21,467	21,467		133,050	133,050	
Total.....	26,500	34,000	515	173,009	163,571	147,819	484,399			2,658,250		
Purchased bills.....			515	46,509	105,571	30,819		182,899			424,577	
Discounted bills.....	26,500	34,000		126,500	58,000	117,000		301,500				2,233,673

Discounted bills, including member banks collateral notes, held by each Federal Reserve Bank on the last Friday in December, 1919, distributed by classes.

[In thousands of dollars.]

Federal Reserve Bank.	Agricultural paper.	Live stock paper.	Customers' paper secured by Government war obligations.	Member banks' collateral notes.		Trade acceptances.	Bankers' acceptances.	All other discounts.	Total.
				Secured by Government war obligations.	Otherwise secured.				
Boston.....	61		72,418	65,788	120	3,633	3,766	49,050	194,836
New York.....	286		138,265	446,323		12,966	10,262	180,092	788,194
Philadelphia.....	138		81,387	97,261		1,172		28,182	208,140
Cleveland.....	157	112	13,446	107,090	88	2,621		44,063	167,577
Richmond.....	441	8	14,330	73,571	23	2,128		18,160	108,661
Atlanta.....	691	150	4,562	56,817	570	1,790		25,642	90,222
Chicago.....	12,783		8,939	137,901	148	3,358		112,140	275,269
St. Louis.....	66	228	7,873	36,269	570	2,404	1,367	29,458	78,235
Minneapolis.....	1,378	5,477	3,498	18,967	638	70		40,029	70,057
Kansas City.....	6,491	13,531	4,666	32,231	5,653	393	8	24,460	87,433
Dallas.....	1,059	3,391	336	42,298	88			6,889	54,061
San Francisco.....	1,274	3,346	2,869	43,249	357	3,162	76	17,860	72,193
Total.....	24,825	26,243	352,589	1,157,765	8,255	33,697	15,479	576,025	2,194,878
Per cent.....	1.1	1.2	16.1	52.8	.4	1.5	.7	26.2	100.0
Total Dec. 30, 1918.....	29,384	27,335	362,840	1,037,348	21,615	15,985		208,431	1,702,938
Per cent.....	1.7	1.6	21.3	60.9	1.3	.9		12.3	100.0

Acceptances purchased by each Federal Reserve Bank, and held on Dec. 31, 1919, distributed by classes of accepting institutions.

[In thousands of dollars.]

Federal Reserve Bank.	Bank acceptances.					Trade acceptances.			Grand total.	
	Member banks.	Non-member trust companies.	Non-member state banks.	Private banks.	Foreign bank branches and agencies.	Total.	Domestic.	Foreign.		Total.
Boston.....	12,518	170	487	3,467	336	16,978	368	1,303	1,671	18,649
New York.....	123,413	2,302	33,519	19,232	19,562	198,028	1,934	2,941	4,875	202,903
Philadelphia.....	4,494		378	250	35	5,157		20	20	5,177
Cleveland.....	30,051	76	6,743	7,025	4,383	48,278	157	172	329	48,607
Richmond.....	15,717	100	196	342	50	16,405				16,405
Atlanta.....	14,481	875	466	817		16,639				16,639
Chicago.....	84,788	868	1,139	5,063	792	92,650				92,650
St. Louis.....	25,739	275	3,256	2,868	666	32,804				32,804
Minneapolis.....	12,516		19	14	50	12,599				12,599
Kansas City.....	12,791	258	2,040	1,638	1,964	18,691				18,691
Dallas.....	5,538			883		6,421				6,421
San Francisco.....	63,293	197	11,970	13,938	12,321	101,719	81	758	839	102,558
Total:										
Dec. 31, 1919.....	405,339	5,121	60,213	55,537	40,159	566,369	2,540	5,194	7,734	574,103
Nov. 30, 1919.....	347,852	6,446	48,798	55,876	36,358	495,330	1,646	4,934	6,580	501,910
Oct. 31, 1919.....	271,701	8,021	36,707	42,677	28,511	387,617	1,740	4,998	6,738	394,355
Dec. 31, 1918.....	238,257	2,745	10,442	20,385	13,444	285,273	2,536	4,388	6,924	292,197
Dec. 31, 1917.....	227,717	8,163	3,179	20,137	7,657	266,853			6,383	273,236

OPERATION OF THE FEDERAL RESERVE CLEARING SYSTEM, DEC. 16, 1919, TO JAN. 15, 1920.

[Amounts in thousands of dollars.]

Federal Reserve Bank or branch.	Items drawn on banks in own district.				Items drawn on Treasurer of United States.		Total.		Number of business days in month.	Items forwarded to other Federal Reserve Banks and their branches.		Items forwarded to parent bank or to branch in same district.	
	Located in Federal Reserve and Federal Reserve branch cities.		Located outside Federal Reserve and Federal Reserve branch cities.							Number.	Amount.	Number.	Amount.
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.					
Boston.....	650,122	803,653	2,769,056	454,031	129,880	21,231	3,549,058	1,278,915	25	451,145	377,488	.....	.....
New York.....	873,235	2,462,376	3,713,130	2,035,570	852,986	358,120	5,439,351	4,856,066	25	964,266	577,221	30,161	11,730
Buffalo.....	148,790	94,257	301,323	44,428	10,210	2,258	460,323	140,943	25	134,117	31,818	31,979	20,765
Philadelphia.....	1,333,153	871,595	1,651,099	232,867	132,414	51,071	3,116,666	1,155,533	25	811,930	236,682	.....	.....
Cleveland.....	212,726	267,400	982,015	188,138	34,092	5,939	1,228,833	461,477	25	40,716	49,780	40,498	18,587
Cincinnati.....	133,211	150,938	616,405	91,578	28,543	2,382	778,159	244,898	25	6,298	10,812	9,065	4,820
Pittsburgh.....	276,440	300,158	718,483	108,495	32,777	8,226	1,027,700	416,879	25	55,722	53,733	31,081	8,001
Richmond.....	88,122	229,400	1,230,247	296,317	31,818	5,851	1,350,187	531,568	25	98,859	84,879	1,926	6,355
Baltimore.....	183,733	162,697	510,159	65,784	4,930	4,069	698,822	232,550	25	151,245	110,818	8,851	12,828
Atlanta.....	95,385	111,345	334,969	90,520	21,154	5,532	451,508	207,397	26	17,890	31,082	71,999	18,389
Birmingham.....	41,450	23,122	126,984	14,837	14,524	2,782	182,958	40,741	26	15,972	15,972	25,895	47,116
Jacksonville.....	36,798	20,589	120,895	14,656	18,508	2,513	176,201	37,758	25	28,509	6,039	3,864	1,137
Nashville.....	51,030	38,862	147,231	23,391	8,494	1,101	206,755	63,354	26	16,434	6,892	12,551	2,508
New Orleans.....	49,104	70,525	115,303	20,380	14,979	2,928	179,386	93,833	24	47,410	23,958	6,662	1,329
Chicago.....	762,615	823,540	2,987,921	383,960	196,741	24,118	3,947,277	1,231,618	25	225,766	50,655	7,498	15,077
Detroit.....	159,670	109,156	8,230	7,865	6,505	9,560	174,405	126,581	25	.....	.....	6,168	9,155
St. Louis.....	228,911	290,769	1,144,179	121,231	71,502	7,848	1,444,592	419,848	25	18,842	11,280	13,162	3,044
Little Rock.....	40,692	27,741	160,961	18,450	4,656	4,901	206,309	51,092	25	3,090	651	12,488	2,696
Louisville.....	95,559	69,441	232,020	31,345	13,067	4,509	340,646	105,295	25	7,683	2,159	1,101	566
Memphis.....	62,395	55,638	151,984	19,700	7,258	3,248	221,637	78,586	25	2,062	1,004	1,225	495
Minneapolis.....	229,828	285,076	867,987	78,464	20,399	2,606	1,118,214	306,146	25	138,204	91,318	.....	.....
Kansas City.....	272,741	358,860	2,133,692	279,808	55,892	6,882	2,462,325	645,550	25	230,766	102,602	90,053	23,121
Denver.....	68,332	58,117	300,631	25,708	11,865	2,010	380,828	85,835	25	65,733	13,549	39,474	16,816
Omaha.....	88,350	69,958	385,943	37,458	23,753	1,756	498,046	109,172	25	37,861	12,030	22,773	8,935
Dallas.....	101,966	145,715	1,333,246	370,650	25,938	3,507	1,461,150	519,872	25	158,035	22,308	80,338	15,473
El Paso.....	27,190	13,345	133,431	15,052	32,426	1,880	193,047	30,277	25	37,013	12,623	19,809	4,587
Houston.....	60,872	38,256	137,082	13,682	84,596	2,175	282,550	54,113	25	20,798	31,161	20,535	6,231
San Francisco.....	95,633	114,997	316,667	40,177	44,147	175,015	456,447	330,189	25	23,226	19,368	99,156	19,922
Los Angeles.....	25,071	17,068	100,962	11,127	4,582	1,242	130,615	29,437	12	2,585	2,330	2,703	2,381
Portland.....	46,332	33,254	109,201	9,223	14,090	5,969	169,623	48,446	25	2,872	1,293	20,993	4,100
Salt Lake City.....	37,819	37,607	410,294	43,428	9,270	2,732	457,383	83,767	25	7,005	23,294	8,185	20,704
Seattle.....	66,030	44,699	139,415	13,853	21,272	10,194	226,717	68,746	25	11,618	4,537	24,587	7,478
Spokane.....	23,699	19,857	154,336	12,238	7,094	931	185,129	33,026	25	3,902	4,274	18,369	8,354
Total.....	6,667,004	8,220,011	24,545,481	5,214,411	1,990,362	745,086	33,202,847	14,179,508	.....	3,837,934	2,016,665	763,149	322,700

Federal Reserve Bank.	Number of member banks in district.		Number of nonmember banks on par list.		Number of incorporated banks other than mutual savings banks not on par list.	
	1920	1919	1920	1919	1920	1919
	Boston.....	431	424	247	244
New York.....	758	721	325	322	.....	.....
Philadelphia.....	681	666	415	314	.....	91
Cleveland.....	843	814	1,085	738	.....	288
Richmond.....	586	565	509	353	.....	1,149
Atlanta.....	428	424	425	290	1,148	1,288
Chicago.....	1,375	1,338	3,897	2,414	293	1,747
St. Louis.....	538	513	2,357	1,035	317	1,545
Minneapolis.....	923	867	2,212	1,191	717	1,648
Kansas City.....	1,040	994	3,350	2,171	.....	1,012
Dallas.....	759	728	1,225	927	.....	947
San Francisco.....	727	648	939	247	107	148
Total.....	9,089	8,702	16,986	10,246	3,566	9,863

OPERATIONS OF THE FEDERAL RESERVE BANKS.

During the four weeks between December 26, 1919, and January 23 of the present year investment operations of the Federal Reserve Banks on the whole show a slight downward trend, the holdings of both discounted and purchased paper being smaller at the close of the period than four weeks earlier. The outstanding feature of the more recent developments in the Federal Reserve field is the return flow of Federal Reserve notes, which set in during the first week of January and is still continuing, though at a much reduced rate. The result has been a reduction by 213.4 millions in Federal Reserve note circulation, which is however partly offset by an increase of 113.3 millions in net deposits.

Fiscal operations of the Treasury during the period include the redemption on January 2 and 15 of the outstanding balances of the two series of loan certificates issued in August of the past year and the issue under date of January 2 of 703 millions of a new series of tax certificates maturing December 15 of the present year. These operations apparently account for the moderate increase in discounts shown under January 2, and the considerable decline on the Friday following. At the closing date of the period total discounts held by the Federal Reserve Banks, 2,153.4 millions, were 41.5 millions below the total reported four weeks earlier. War paper holdings show a much larger decline, from 1,510.4 to 1,386.3 millions, this decline being partly offset by an increase in the holdings of ordinary commercial paper from 684.6 to 767.1 millions. Of the total held at the more recent date, 629.7 millions, or 45.4 per cent, was secured by Liberty bonds; 243.3 millions, or 17.6 per cent, by Victory notes; and 513.4 millions, or about 37 per cent, by Treasury certificates, as against 48.5, 22.3, and 29.2 per cent of the total of war paper reported four weeks before.

As the result of rate revision and the partial elimination of the differentials between rates on 15-day and 90-day maturities there is seen an increase of 135.9 millions in the holdings of 90-day paper, as against decreases of 155.9

in the holdings of 15-day paper, and of 27.8 millions in the holdings of 30-day paper, the share of 15-day discounts in total discounts showing a further decline from 68 to about 62 per cent.

Differences in the amounts of Treasury certificate holdings represent in most part amounts of temporary certificates held by the Federal Reserve Banks to cover advances to the Treasury pending receipt of funds from depository institutions.

Discounted paper held by the several Federal Reserve Banks include amounts held under discount for other Federal Reserve Banks. During the period under review the amount of such paper, largely as the result of rediscounting by the New York bank, increased on January 16 from 40.6 to 119.8 millions, held by six Federal Reserve Banks. By the following Friday the total had been reduced to 89.1 millions held by the Cleveland, Atlanta, Chicago, St. Louis, and Dallas banks. As against this considerable increase in the volume of interbank discounts, holdings of bankers' acceptances purchased from the Boston and New York banks show a decline from 128.1 to 48.7 millions, the smaller amount being distributed among the Cleveland, Chicago, St. Louis, Kansas City, Dallas, and San Francisco banks.

As a result of the considerable gains in members' reserve deposits, the net deposits of the Federal Reserve Banks show an increase from 1,704.5 to 1,817.8 millions. On the other hand, Federal Reserve note circulation declined from 3,057.6 to 2,844.2 millions, or at an average weekly rate of over 53 millions.

Export withdrawals, sales of gold held abroad, and exchange of gold for other reserve cash, account for a reduction of 51.8 millions in gold reserves and of only 47.6 millions in total cash reserves. This reduction in reserves and the substantial increase in deposit liabilities was fully neutralized by the larger reduction in note liabilities, with the result that the reserve ratio of the banks on both January 23 and four weeks earlier stood at 44.8 per cent.

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Jan. 2 to Jan. 23, 1920.

[In thousands of dollars.]

RESOURCES.

	Boston.	New York.	Phila- del- phia.	Cleve- land.	Rich- mond.	At- lanta.	Chi- cago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Francisco.	Total.
Gold and gold certificates:													
Jan. 2	8,014	154,012	1,200	10,368	2,421	8,429	24,180	2,725	8,256	254	6,362	13,388	239,609
Jan. 9	8,309	140,823	1,279	6,102	2,441	8,458	24,215	2,808	8,288	247	6,467	10,864	220,301
Jan. 16	8,903	124,643	1,383	12,069	2,472	8,331	24,278	2,853	7,539	340	6,448	12,860	212,119
Jan. 23	9,064	137,103	1,282	7,990	2,502	8,280	24,463	2,862	7,258	278	6,676	12,589	220,347
Gold settlement fund, Federal Reserve Board:													
Jan. 2	36,083	41,101	30,577	36,416	30,007	20,082	72,562	16,675	5,952	30,994	15,415	27,859	363,723
Jan. 9	39,226	11,154	28,544	45,500	28,470	21,055	115,620	15,879	13,507	24,294	11,868	25,146	380,263
Jan. 16	47,525	94,198	31,166	41,205	23,666	24,041	88,448	22,359	18,018	26,607	11,588	27,439	456,260
Jan. 23	54,828	61,528	30,117	49,935	23,454	20,302	87,767	17,675	18,289	36,365	10,084	31,155	441,499
Gold with foreign agencies:													
Jan. 2	9,586	48,195	10,506	10,768	6,435	4,727	15,627	6,172	3,546	6,303	3,414	6,041	131,320
Jan. 9	9,002	45,260	9,866	10,112	6,443	4,440	14,675	5,796	3,330	5,919	3,206	5,673	123,322
Jan. 16	8,784	44,158	9,626	9,867	5,896	4,332	14,318	5,655	3,249	5,775	3,128	5,535	120,323
Jan. 23	8,565	43,057	9,386	9,621	5,749	4,224	13,961	5,514	3,168	5,631	3,050	5,396	117,322
Gold with Federal Reserve agents:													
Jan. 2	73,189	306,756	88,918	123,711	39,972	63,393	217,767	61,181	35,607	39,246	27,411	128,445	1,205,596
Jan. 9	79,895	300,520	81,858	128,098	37,343	66,577	219,929	71,525	35,147	39,465	32,973	116,178	1,209,508
Jan. 16	76,761	284,286	78,583	120,723	44,587	55,288	213,020	53,879	34,703	38,100	33,014	103,382	1,136,326
Jan. 23	74,289	283,218	75,063	127,973	41,730	57,837	214,502	54,375	35,029	36,260	32,194	93,791	1,126,261
Gold-redemption fund:													
Jan. 2	26,664	25,000	8,479	1,956	7,223	8,051	20,371	6,577	445	4,538	3,845	9,218	122,367
Jan. 9	14,850	25,000	10,096	1,137	8,791	7,709	16,772	6,003	400	4,255	3,255	9,709	107,977
Jan. 16	17,555	25,000	12,254	1,192	6,619	6,828	22,910	7,536	792	5,452	3,146	9,466	118,850
Jan. 23	19,716	25,000	14,770	1,498	8,894	5,912	19,531	5,844	200	7,124	2,897	9,835	121,221
Total gold reserves:													
Jan. 2	153,536	575,064	139,680	183,219	86,058	104,682	350,507	93,330	53,806	81,335	56,447	184,951	2,062,615
Jan. 9	151,282	522,757	131,643	190,949	83,088	108,239	391,211	102,011	60,672	74,180	57,769	167,570	2,041,371
Jan. 16	159,528	572,285	133,112	185,056	83,240	98,820	362,874	92,382	64,301	76,274	57,324	158,682	2,043,878
Jan. 23	166,462	549,906	130,618	197,017	82,329	96,555	360,224	86,270	63,944	85,658	54,901	152,766	2,026,650
Legal-tender notes, silver, etc.:													
Jan. 2	3,966	45,819	536	715	192	997	1,909	2,490	65	361	1,253	354	58,657
Jan. 9	5,009	46,260	381	809	198	979	2,158	2,671	74	321	1,439	429	60,728
Jan. 16	4,641	45,638	422	910	204	1,108	2,278	2,934	62	287	1,471	453	60,403
Jan. 23	5,004	46,111	310	1,048	220	1,139	1,757	3,175	69	361	1,627	425	61,246
Total cash reserves:													
Jan. 2	157,502	620,883	140,216	183,934	86,250	105,679	352,416	95,820	53,871	81,696	57,700	185,305	2,121,272
Jan. 9	156,291	569,017	132,024	191,758	83,286	109,218	393,369	104,682	60,746	74,501	59,208	167,999	2,102,099
Jan. 16	164,169	617,923	133,534	185,966	83,444	99,923	365,252	95,216	64,363	76,561	58,795	159,135	2,104,281
Jan. 23	171,466	596,017	130,928	198,065	82,549	97,694	361,981	89,445	64,013	86,019	56,528	153,191	2,087,896
Bills discounted:													
Secured by Government war obligations 1—													
Jan. 2	123,914	571,822	173,734	114,920	84,607	63,898	160,421	48,271	21,228	39,744	38,763	42,940	1,484,262
Jan. 9	105,100	494,173	174,403	100,854	82,577	67,645	135,896	45,640	20,363	37,354	39,157	48,921	1,352,085
Jan. 16	108,935	419,804	163,582	105,025	73,752	80,733	176,432	62,032	20,519	33,262	52,021	55,357	1,351,454
Jan. 23	105,562	482,773	159,377	93,457	75,762	80,718	184,693	54,429	22,451	33,832	47,354	45,940	1,386,348
All other—													
Jan. 2	60,742	239,901	34,761	46,319	23,841	24,826	135,695	32,587	50,152	48,432	18,372	31,297	746,925
Jan. 9	54,660	267,130	28,911	42,505	23,681	23,142	110,833	28,574	47,256	51,810	18,183	30,985	727,670
Jan. 16	47,574	288,505	31,442	39,160	22,156	18,358	117,160	33,683	44,868	58,488	10,617	36,600	748,611
Jan. 23	43,258	278,596	39,355	39,737	21,517	18,451	129,639	47,261	42,291	57,987	12,208	36,810	767,110
Bills bought in open market: *													
Jan. 2	18,634	208,652	5,177	48,219	16,560	16,226	90,690	31,161	12,061	17,567	6,621	103,063	574,631
Jan. 9	38,284	194,796	5,842	63,729	10,973	9,887	88,792	21,154	10,229	15,211	6,286	109,539	574,722
Jan. 16	34,500	212,295	6,065	63,791	11,205	9,662	84,118	15,668	8,409	14,013	6,256	109,693	575,675
Jan. 23	35,424	202,706	7,827	71,312	10,449	9,503	82,939	12,612	7,984	9,524	6,091	119,418	575,789
United States Government bonds:													
Jan. 2	539	1,257	1,385	833	1,235	375	4,477	1,153	116	8,868	3,966	2,632	26,836
Jan. 9	539	1,257	1,385	833	1,235	375	4,477	1,153	116	8,868	3,966	2,632	26,836
Jan. 16	539	1,457	1,385	833	1,235	375	4,477	1,153	116	8,868	3,966	2,632	27,036
Jan. 23	539	1,457	1,385	833	1,235	375	4,477	1,153	116	8,868	3,966	2,632	27,036
United States Victory notes:													
Jan. 2		50		10			4						64
Jan. 9		250		10			4						264
Jan. 16		50		10			4						64
Jan. 23		50		10			4						64
United States certificates of indebtedness:													
Jan. 2	33,605	79,952	30,585	27,521	12,260	15,665	83,891	18,236	9,480	16,986	9,065	11,844	349,090
Jan. 9	21,775	67,489	30,598	26,521	12,260	15,665	64,797	17,243	8,480	16,832	9,065	11,681	302,406
Jan. 16	26,074	71,211	31,098	34,521	17,260	15,665	52,921	17,281	12,555	20,780	8,300	12,018	319,684
Jan. 23	21,891	68,716	31,091	23,707	12,260	15,665	40,513	17,750	8,480	15,826	8,300	12,566	276,765
Total earning assets:													
Jan. 2	237,434	1,101,634	245,642	237,822	138,503	120,994	475,174	131,408	93,037	131,597	76,787	191,776	3,181,808
Jan. 9	220,358	1,025,095	241,139	234,452	130,726	116,718	404,795	113,764	86,444	130,075	76,659	203,758	2,983,983
Jan. 16	217,622	993,322	233,572	243,340	125,608	124,797	435,108	129,817	86,467	135,411	81,160	216,300	3,022,524
Jan. 23	206,674	1,034,298	239,035	229,056	121,223	124,716	442,261	133,205	81,322	126,037	77,919	217,366	3,033,112

Resources and liabilities of each Federal Reserve Bank at close of business on Fridays, Jan. 2 to Jan. 23, 1920—Contd.

[In thousands of dollars.]

RESOURCES.

	Boston.	New York.	Phila-delphia.	Cleveland.	Richmond.	At-lanta.	Chi-cago.	St. Louis.	Minne-apolis.	Kansas City.	Dallas.	San Fran-cisco.	Total.
Bank premises:													
Jan. 2.....	1,103	3,094	500	640	504	463	2,116	356	500	462	399	232	10,369
Jan. 9.....	1,108	3,094	500	640	504	478	2,116	356	500	462	421	231	10,410
Jan. 16.....	1,108	3,094	500	640	553	480	2,116	356	500	462	421	231	10,461
Jan. 23.....	1,098	3,094	500	640	553	480	2,116	356	515	462	448	231	10,493
Uncollected items and other deductions from gross deposits:													
Jan. 2.....	104,966	257,067	97,166	96,546	101,242	54,485	131,964	83,123	31,347	91,285	67,012	55,575	1,171,778
Jan. 9.....	75,056	222,803	77,009	76,566	81,169	52,573	122,620	79,111	24,148	89,971	61,916	58,754	1,021,696
Jan. 16.....	87,310	268,237	95,285	86,507	87,512	50,535	141,810	74,553	23,480	88,544	60,044	53,085	1,116,852
Jan. 23.....	83,257	230,008	81,724	79,077	85,867	47,599	120,796	70,528	22,026	81,512	56,999	63,240	1,022,633
per cent redemption fund against Federal Reserve bank notes:													
Jan. 2.....	1,072	2,910	1,475	1,114	643	831	1,832	673	400	957	558	665	13,130
Jan. 9.....	1,072	2,885	1,475	1,146	519	847	2,132	682	324	957	550	665	13,254
Jan. 16.....	1,072	2,832	1,475	1,166	643	803	1,602	725	276	958	558	665	12,865
Jan. 23.....	1,072	2,751	1,475	1,125	335	859	1,568	463	310	941	566	665	12,130
All other resources:													
Jan. 2.....	369	1,176	419	a 649	620	163	500	241	141	477	612	276	5,733
Jan. 9.....	333	1,175	156	426	b 905	154	564	255	148	497	350	278	5,241
Jan. 16.....	534	1,137	421	470	482	149	599	282	160	507	388	334	5,463
Jan. 23.....	488	1,143	469	418	505	325	567	305	140	477	326	320	5,483
Total resources:													
Jan. 2.....	502,446	1,986,764	485,418	520,705	327,762	282,615	964,092	311,621	179,296	306,474	203,068	433,829	6,504,093
Jan. 9.....	454,218	1,824,069	452,303	504,988	297,109	279,988	925,506	298,850	172,310	396,463	199,104	431,685	6,136,680
Jan. 16.....	471,815	1,886,545	464,787	518,089	298,242	276,687	946,577	300,949	175,246	302,443	201,366	429,700	6,272,446
Jan. 23.....	464,055	1,867,311	454,131	508,381	291,032	271,673	929,289	294,302	168,326	295,448	192,786	435,013	6,171,747
¹Includes bills discounted for other Federal Reserve banks:													
Jan. 2.....						5,000	17,540				28,903		51,443
Jan. 9.....						7,000	6,050	4,500			24,350		41,900
Jan. 16.....				9,500		22,000	47,500	12,970			7,814	10,000	119,784
Jan. 23.....				2,500		19,500	47,675	7,470			12,000		89,145
²Includes bankers' acceptances bought from other Federal Reserve banks:													
With their indorsement—													
Jan. 2.....					5,080	5,065	16,500	17,058			5,065	10,081	58,849
Jan. 9.....							15,165	10,723			5,065		30,953
Jan. 16.....							15,165	7,134			5,065		27,364
Jan. 23.....							14,115	4,639			5,065		23,819
Without their indorsement—													
Jan. 2.....				4,902			8,940	6,731		8,086	100	3,598	32,357
Jan. 9.....				12,386			5,622	3,230		6,264		2,441	29,943
Jan. 16.....				11,939			1,922	1,444			5,036	406	20,817
Jan. 23.....				18,574			376	1,386			990	3,580	24,906

^a Includes Government overdraft of \$245,000.

^b Includes Government overdraft of \$204,000.

Maturities of bills discounted and bought, also of Treasury certificates of indebtedness.

[In thousands of dollars.]

	Within 15 days.	16 to 30 days.	31 to 60 days.	61 to 90 days.	Over 90 days.	Total.
Bills discounted:						
Jan. 2.....	1,477,607	238,153	341,395	153,103	20,929	2,231,187
Jan. 9.....	1,433,979	150,015	312,265	160,942	22,554	2,079,755
Jan. 16.....	1,386,691	172,077	323,307	196,111	21,879	2,100,065
Jan. 23.....	1,328,917	217,142	298,901	288,043	20,455	2,153,458
Bills bought:						
Jan. 2.....	116,925	104,217	206,406	147,083	.....	574,631
Jan. 9.....	103,555	103,643	237,367	130,157	.....	574,722
Jan. 16.....	115,446	101,103	237,365	121,701	.....	575,675
Jan. 23.....	122,411	116,004	229,157	108,217	.....	575,789
United States certificates of indebtedness:						
Jan. 2.....	85,606	3,000	6,607	7,989	245,888	349,090
Jan. 9.....	39,889	3,151	7,797	8,326	243,243	302,406
Jan. 16.....	52,457	2,574	11,850	6,600	246,203	319,684
Jan. 23.....	11,293	5,136	10,868	6,100	243,368	276,765

FEDERAL RESERVE NOTES.

Federal Reserve note account of each Federal Reserve Bank at close of business on Fridays, Jan. 2 to Jan. 23, 1920.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Federal Reserve notes:													
Received from agents—													
Jan. 2.....	254,396	939,186	245,865	283,818	150,878	159,467	537,501	163,275	88,503	110,393	78,641	279,419	3,291,342
Jan. 9.....	251,602	935,596	237,806	274,605	145,849	155,687	523,362	160,620	87,643	110,112	78,320	283,112	3,244,314
Jan. 16.....	244,468	921,679	231,371	270,190	140,933	149,098	511,645	155,573	85,449	109,307	78,361	279,216	3,177,290
Jan. 23.....	241,996	905,595	228,780	268,720	136,771	147,851	515,247	155,668	84,585	107,487	76,821	276,625	3,146,156
Held for banks—													
Jan. 2.....	11,028	128,067	13,705	20,821	5,601	5,355	39,322	19,864	1,397	6,713	3,827	36,649	292,350
Jan. 9.....	18,102	159,004	13,484	12,260	5,844	5,074	36,976	21,894	2,077	7,898	4,064	43,269	329,946
Jan. 16.....	16,304	163,773	9,231	15,583	5,440	4,394	34,152	18,952	1,975	7,822	4,713	45,072	327,411
Jan. 23.....	10,997	143,952	8,529	13,133	4,164	5,081	33,654	21,819	2,117	6,759	4,230	47,494	301,929
In actual circulation—													
Jan. 2.....	243,368	811,119	232,160	262,997	145,277	154,112	498,178	143,411	87,106	103,680	74,814	242,770	2,998,992
Jan. 9.....	233,500	776,592	224,322	262,345	140,005	150,613	486,386	138,726	85,566	102,214	74,256	239,843	2,914,368
Jan. 16.....	228,164	757,906	222,140	254,607	135,493	144,704	477,493	136,621	83,474	101,485	73,648	234,144	2,849,879
Jan. 23.....	230,999	761,643	220,261	255,587	132,607	142,770	481,593	133,849	82,468	100,728	72,591	229,131	2,844,227
Gold deposited with or to credit of Federal Reserve agent:													
Jan. 2.....	73,189	306,756	88,918	123,711	39,972	63,393	217,767	61,181	35,607	39,246	27,411	128,445	1,205,596
Jan. 9.....	79,595	300,520	81,858	128,098	37,343	66,577	219,929	71,525	35,147	39,465	32,973	116,178	1,209,508
Jan. 16.....	76,761	284,286	78,583	120,723	44,587	55,288	213,020	53,879	34,703	38,100	33,014	103,382	1,136,326
Jan. 23.....	74,289	283,218	75,063	127,973	41,730	57,837	214,502	54,375	35,029	36,260	32,194	93,791	1,126,261
Paper delivered to Federal Reserve agent:													
Jan. 2.....	203,290	1,018,253	173,919	208,281	115,214	104,853	386,509	111,910	73,592	105,657	63,756	165,428	2,730,662
Jan. 9.....	198,044	953,766	186,782	189,088	115,214	100,585	335,223	95,368	66,158	104,123	63,628	182,570	2,590,549
Jan. 16.....	191,009	918,288	170,301	206,026	104,031	108,599	377,457	111,383	62,782	105,712	68,894	190,177	2,614,659
Jan. 23.....	184,244	961,953	182,876	196,420	104,183	107,050	396,864	114,302	58,663	101,302	65,653	194,300	2,667,810

Federal Reserve note account of each Federal Reserve agent at close of business on Fridays, Jan. 2 to Jan. 23, 1920.

[In thousands of dollars.]

	Bos- ton.	New York.	Phila- del- phia.	Cleve- land.	Rich- mond.	At- lanta.	Chi- cago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Federal Reserve notes:													
Received from Comptroller—													
Jan. 2.....	476,300	2,001,000	510,780	485,040	305,860	298,000	838,800	299,600	152,080	203,260	143,700	409,920	6,124,340
Jan. 9.....	479,900	2,007,600	510,780	485,240	305,860	298,000	845,600	299,600	154,080	205,260	144,500	415,880	6,152,300
Jan. 16.....	479,900	2,007,600	510,780	485,840	305,860	298,000	848,960	299,600	154,080	207,280	146,000	419,880	6,163,780
Jan. 23.....	479,900	2,008,720	510,780	486,240	305,860	299,800	854,120	299,600	154,080	207,300	145,980	419,880	6,172,260
Returned to Comptroller—													
Jan. 2.....	193,224	945,814	241,575	175,122	129,794	93,088	290,459	113,825	56,317	87,077	48,899	129,351	2,504,545
Jan. 9.....	196,518	962,004	244,634	178,735	132,424	94,903	298,298	115,480	56,777	88,358	49,400	131,618	2,549,149
Jan. 16.....	199,652	975,921	248,409	182,110	135,179	98,192	305,205	120,127	57,971	89,723	50,359	133,414	2,596,262
Jan. 23.....	202,124	992,405	252,930	185,860	138,036	100,644	313,723	121,632	59,395	91,563	51,179	136,005	2,645,496
Chargeable to Federal Reserve agent—													
Jan. 2.....	283,076	1,055,186	269,205	300,918	176,066	204,912	548,341	185,775	95,763	116,183	94,801	280,569	3,619,795
Jan. 9.....	283,382	1,045,596	266,146	306,505	173,436	203,097	547,302	184,120	97,303	116,962	95,100	284,262	3,603,151
Jan. 16.....	280,248	1,031,679	262,371	303,730	170,681	199,808	543,755	179,473	96,109	117,557	95,641	286,466	3,567,518
Jan. 23.....	277,776	1,016,315	257,850	300,380	167,824	199,156	540,397	177,968	94,685	115,737	94,801	283,875	3,526,764
In hands of Federal Reserve agent—													
Jan. 2.....	28,680	116,000	23,340	26,100	25,188	45,445	10,840	22,500	7,260	5,790	16,160	1,150	328,453
Jan. 9.....	31,780	110,000	28,340	31,900	27,587	47,410	23,940	23,500	9,660	6,790	16,780	1,150	358,837
Jan. 16.....	35,780	110,000	31,000	33,540	29,748	50,710	32,110	23,900	10,660	8,250	17,280	7,250	390,228
Jan. 23.....	35,780	110,720	29,060	31,660	31,053	51,305	25,150	22,300 ¹	10,100	8,250	17,980	7,250	380,608
Issued to Federal Reserve Bank less amount re- turned to Federal Reserve agent for redemption:													
Jan. 2.....	254,396	939,186	245,865	283,818	150,878	159,467	537,501	163,275	88,503	110,393	78,641	279,419	3,291,342
Jan. 9.....	251,602	935,596	237,806	274,605	145,849	155,687	523,362	160,620	87,643	110,112	78,320	283,112	3,244,314
Jan. 16.....	244,468	921,679	231,371	270,190	140,933	149,098	511,645	155,573	85,449	109,307	78,361	279,216	3,177,290
Jan. 23.....	241,996	905,595	228,790	268,720	136,771	147,851	515,247	155,668	84,585	107,487	76,821	276,625	3,146,156
Collateral held as security for outstanding notes:													
Gold coin and certificates—													
Jan. 2.....		183,740		32,025		2,500		4,000	13,052		8,831		244,148
Jan. 9.....		183,740		36,025		2,500		4,000	13,052		8,831		248,148
Jan. 16.....		183,740		30,025		2,500		4,000	13,052		8,831		242,148
Jan. 23.....		183,740		34,025		2,500		4,000	13,052		8,831		246,148
Gold redemption fund—													
Jan. 2.....	13,189	13,016	14,529	16,686	1,972	2,893	8,622	3,250	2,755	1,886	4,096	18,226	101,120
Jan. 9.....	12,895	11,780	16,469	17,073	1,343	3,077	8,788	5,595	2,795	2,605	5,658	17,713	105,786
Jan. 16.....	15,761	10,546	12,694	15,698	1,587	3,788	7,876	2,948	2,351	3,240	4,699	15,917	96,105
Jan. 23.....	13,289	9,478	13,174	13,948	2,730	3,337	8,358	3,444	2,677	3,400	3,879	14,265	91,979
Gold settlement fund, Fed- eral Reserve Board—													
Jan. 2.....	60,000	110,000	74,389	75,000	38,000	58,000	209,145	53,931	19,800	37,360	14,484	110,219	860,328
Jan. 9.....	67,000	105,000	65,389	75,000	36,000	61,000	211,146	61,930	19,300	36,860	18,484	98,465	855,574
Jan. 16.....	61,000	90,000	65,889	75,000	44,000	49,000	205,144	46,931	19,300	34,860	19,484	87,465	788,073
Jan. 23.....	61,000	90,000	61,889	80,000	39,000	52,000	206,144	46,931	19,300	32,860	19,484	79,526	788,134
Eligible paper, minimum required—¹													
Jan. 2.....	181,207	632,430	156,947	160,107	110,906	96,074	319,734	102,094	52,896	71,147	51,230	150,974	2,085,746
Jan. 9.....	171,707	635,076	155,948	146,507	108,506	89,110	303,433	89,095	52,496	70,647	45,347	166,934	2,034,806
Jan. 16.....	167,707	637,393	152,788	149,467	96,346	93,810	298,625	101,694	50,746	71,207	45,347	175,834	2,040,964
Jan. 23.....	167,707	622,377	153,727	140,747	95,041	90,014	300,745	101,293	49,556	71,227	44,627	182,834	2,019,895

¹ For actual amounts, see "Paper delivered to Federal Reserve agent," on p. 200.

Amounts of Federal Reserve notes received from and returned to other Federal Reserve Banks for redemption or credit during the period from Jan. 1, 1919, to Dec. 31, 1919.

	Boston.		New York.		Philadelphia.		Cleveland.		Richmond.	
	Received.	Returned.	Received.	Returned.	Received.	Returned.	Received.	Returned.	Received.	Returned.
Boston.....			\$59,860,250	\$33,230,800	\$4,370,700	\$3,382,000	\$4,528,700	\$1,655,100	\$4,367,850	\$2,250,250
New York.....	\$45,236,150	\$59,738,000			47,221,750	59,800,500	35,792,100	21,783,650	31,924,350	22,233,250
Philadelphia.....	4,247,000	6,872,600	59,310,500	54,441,950	7,180,750	7,897,500	11,133,500	9,567,500	9,899,870	13,156,250
Cleveland.....	2,325,250	4,427,450	22,815,150	24,882,550	10,451,000	8,798,000			6,876,600	9,627,500
Richmond.....	2,237,750	4,392,150	22,394,000	24,859,000	1,874,200	3,510,500	9,771,000	5,728,850		
Atlanta.....	1,607,830	2,470,650	12,802,160	14,603,700	3,906,900	5,633,000	4,605,380	3,060,400	6,217,370	8,539,250
Chicago.....	3,681,000	6,369,450	28,768,500	29,202,250	1,123,805	1,477,000	19,028,500	16,439,300	5,425,000	8,955,500
St. Louis.....	1,073,035	1,219,550	9,962,820	5,983,050	395,000	1,088,500	6,225,265	1,703,850	2,662,005	2,597,000
Minneapolis.....	420,000	1,378,050	3,414,000	4,091,350	571,100	1,452,500	1,099,000	1,515,550	2,662,005	2,027,750
Kansas City.....	522,400	1,621,300	4,883,200	5,489,350	392,800	512,500	1,716,200	1,762,250	1,001,200	2,146,000
Dallas.....	306,605	509,100	3,178,600	2,522,950	811,880	993,050	894,700	430,600	575,250	757,500
San Francisco.....	1,062,445	1,294,600	8,018,610	11,028,250			1,881,210	866,850	1,332,320	620,750
Total: 1919.....	62,719,465	90,292,900	235,407,790	210,385,200	78,299,885	94,525,050	96,675,555	64,563,900	70,805,815	72,911,000
1918.....	21,660,305	37,931,700	118,050,470	118,629,200	39,531,305	62,354,660	40,366,135	21,249,450	31,113,635	26,603,050
1917.....	4,278,835	12,012,900	29,997,052	24,799,975	8,066,790	14,960,902	5,175,740	2,534,070	6,450,175	2,083,430

	Atlanta.		Chicago.		St. Louis.		Minneapolis.	
	Received.	Returned.	Received.	Returned.	Received.	Returned.	Received.	Returned.
Boston.....	\$2,439,250	\$1,584,360	\$6,311,850	\$3,908,000	\$1,207,350	\$1,098,565	\$1,405,650	\$451,000
New York.....	18,361,150	14,014,420	40,400,150	28,930,000	7,747,100	10,234,335	5,693,250	3,376,000
Philadelphia.....	3,617,500	2,770,980	6,951,510	6,150,000	1,526,500	2,037,755	1,124,500	556,500
Cleveland.....	3,434,950	4,948,010	19,259,550	19,071,000	1,993,200	6,237,965	1,804,550	1,104,500
Richmond.....	8,699,750	6,271,540	8,873,310	5,490,500	2,582,000	2,705,855	2,069,250	524,000
Atlanta.....			6,792,795	6,340,000	8,802,075	9,518,855	1,017,730	550,000
Chicago.....	6,145,500	6,975,840			13,102,000	25,107,085	18,446,500	15,714,000
St. Louis.....	9,271,360	9,506,250	25,007,785	13,137,000			1,873,305	950,000
Minneapolis.....	571,500	1,063,500	15,834,500	18,415,000	953,500	1,871,705		
Kansas City.....	1,677,400	2,381,450	10,335,250	14,621,500	8,200,400	9,093,880	2,402,050	2,510,000
Dallas.....	2,820,850	4,139,000	2,310,850	3,270,000	2,805,705	5,495,840	392,700	378,500
San Francisco.....	1,357,935	965,310	7,900,180	10,269,500	1,550,095	2,157,445	3,377,150	3,589,000
Total: 1919.....	58,397,145	54,620,660	149,977,730	129,605,500	50,469,925	75,559,285	39,606,635	29,703,500
1918.....	21,107,515	20,438,925	49,708,155	51,456,600	15,019,535	37,557,760	14,296,105	9,115,300
1917.....	6,210,710	4,650,150	5,129,265	15,268,500	3,344,960	7,979,770	5,537,985	1,351,000

	Kansas City.		Dallas.		San Francisco.		Total.	
	Received.	Returned.	Received.	Returned.	Received.	Returned.	Received.	Returned.
Boston.....	\$1,618,950	\$522,400	\$494,200	\$246,550	\$1,277,800	\$1,075,745	\$87,882,550	\$49,454,770
New York.....	7,450,700	4,908,700	3,581,350	2,366,850	14,769,350	8,018,955	258,177,400	235,404,660
Philadelphia.....	1,504,000	858,200	548,000	378,400	1,044,500	1,280,495	100,907,380	98,070,630
Cleveland.....	2,080,850	1,721,200	606,700	647,150	1,044,950	1,566,410	72,692,750	83,331,735
Richmond.....	2,148,500	1,019,500	734,750	469,700	635,250	1,356,250	67,326,310	60,714,845
Atlanta.....	2,040,725	1,617,500	3,857,150	2,396,350	940,855	1,346,100	50,558,270	53,953,305
Chicago.....	14,637,000	10,335,250	3,229,500	1,710,500	10,172,000	7,783,965	126,542,400	134,226,140
St. Louis.....	9,053,925	8,200,400	5,458,235	2,455,150	2,128,495	1,529,745	73,840,035	48,758,995
Minneapolis.....	2,518,000	2,402,050	339,000	294,150	3,921,000	3,592,310	29,989,500	37,722,915
Kansas City.....			3,945,150	2,549,650	4,175,550	5,338,250	39,429,900	49,017,130
Dallas.....	3,208,750	4,015,150			2,280,850	2,027,590	19,167,660	24,108,730
San Francisco.....	5,345,740	4,201,550	1,971,060	934,850			34,608,625	36,921,155
Total: 1919.....	51,607,140	39,801,900	24,765,095	14,449,300	42,390,600	35,266,815	961,122,780	911,685,010
1918.....	33,604,360	6,320,605	11,083,945	11,855,210	15,832,545	5,064,685	411,124,010	408,607,145
1917.....	7,783,185	1,118,755	5,765,280	3,506,950	4,355,640	1,843,080	92,095,617	92,109,482

CONDITION OF MEMBER BANKS IN SELECTED CITIES.

For the period between December 19, 1919, and January 16 of the present year, reports from about 800 member banks in leading cities indicate a reduction of 47.4 millions in United States securities held. A total decline of 3.1 millions is shown in the aggregate holdings of United States bonds, Victory notes fell off 15.8 millions, this amount apparently representing additional absorption by subscribing customers, while Treasury certificate holdings, after reaching the maximum of 894.6 millions on January 9, declined to 815.9 millions, or 28.4 millions below the total reported four weeks before. Reductions in certificate holdings represent amounts of certificates redeemed by the Treasury on or before maturity and to a much smaller extent amounts placed with the public. Loans secured by Government war obligations, less rediscounts (so-called war paper), show a decrease from 1,022.6 to 1,002.2 millions. Of the total war paper (less rediscounts) held on the more recent date, 692.9 millions, or 69 per cent, was secured by Liberty bonds, 292.4 millions, or 29 per cent, by Victory notes, and 16.9 millions, or less than 2 per cent, by Treasury certificates.

War paper rediscounted with the Federal Reserve Banks decreased from 306.3 to 299.8 millions, while the total of other paper rediscounted with the Federal Reserve Banks increased from 486 to 656.3 millions. In addition the reporting banks decreased the total of their collateral notes discounted with the Federal Reserve Banks from 846.1 to 801.3 millions. Of the latter total all but 5.6 millions was represented by war paper. Of the gross amount of war paper, 1,328.9 millions, shown by reporting member banks for December 19, no less than 1,147.7 millions, or about 86 per cent, was either discounted or rediscounted with the Federal Reserve Bank. Four weeks later the gross amount of war paper shown by all

reporting banks had declined to 1,302 millions, while the amount of war paper discounted or rediscounted with the Federal Reserve Banks had been reduced to 1,095.5 millions, or to 84 per cent of the gross total shown. Loans secured by stocks and bonds, which totaled 3,270.5 millions on December 19, reached the high point of 3,390.6 millions on the first Friday of the year. Since then there has been some liquidation of these loans, reducing the total to 3,355.7 millions, or to 21.1 per cent of the total loans and investments of all reporting banks, as compared with 20.9 per cent four weeks before. All other loans and investments of reporting banks (exclusive of rediscounts with Federal Reserve Banks) show a steady increase from 9,340 to 9,604 millions, about 58 per cent of the total increase being shown by members outside Federal Reserve Bank cities.

Fluctuations in volume of Government deposits were caused largely by the Treasury's transactions in redeeming and placing certificates, the movement of Treasury certificates held by reporting banks being parallel to the movement of their Government deposits. Other demand deposits (net), in keeping with the considerable increase in the loans and investments of the reporting banks, show an increase during the four weeks of 545.3 millions, while the gain of 172.9 millions in time deposits is due largely to the inclusion for the first time on January 9 of reports from two and on January 16 of reports from three Los Angeles trust companies and savings banks.

Reserve balances with the Federal Reserve Banks show a commensurate increase, the total on January 16 being 157.1 millions larger than four weeks before. A decrease of 26.3 millions in cash on hand apparently represents to a large extent Federal Reserve notes returned to the Federal Reserve Banks.

Principal resources and liabilities of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities as at close of business on Fridays from Dec. 26, 1919, to Jan. 16, 1920.

1. ALL REPORTING MEMBER BANKS.

[In thousands of dollars.]

	Bos- ton.	New York.	Phila- del- phia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Number of reporting banks:													
Dec. 26.....	46	112	56	90	82	47	107	35	35	82	43	62	797
Jan. 2.....	46	112	56	90	82	47	107	35	35	82	44	62	798
Jan. 9.....	46	112	56	92	82	47	107	35	35	82	44	64	802
Jan. 16.....	46	112	56	92	82	47	107	35	35	82	44	65	803
United States bonds to secure circulation:													
Dec. 26.....	13,436	48,887	11,097	41,841	26,271	14,015	20,873	17,178	7,020	14,317	19,573	34,605	269,113
Jan. 2.....	13,336	48,887	11,097	41,841	26,296	14,015	20,874	17,178	7,020	14,067	19,573	34,605	268,789
Jan. 9.....	13,111	48,886	11,097	41,841	26,296	14,015	20,861	17,178	7,120	14,067	19,573	34,605	268,650
Jan. 16.....	13,011	48,887	11,097	41,841	26,296	14,015	20,893	17,178	7,120	14,239	19,573	34,605	268,755
Other United States bonds, including Liberty bonds:													
Dec. 26.....	14,514	271,521	29,426	62,826	36,283	27,864	61,020	14,782	10,540	24,925	20,095	58,980	632,776
Jan. 2.....	14,461	272,526	29,518	63,563	37,249	28,961	59,476	15,631	10,546	27,185	17,528	61,074	637,716
Jan. 9.....	14,150	269,161	28,947	62,170	37,121	29,425	61,214	19,662	10,495	24,928	18,514	60,920	636,707
Jan. 16.....	14,148	263,507	29,425	61,123	36,005	29,226	60,310	14,361	10,688	25,321	18,416	61,116	623,646
United States Victory notes:													
Dec. 26.....	7,758	92,937	12,283	27,353	12,248	8,288	44,822	5,501	2,747	6,839	4,199	13,022	237,997
Jan. 2.....	7,727	97,801	11,994	25,079	12,123	8,136	44,109	5,099	2,745	6,472	4,110	12,728	238,123
Jan. 9.....	7,725	97,577	11,883	24,831	11,511	7,682	43,826	4,752	2,718	6,215	3,781	13,846	236,347
Jan. 16.....	7,883	87,143	12,400	24,675	11,356	7,650	43,251	4,604	2,695	6,125	3,876	14,346	226,064
United States certificates of indebtedness:													
Dec. 26.....	48,191	294,646	55,836	63,996	28,474	39,744	109,939	22,247	17,003	24,281	34,733	50,792	789,882
Jan. 2.....	45,149	351,789	60,581	57,382	27,202	42,062	129,959	24,225	15,588	21,866	29,440	52,112	857,355
Jan. 9.....	48,261	370,185	68,393	60,680	27,566	41,360	122,619	25,776	18,952	20,652	30,775	59,430	894,649
Jan. 16.....	43,118	327,235	58,716	59,165	29,094	35,598	120,321	24,459	15,205	17,581	30,306	54,853	815,851
Total United States securities owned:													
Dec. 26.....	83,899	707,991	108,642	196,016	103,276	89,911	236,654	59,708	37,310	70,362	78,600	157,399	1,929,768
Jan. 2.....	80,673	771,003	113,190	187,865	102,870	93,174	254,418	62,133	35,899	69,590	70,649	160,519	2,001,983
Jan. 9.....	83,247	785,809	120,320	189,522	102,494	92,482	248,520	67,368	39,285	65,862	72,643	168,801	2,036,853
Jan. 16.....	78,160	726,772	111,668	186,804	102,751	86,489	244,975	60,602	35,708	63,266	72,171	164,920	1,934,316
Loans secured by United States bonds, Victory notes, and certificates:													
Dec. 26.....	41,344	517,533	102,411	88,866	37,718	24,353	102,644	32,193	14,981	20,944	7,506	29,891	1,020,384
Jan. 2.....	43,793	510,678	97,256	90,441	37,947	25,642	103,147	32,184	15,143	20,800	13,880	29,257	1,020,168
Jan. 9.....	44,116	510,240	96,623	88,047	37,031	24,705	98,537	30,571	15,213	21,015	7,352	30,814	1,004,264
Jan. 16.....	41,527	522,104	89,065	86,542	37,402	24,440	96,868	30,810	14,970	19,482	7,237	31,774	1,002,221
Loans secured by stocks and bonds other than United States securities:													
Dec. 26.....	204,836	1,483,103	207,032	349,745	112,551	50,605	469,458	157,824	31,655	74,305	31,686	127,573	3,300,373
Jan. 2.....	208,330	1,541,833	208,802	351,567	113,085	52,980	484,269	160,974	31,859	75,216	31,689	129,042	3,390,646
Jan. 9.....	204,584	1,515,711	210,839	348,890	112,784	52,182	482,610	157,659	31,652	75,667	31,608	139,966	3,364,049
Jan. 16.....	206,769	1,502,165	204,224	349,029	111,854	54,420	486,466	159,540	32,064	75,012	33,292	140,881	3,355,716
All other loans and investments:													
Dec. 26.....	665,647	3,352,240	497,703	794,953	338,804	350,268	1,372,447	813,747	252,208	472,692	214,992	744,725	9,370,426
Jan. 2.....	673,502	3,374,075	484,392	792,093	341,789	354,955	1,360,972	820,957	256,064	476,157	213,116	735,367	9,383,439
Jan. 9.....	675,049	3,357,857	493,486	806,113	345,478	358,309	1,401,994	824,812	253,910	469,712	218,884	819,754	9,351,358
Jan. 16.....	686,182	3,332,073	501,877	814,053	345,736	355,953	1,411,834	825,049	252,565	474,726	219,126	824,828	9,304,049
Total loans and investments:													
Dec. 26.....	995,726	6,060,867	915,788	1,429,580	592,349	515,137	2,181,203	563,472	336,154	638,303	332,784	1,059,588	15,620,951
Jan. 2.....	1,006,298	6,197,589	904,640	1,421,966	595,691	526,751	2,202,806	576,248	338,965	641,763	329,334	1,054,185	15,796,236
Jan. 9.....	1,006,946	6,169,617	927,318	1,432,572	597,737	527,678	2,231,561	580,410	340,060	632,256	330,484	1,159,335	15,936,024
Jan. 16.....	1,012,638	6,143,114	906,864	1,436,428	597,793	521,302	2,240,143	576,001	335,307	632,483	331,826	1,162,403	15,896,302
Reserve balances with Federal Reserve Bank:													
Dec. 26.....	74,135	650,456	60,199	85,064	37,794	40,460	187,428	44,069	24,514	45,712	24,107	73,237	1,347,175
Jan. 2.....	85,134	710,526	59,492	87,541	41,005	37,989	202,022	49,555	26,340	43,128	25,905	75,648	1,444,285
Jan. 9.....	86,870	648,912	68,864	92,706	40,453	37,169	201,571	49,897	24,430	48,253	27,860	79,550	1,406,535
Jan. 16.....	88,612	704,190	63,301	97,908	38,001	38,394	207,268	45,632	24,475	53,017	29,780	81,396	1,473,974
Cash in vault:													
Dec. 26.....	30,512	146,238	21,549	36,218	20,958	15,340	77,911	13,250	9,504	16,432	12,681	29,119	429,712
Jan. 2.....	29,838	139,527	21,027	40,920	22,868	17,404	76,084	13,715	10,692	16,809	13,131	29,421	431,436
Jan. 9.....	24,243	140,736	19,533	35,656	20,965	15,586	72,757	11,365	10,130	16,235	11,555	31,946	410,707
Jan. 16.....	23,487	126,488	16,650	34,554	17,997	13,898	68,522	10,920	9,012	15,397	10,599	29,783	377,307
Net demand deposits on which reserve is computed:													
Dec. 26.....	767,204	5,082,001	655,361	803,946	362,907	305,490	1,366,985	352,834	238,711	454,082	240,622	594,056	11,174,249
Jan. 2.....	824,778	5,220,661	668,657	815,622	371,236	327,953	1,432,306	375,358	246,341	462,219	259,151	604,965	11,609,247
Jan. 9.....	800,456	5,125,440	677,203	837,286	369,475	325,905	1,441,313	380,368	246,880	469,535	250,498	626,817	11,549,176
Jan. 16.....	822,885	5,234,706	668,121	857,178	369,288	324,313	1,468,799	380,264	246,542	475,614	255,665	637,041	11,740,416

Principal resources and liabilities of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities as at close of business on Fridays from Dec. 26, 1919, to Jan. 16, 1920—Con.

1. ALL REPORTING MEMBER BANKS—Continued.

[In thousands of dollars.]

	Boston.	New York.	Philadelphia.	Cleveland.	Richmond.	Atlanta.	Chicago.	St. Louis.	Minneapolis.	Kansas City.	Dallas.	San Francisco.	Total.
Time deposits:													
Dec. 26.....	129,141	392,356	22,242	332,699	96,086	121,150	560,265	112,015	59,924	85,782	35,869	354,815	2,302,344
Jan. 2.....	129,158	397,155	22,651	335,487	98,480	123,939	567,402	113,559	59,975	87,678	38,537	359,786	2,333,807
Jan. 9.....	130,701	393,580	22,844	335,130	98,348	123,167	567,733	114,094	60,371	86,448	39,129	438,194	2,409,739
Jan. 16.....	131,337	408,923	23,156	334,009	99,685	124,728	572,795	116,166	59,978	87,013	40,325	468,164	2,466,279
Government deposits:													
Dec. 26.....	36,263	248,489	36,080	46,565	12,366	21,359	74,623	24,585	6,865	12,204	31,502	29,551	530,452
Jan. 2.....	40,649	330,789	43,376	44,340	7,815	19,471	63,769	23,496	2,163	8,118	24,293	20,922	629,201
Jan. 9.....	47,433	330,559	49,422	41,519	7,538	15,645	61,191	23,249	6,861	7,770	17,560	24,998	633,745
Jan. 16.....	37,898	214,881	35,180	37,826	7,990	10,733	39,835	12,906	5,830	3,241	2,971	13,830	423,121
Bills payable with Federal Reserve Bank:													
Secured by United States war obligations—													
Dec. 26.....	43,785	411,343	82,212	92,077	48,802	45,020	90,619	26,561	13,483	34,539	5,822	32,658	926,921
Jan. 2.....	35,064	401,265	72,541	86,329	50,418	42,830	106,210	28,880	12,365	34,030	6,804	30,042	906,778
Jan. 9.....	18,676	323,346	69,012	74,647	55,125	45,510	94,898	21,587	12,021	27,223	11,673	36,335	790,553
Jan. 16.....	23,849	329,584	63,419	70,355	46,845	43,920	95,473	30,827	11,424	24,799	23,305	31,868	795,668
All other—													
Dec. 26.....						530			550	5,242	25	335	6,682
Jan. 2.....					50	580			1,280	5,121		100	7,131
Jan. 9.....					575	510			495	5,557		100	7,237
Jan. 16.....						360			150	4,991		100	5,601
Bills rediscounted with Federal Reserve Bank:													
Secured by United States war obligations—													
Dec. 26.....	56,377	130,875	76,102	12,029	10,521	2,955	7,047	4,356	2,156	3,820	124	3,228	309,590
Jan. 2.....	54,247	123,008	79,858	12,235	10,304	3,144	5,882	5,722	2,035	3,698	251	2,715	303,099
Jan. 9.....	53,012	123,795	79,069	10,390	10,318	3,708	6,409	4,533	1,827	3,366	313	1,922	298,662
Jan. 16.....	53,947	123,479	79,106	10,588	10,009	3,101	5,823	6,557	1,811	3,064	213	2,123	299,821
All other—													
Dec. 26.....	50,496	192,814	26,592	43,007	16,661	24,538	110,343	23,478	42,555	34,865	4,965	19,700	590,014
Jan. 2.....	52,140	230,046	32,164	42,673	19,385	20,494	117,704	25,035	44,222	40,951	5,096	23,582	653,492
Jan. 9.....	47,326	257,838	26,069	39,074	18,757	18,091	93,171	21,346	40,405	43,127	4,742	23,414	633,360
Jan. 16.....	39,757	279,176	26,687	36,229	17,070	14,223	100,183	26,472	40,513	42,829	4,547	28,600	656,286

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES.

[In thousands of dollars.]

Number of reporting banks:													
Dec. 26.....	22	71	41	12	9	8	50	13	9	20	6	15	276
Jan. 2.....	22	71	41	12	9	8	50	13	9	20	6	15	276
Jan. 9.....	22	71	41	12	9	8	50	13	9	20	6	15	276
Jan. 16.....	22	71	41	12	9	8	50	13	9	20	6	15	276
United States bonds to secure circulation:													
Dec. 26.....	3,506	39,190	7,087	3,631	2,832	3,100	1,438	10,548	2,791	4,753	4,560	18,500	101,936
Jan. 2.....	3,406	39,190	7,087	3,631	2,832	3,100	1,440	10,548	2,791	4,753	4,560	18,500	101,838
Jan. 9.....	3,181	39,190	7,087	3,631	2,832	3,100	1,439	10,548	2,791	4,753	4,560	18,500	101,612
Jan. 16.....	3,081	39,190	7,087	3,631	2,832	3,100	1,439	10,548	2,791	4,825	4,560	18,500	101,584
Other United States bonds, including Liberty bonds:													
Dec. 26.....	6,617	241,308	21,999	9,677	4,486	1,422	27,305	6,006	1,566	8,009	5,342	37,471	371,208
Jan. 2.....	6,485	240,863	22,079	9,686	5,540	1,483	25,755	6,536	1,586	10,470	2,946	39,139	372,568
Jan. 9.....	6,233	238,446	21,927	9,261	5,726	1,490	27,863	10,831	1,624	10,262	3,278	36,376	378,317
Jan. 16.....	6,091	232,886	22,121	8,466	5,650	1,516	27,085	5,363	1,706	10,332	3,194	36,323	360,733
United States Victory notes:													
Dec. 26.....	951	81,782	8,918	5,390	592	687	19,818	2,259	252	3,662	1,000	6,366	131,677
Jan. 2.....	946	87,236	8,740	5,325	884	669	19,358	2,086	249	3,354	914	6,052	135,813
Jan. 9.....	947	87,320	8,655	4,759	535	566	19,050	1,795	251	3,254	1,032	5,974	134,138
Jan. 16.....	1,127	76,844	9,086	4,498	490	553	18,529	1,565	250	3,093	995	5,995	123,025
United States certificates of indebtedness:													
Dec. 26.....	31,972	274,574	51,920	14,097	959	17,775	49,483	19,245	5,956	5,527	22,374	21,083	514,965
Jan. 2.....	27,930	332,072	56,420	7,058	1,343	15,934	53,599	21,504	5,746	5,349	17,862	23,502	568,319
Jan. 9.....	31,883	347,390	64,354	10,179	2,058	15,524	49,545	22,617	7,251	6,350	19,491	24,062	600,684
Jan. 16.....	28,752	308,547	55,284	8,242	2,039	9,639	52,679	21,315	7,091	5,475	19,080	24,411	542,554
Total United States securities owned:													
Dec. 26.....	43,046	636,854	89,924	32,795	8,869	22,984	98,044	38,058	10,565	21,951	33,276	83,420	1,119,786
Jan. 2.....	38,767	699,361	94,326	25,700	10,599	21,186	100,152	40,674	10,372	23,926	26,282	87,193	1,178,538
Jan. 9.....	42,244	712,346	102,023	27,830	11,151	20,680	97,897	45,791	11,917	24,599	28,361	84,912	1,209,751
Jan. 16.....	39,051	657,467	93,578	24,837	11,011	14,808	99,732	38,791	11,838	23,725	27,829	85,229	1,127,896

Principal resources and liabilities of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities as at close of business on Fridays from Dec. 26, 1919, to Jan. 16, 1920—Con.

2. MEMBER BANKS IN FEDERAL RESERVE BANK CITIES—Continued.

[In thousands of dollars.]

	Bos- ton.	New York.	Phila- del- phia.	Cleve- land.	Rich- mond.	At- lanta.	Chicago.	St. Louis.	Minne- apolis.	Kansas City.	Dallas.	San Fran- cisco.	Total.
Loans secured by United States bonds, Victory notes, and certificates:													
Dec. 26.....	28,163	488,335	97,437	24,636	13,889	6,376	75,483	22,908	8,186	6,266	2,146	17,066	790,891
Jan. 2.....	30,550	481,621	92,455	22,727	12,782	6,166	74,433	22,820	8,356	6,591	8,544	16,959	784,004
Jan. 9.....	31,217	481,988	91,554	22,964	12,932	6,094	69,726	22,132	8,250	6,765	2,281	16,561	771,564
Jan. 16.....	29,031	493,568	84,119	22,275	12,501	6,273	67,333	22,327	7,779	6,664	2,158	16,883	770,911
Loans secured by stocks and bonds, other than United States securities:													
Dec. 26.....	160,331	1,343,083	188,618	130,859	17,663	6,377	371,335	125,879	14,735	32,698	9,970	63,645	2,465,193
Jan. 2.....	163,798	1,402,520	191,013	134,128	16,680	6,610	384,854	128,685	14,994	33,197	9,837	63,915	2,550,231
Jan. 9.....	159,492	1,363,675	191,495	127,335	15,598	5,279	382,557	123,638	15,232	33,395	10,155	64,319	2,492,170
Jan. 16.....	160,254	1,344,086	184,911	125,931	14,862	6,830	388,269	124,749	15,518	33,178	10,274	65,625	2,474,487
All other loans and investments:													
Dec. 26.....	458,312	2,991,622	432,118	223,889	67,083	55,374	736,818	188,809	111,106	168,511	51,338	402,554	5,947,534
Jan. 2.....	466,308	3,011,587	419,611	220,880	65,461	54,892	780,952	197,428	113,522	168,193	51,017	388,114	5,937,965
Jan. 9.....	467,267	2,994,904	433,382	221,391	65,227	56,570	814,253	190,734	112,183	162,457	55,251	391,411	5,974,030
Jan. 16.....	476,886	3,023,795	435,813	228,109	64,674	56,160	819,645	203,034	112,564	161,615	57,228	389,582	6,029,105
Total loans and investments:													
Dec. 26.....	689,852	5,459,894	808,097	412,179	107,504	91,111	1,341,680	375,654	144,592	220,426	96,730	566,685	10,323,404
Jan. 2.....	699,423	5,595,089	797,405	403,435	105,522	88,854	1,340,391	389,607	147,244	231,907	95,680	556,181	10,450,738
Jan. 9.....	700,220	5,552,013	818,454	399,520	104,908	88,623	1,364,433	391,295	147,582	227,216	96,048	557,203	10,447,515
Jan. 16.....	705,222	5,518,916	798,421	401,152	103,048	84,071	1,374,979	388,901	147,699	225,182	97,489	557,319	10,402,399
Reserve balances with Federal Reserve Bank:													
Dec. 26.....	58,526	613,552	53,043	22,888	7,831	8,414	130,592	32,667	13,158	12,091	5,053	33,696	992,513
Jan. 2.....	68,976	669,481	52,691	24,563	8,643	6,126	141,843	36,617	13,998	12,223	7,829	35,995	1,078,990
Jan. 9.....	71,487	608,772	63,025	23,756	7,495	7,178	141,418	38,420	12,230	17,099	8,260	33,653	1,032,793
Jan. 16.....	72,215	660,997	58,193	27,780	6,162	6,787	145,080	32,871	12,749	20,726	10,035	35,388	1,088,983
Cash in vault:													
Dec. 26.....	19,804	129,971	16,914	9,265	2,262	2,465	46,707	7,061	2,897	4,801	2,544	10,894	255,585
Jan. 2.....	18,882	123,660	16,213	10,301	3,215	2,847	44,707	6,904	3,448	4,421	2,152	10,973	247,693
Jan. 9.....	16,323	125,979	15,356	9,219	2,317	2,704	42,130	6,088	3,465	4,391	2,221	12,137	242,330
Jan. 16.....	14,318	113,743	13,110	8,807	2,333	2,409	38,916	5,588	2,718	4,006	1,932	10,218	218,098
Net demand deposits on which reserve is computed:													
Dec. 26.....	593,704	4,589,921	567,352	201,291	69,069	50,489	937,172	240,826	107,224	158,898	65,705	275,833	7,857,484
Jan. 2.....	631,310	4,765,497	578,653	205,774	65,015	53,563	986,118	260,547	109,771	166,321	84,686	281,484	8,188,739
Jan. 9.....	616,108	4,669,929	589,194	210,347	63,148	51,896	994,785	263,827	109,590	170,917	72,591	281,203	8,098,535
Jan. 16.....	632,552	4,766,405	579,578	218,311	65,101	52,748	1,003,732	263,690	110,802	171,107	78,349	285,506	8,227,881
Time deposits:													
Dec. 26.....	40,896	308,253	13,294	168,414	19,731	19,214	257,760	68,888	21,520	12,166	3,593	207,474	1,141,203
Jan. 2.....	41,432	311,818	13,333	169,531	20,097	19,420	261,407	69,799	21,638	12,819	3,607	211,143	1,156,044
Jan. 9.....	42,355	305,029	13,295	163,519	19,894	19,504	258,882	70,016	21,829	11,930	3,747	205,244	1,135,334
Jan. 16.....	42,489	318,949	13,568	163,164	20,458	19,637	262,732	70,326	22,057	11,930	3,804	209,345	1,158,459
Government deposits:													
Dec. 26.....	26,879	238,682	34,661	14,851	1,527	5,448	42,388	21,790	2,294	4,699	26,362	21,246	440,827
Jan. 2.....	31,101	323,851	40,771	11,292	1,869	626	36,864	20,859	415	2,703	20,940	16,139	507,430
Jan. 9.....	38,596	320,364	48,153	10,837	2,312	805	30,088	20,012	3,132	3,019	14,954	18,214	510,486
Jan. 16.....	32,621	206,986	33,089	8,964	1,632	822	18,477	10,341	2,900	2,151	1,294	9,459	328,636
Bills payable with Federal Reserve Bank:													
Secured by United States war obligations—													
Dec. 26.....	35,239	370,888	75,845	21,535	6,380	9,763	45,942	20,727	3,693	14,082	.....	18,462	622,556
Jan. 2.....	30,003	361,770	67,444	19,765	8,413	7,840	53,716	22,929	3,868	15,151	.....	16,347	607,246
Jan. 9.....	13,791	286,359	64,364	12,530	7,745	11,062	45,570	14,768	3,613	12,896	4,775	19,360	496,833
Jan. 16.....	19,510	293,268	59,070	11,100	4,909	3,927	44,294	23,918	2,705	13,264	15,625	18,196	509,786
All other—													
Dec. 26.....	.....	.....	.....	.....	.....	.....	.....	.....	450	1,143	.....	.....	1,593
Jan. 2.....	.....	.....	.....	.....	.....	.....	.....	.....	1,280	1,138	.....	.....	2,418
Jan. 9.....	.....	.....	.....	.....	.....	.....	.....	.....	345	1,074	.....	.....	1,419
Jan. 16.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,470	.....	.....	1,470
Bills rediscounted with Federal Reserve Bank:													
Secured by United States war obligations—													
Dec. 26.....	47,714	125,503	75,682	5,462	2,939	687	2,347	1,118	2,054	1,264	33	1,310	266,113
Jan. 2.....	45,573	117,870	79,438	4,879	2,632	687	2,133	2,761	1,960	1,146	28	1,578	260,685
Jan. 9.....	45,342	119,469	78,724	4,818	2,667	587	2,710	1,517	1,427	1,392	90	1,224	259,967
Jan. 16.....	46,658	119,167	78,761	5,709	2,536	558	2,411	3,683	1,461	1,171	79	1,191	263,385
All other—													
Dec. 26.....	48,245	179,384	25,438	27,758	1,685	3,187	90,246	14,886	33,866	15,661	1,429	13,612	455,397
Jan. 2.....	50,674	219,776	30,995	29,670	3,639	3,454	95,157	14,881	34,560	19,638	1,210	17,300	520,954
Jan. 9.....	44,989	246,678	24,737	26,533	3,282	2,915	72,518	11,794	31,638	20,704	1,085	15,823	502,696
Jan. 16.....	37,836	267,881	25,572	23,980	2,824	1,554	82,839	13,569	32,697	20,885	985	20,109	530,731

Principal resources and liabilities of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities as at close of business on Fridays from Dec. 26, 1919, to Jan. 16, 1920—Con.

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES.

[In thousands of dollars.]

	New York District. ¹	Cleveland District. ²	Richmond District. ³	Atlanta District. ⁴	Chicago District. ⁵	St. Louis District. ⁶	Kansas City District. ⁷	Dallas District. ⁸	San Francisco District. ⁹	Total.
Number of reporting banks:										
Dec. 26.....	9	38	19	24	12	18	17	11	39	187
Jan. 2.....	9	38	19	24	12	18	17	11	39	187
Jan. 9.....	9	40	19	24	12	18	17	11	41	191
Jan. 16.....	9	40	19	24	12	18	17	11	42	192
United States bonds to secure circulation:										
Dec. 26.....	1,599	24,897	5,533	6,915	1,870	5,280	4,237	7,108	13,305	70,794
Jan. 2.....	1,599	24,897	5,608	6,915	1,870	5,280	3,987	7,108	13,305	70,569
Jan. 9.....	1,599	24,897	5,608	6,915	1,870	5,280	3,987	7,108	13,305	70,569
Jan. 16.....	1,599	24,897	5,608	6,915	1,905	5,280	3,987	7,108	13,305	70,604
Other United States bonds, including Liberty bonds:										
Dec. 26.....	7,381	41,542	9,304	22,528	15,447	7,983	7,629	7,310	18,198	137,322
Jan. 2.....	8,430	41,956	9,403	23,424	15,646	8,299	7,599	7,096	18,538	140,391
Jan. 9.....	7,771	41,550	9,436	24,103	15,588	8,025	6,121	7,661	21,129	141,384
Jan. 16.....	7,587	41,218	9,247	23,772	15,570	8,175	5,952	7,596	21,330	140,447
United States Victory notes:										
Dec. 26.....	3,617	17,852	3,767	5,930	14,447	3,119	994	1,560	5,986	57,272
Jan. 2.....	3,667	16,146	3,703	5,820	14,432	2,902	955	1,537	6,006	55,168
Jan. 9.....	3,467	16,160	3,635	5,679	14,554	2,846	851	1,347	7,188	55,727
Jan. 16.....	3,462	16,172	3,610	5,515	14,535	2,925	980	1,396	7,696	56,291
United States certificates of indebtedness:										
Dec. 26.....	8,167	40,264	16,514	17,139	48,454	2,951	8,793	5,782	26,600	174,664
Jan. 2.....	7,756	40,606	14,831	20,378	59,320	2,648	7,992	5,533	25,771	184,835
Jan. 9.....	10,268	40,876	14,403	20,111	57,559	3,068	6,052	5,313	32,481	189,931
Jan. 16.....	8,032	40,831	12,269	20,520	54,126	3,063	4,984	5,368	27,891	177,084
Total United States securities owned:										
Dec. 26.....	20,764	124,555	35,168	52,512	80,218	19,333	21,653	21,760	64,089	440,052
Jan. 2.....	21,452	123,605	33,545	56,537	91,268	19,129	20,533	21,274	63,620	450,963
Jan. 9.....	23,105	123,283	33,082	56,808	89,571	19,219	17,011	21,429	74,103	457,611
Jan. 16.....	20,680	123,118	30,734	56,722	86,136	19,443	15,903	21,468	70,222	444,426
Loans secured by United States bonds, Victory notes, and certificates:										
Dec. 26.....	6,279	52,732	9,399	12,766	10,503	8,228	10,211	1,857	11,387	123,362
Jan. 2.....	6,384	56,069	9,472	14,409	11,859	8,292	9,915	1,841	11,260	129,501
Jan. 9.....	6,400	53,325	9,545	12,993	12,511	7,356	9,956	1,590	13,214	126,890
Jan. 16.....	6,820	52,835	10,187	12,843	12,625	7,392	8,751	1,641	13,881	126,975
Loans secured by stocks and bonds, other than United States securities:										
Dec. 26.....	39,363	158,880	34,266	32,365	52,058	29,131	21,712	13,786	58,781	440,342
Jan. 2.....	39,918	158,638	35,448	34,498	52,573	29,436	21,951	13,855	59,529	445,846
Jan. 9.....	40,239	162,372	35,218	34,752	52,976	31,177	22,307	13,139	69,804	461,984
Jan. 16.....	40,266	162,802	34,547	35,458	51,053	31,958	21,496	14,960	69,260	461,200
All other loans and investments:										
Dec. 26.....	120,535	417,357	99,405	216,075	281,841	109,108	149,293	66,771	310,317	1,770,702
Jan. 2.....	121,969	419,153	99,523	219,864	284,470	108,028	150,201	64,238	317,217	1,784,663
Jan. 9.....	122,325	428,741	99,722	222,970	287,426	109,429	150,135	66,084	398,479	1,885,311
Jan. 16.....	126,261	428,735	100,794	220,837	291,060	106,843	152,569	65,087	405,189	1,897,375
Total loans and investments:										
Dec. 26.....	186,941	753,524	178,238	313,718	424,620	165,800	202,869	104,174	444,574	2,774,458
Jan. 2.....	189,723	757,465	177,988	325,308	440,170	164,885	202,600	101,208	451,626	2,810,973
Jan. 9.....	192,069	767,721	177,567	327,523	442,484	167,181	199,409	102,242	455,600	2,931,796
Jan. 16.....	194,027	767,490	176,262	325,860	440,874	165,636	198,719	102,556	458,552	2,929,976
Reserve balances with Federal Reserve Bank:										
Dec. 26.....	12,265	44,401	11,957	24,191	28,725	10,679	14,759	8,058	35,746	190,781
Jan. 2.....	12,437	46,432	13,204	25,375	30,741	12,003	12,452	7,851	35,857	196,352
Jan. 9.....	15,070	51,455	13,535	22,830	29,766	10,704	13,021	7,949	42,378	206,708
Jan. 16.....	14,945	51,750	12,993	24,128	30,391	12,148	13,388	7,963	42,313	210,019
Cash in vault:										
Dec. 26.....	3,953	16,329	6,247	8,708	16,227	5,403	5,540	3,216	16,127	81,750
Jan. 2.....	3,292	18,044	6,715	9,888	15,710	5,702	5,761	3,407	16,464	84,983
Jan. 9.....	3,306	15,497	6,275	8,715	15,186	4,404	5,606	2,846	17,896	79,731
Jan. 16.....	2,613	15,403	4,959	7,667	14,812	4,376	5,440	2,552	17,703	75,925
Net demand deposits on which reserve is computed:										
Dec. 26.....	125,410	432,323	109,423	199,376	206,876	101,416	131,899	71,853	285,857	1,663,933
Jan. 2.....	131,135	437,581	114,305	217,458	216,474	103,845	131,186	68,523	291,325	1,712,332
Jan. 9.....	129,918	454,122	114,399	214,562	210,310	106,002	132,710	70,951	313,773	1,746,747
Jan. 16.....	129,736	460,035	114,634	213,693	222,920	106,174	135,735	70,693	319,630	1,773,250
Time deposits:										
Dec. 26.....	31,594	93,289	19,064	66,437	194,663	35,727	43,554	17,640	135,248	637,216
Jan. 2.....	31,855	94,075	18,805	67,820	196,408	36,389	43,030	17,771	136,210	642,363
Jan. 9.....	34,479	100,117	18,916	67,823	198,959	36,661	42,877	18,015	220,464	738,311
Jan. 16.....	35,185	99,605	19,784	68,869	199,740	37,193	42,868	18,917	246,390	768,551
Government deposits:										
Dec. 26.....	3,000	26,741	6,078	12,408	22,068	2,795	3,993	2,774	7,447	87,304
Jan. 2.....	1,587	28,620	2,598	14,625	18,167	2,637	2,798	1,761	4,686	77,479
Jan. 9.....	3,547	26,299	2,068	11,516	22,242	3,209	2,576	1,188	6,723	79,368
Jan. 16.....	3,263	24,401	618	8,909	15,230	2,512	681	717	4,250	60,581

Principal resources and liabilities of member banks in leading cities, including member banks located in Federal Reserve Bank cities and in Federal Reserve branch cities as at close of business on Fridays from Dec. 26, 1919, to Jan. 16, 1920—Con.

3. MEMBER BANKS IN FEDERAL RESERVE BRANCH CITIES—Continued.

[In thousands of dollars.]

	New York District. ¹	Cleveland District. ²	Richmond District. ³	Atlanta District. ⁴	Chicago District. ⁵	St. Louis District. ⁶	Kansas City District. ⁷	Dallas District. ⁸	San Francisco District. ⁹	Total.
Bills payable with Federal Reserve Bank:										
Secured by United States war obligations—										
Dec. 26.....	19,431	65,020	20,802	29,234	28,048	5,469	12,691	5,062	12,325	198,082
Jan. 2.....	18,559	61,608	18,761	29,228	33,535	5,310	12,725	5,659	12,275	197,860
Jan. 9.....	18,265	56,969	24,448	27,378	31,433	6,404	8,920	5,468	15,355	194,335
Jan. 16.....	16,810	54,590	20,115	31,818	34,105	6,452	7,068	4,770	11,726	187,154
All other—										
Dec. 26.....				15			4,099	25	335	4,474
Jan. 2.....				15			3,983		100	4,098
Jan. 9.....				35			4,483		100	4,668
Jan. 16.....				60			3,521		100	3,681
Bills rediscounted with Federal Reserve Bank:										
Secured by United States war obligations—										
Dec. 26.....	2,541	5,336	5,484	1,495	1,943	2,569	1,814	91	1,803	23,076
Jan. 2.....	2,434	6,289	5,401	1,490	950	2,358	1,767	223	1,011	21,923
Jan. 9.....	1,717	4,565	5,079	2,350	950	2,299	1,086	223	612	18,881
Jan. 16.....	1,719	3,856	5,143	1,950	978	2,405	977	134	392	18,054
All other—										
Dec. 26.....	4,151	11,478	10,447	18,265	5,666	7,726	13,064	2,787	5,083	78,667
Jan. 2.....	1,867	9,384	9,756	14,908	5,200	9,341	13,647	3,157	5,035	72,295
Jan. 9.....	3,260	9,378	9,581	13,911	4,330	8,692	15,474	2,846	6,294	73,766
Jan. 16.....	3,026	8,743	8,228	11,275	3,349	12,014	15,751	2,745	7,150	72,281

Buffalo.
Pittsburgh and Cincinnati.
Baltimore.
New Orleans, Birmingham, Jacksonville, and Nashville.
Detroit.

⁴ Louisville, Memphis, and Little Rock.
⁷ Omaha and Denver.
⁸ El Paso and Houston.
⁹ Spokane, Portland, Seattle, Salt Lake City, and Los Angeles.

IMPORTS AND EXPORTS OF GOLD AND SILVER.

Gold imports into and exports from the United States.

[In thousands of dollars.]

	During 10 days ending Dec. 20, 1919.	During 11 days ending Dec. 31, 1919.	Total for calendar year 1919.	Total for calendar year 1918.	Ten days ending Jan. 10, 1920.
IMPORTS.					
Ore and base bullion.....	749	281	16,744	15,335	403
United States Mint or assay office bars.....				6	
Bullion, refined.....	508	287	33,186	39,591	89
United States coin.....	456	21	11,243	6,834	
Foreign coin.....	7,503		15,361	184	
Total.....	9,216	589	76,534	61,950	492
EXPORTS.					
Domestic:					
Ore and base bullion.....			20	206	
United States Mint or assay office bars.....	873	2,685	109,427	4,484	6,988
Bullion, refined.....		3	12,628	3,575	14
Coin.....	7,771	10,777	245,497	32,157	7,725
Total.....	8,644	13,465	367,572	40,422	14,727
Foreign coin.....	3	11	613	426	
Total exports.....	8,647	13,476	368,185	40,848	14,727

Excess of gold exports over imports since Jan. 1, 1920, \$14,235,000. Excess of gold imports over exports since Aug. 1, 1914, \$765,520,000.

Silver imports into and exports from the United States.

[In thousands of dollars.]

	During 10 days ending Dec. 20, 1919.	During 11 days ending Dec. 31, 1919.	Total for calendar year 1919.	Total for calendar year 1918.	Ten days ending Jan. 10, 1920.
IMPORTS.					
Ore and base bullion.....	3,367	2,342	74,074	44,878	3,458
United States Mint or assay office bars.....				51	
Bullion, refined.....	162	449	8,387	20,569	115
United States coin.....	28	20	1,055	1,268	17
Foreign coin.....	92	680	5,894	4,610	746
Total.....	3,649	3,491	89,410	71,376	4,336
EXPORTS.					
Domestic:					
Ore and base bullion.....			5	19	
United States Mint or assay office bars.....	289	42	72,586	67,096	
Bullion, refined.....	1,547	2,662	113,949	169,316	6,353
Coin.....	141	3,829	21,222	3,542	459
Total.....	1,977	6,533	207,762	239,973	6,812
Foreign:					
Ore and base bullion.....			1		
Bullion, refined.....	765	559	23,647	6,018	866
Coin.....	1,284	790	7,611	6,855	28
Total.....	2,049	1,349	31,259	12,873	894
Total exports.....	4,026	7,882	239,021	252,846	7,706

Excess of silver exports over imports since Jan. 1, 1920, \$3,370,000. Excess of silver exports over imports since Aug. 1, 1914, \$432,742,000.

Estimated general stock of money, money held by the Treasury and by the Federal Reserve system, and all other money in the United States, Jan. 1, 1920.

	General stock of money in the United States.	Held in 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.	Amounts per capita outside United States Treasury and Federal Reserve system.
Gold coin (including bullion in Treasury) ²	\$2,787,714,306	\$382,042,539	\$1,350,126,144	\$390,993,272	.....
Gold certificates.....	.....	.....	358,885,470	305,666,881	.....
Standard silver dollars.....	288,221,775	55,402,781	.....	81,536,166	.....
Silver certificates.....	.....	.....	5,811,954	143,715,138	.....
Subsidiary silver.....	249,452,405	2,455,945	3,378,208	243,618,257	.....
Treasury notes of 1890.....	.....	.....	.....	1,665,736	.....
United States notes.....	346,681,016	19,792,932	449,767,671	277,120,413	.....
Federal Reserve notes.....	3,295,789,145	45,550,983	263,013,340	2,987,224,822	.....
Federal Reserve Bank notes.....	269,122,800	59,808,709	8,472,855	200,841,236	.....
National-bank notes.....	724,338,692	39,774,944	4,966,666	679,597,082	.....
Total:					
Jan. 1, 1920.....	7,961,320,139	604,888,833	2,044,422,303	5,312,009,003	\$49.81
Dec. 1, 1919.....	7,783,144,476	617,776,320	1,993,145,199	5,172,222,957	48.54
Nov. 1, 1919.....	7,721,561,106	604,552,807	2,033,098,639	5,033,909,660	47.28
Oct. 1, 1919.....	7,662,898,238	616,213,318	2,087,709,369	4,958,975,551	46.61
July 1, 1919.....	7,588,473,771	578,848,042	2,167,280,313	4,842,345,415	45.00
Apr. 1, 1919.....	7,586,752,855	550,628,454	2,195,151,766	4,840,972,635	45.17
Jan. 1, 1919.....	7,780,793,606	454,948,160	2,220,705,767	5,105,139,679	47.83
Oct. 1, 1918.....	7,391,008,277	380,246,203	2,084,774,897	4,925,987,177	46.34
July 1, 1918.....	6,742,225,784	356,124,750	2,018,361,825	4,367,739,209	41.31
Apr. 1, 1918.....	6,480,181,525	339,856,674	1,873,524,132	4,266,800,719	40.47
Jan. 1, 1918.....	6,256,158,271	277,043,358	1,723,570,291	4,255,584,622	40.53
Oct. 1, 1917.....	5,642,264,856	242,469,027	1,423,422,432	3,970,373,397	37.97
July 1, 1917.....	5,480,009,884	253,671,614	1,280,880,714	3,945,457,556	37.88
Apr. 1, 1917.....	5,312,109,272	258,198,442	952,964,705	4,100,976,125	39.54

¹ Includes reserve funds 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.

² Includes balances in gold settlement fund standing to the credit of the Federal Reserve Banks and agents.

³ Includes standard silver dollars.

⁴ Includes Treasury notes of 1890.

FEDERAL RESERVE BANK DISCOUNT RATES.

Rates on paper discounted for member banks approved by the Federal Reserve Board up to Feb. 2, 1920.

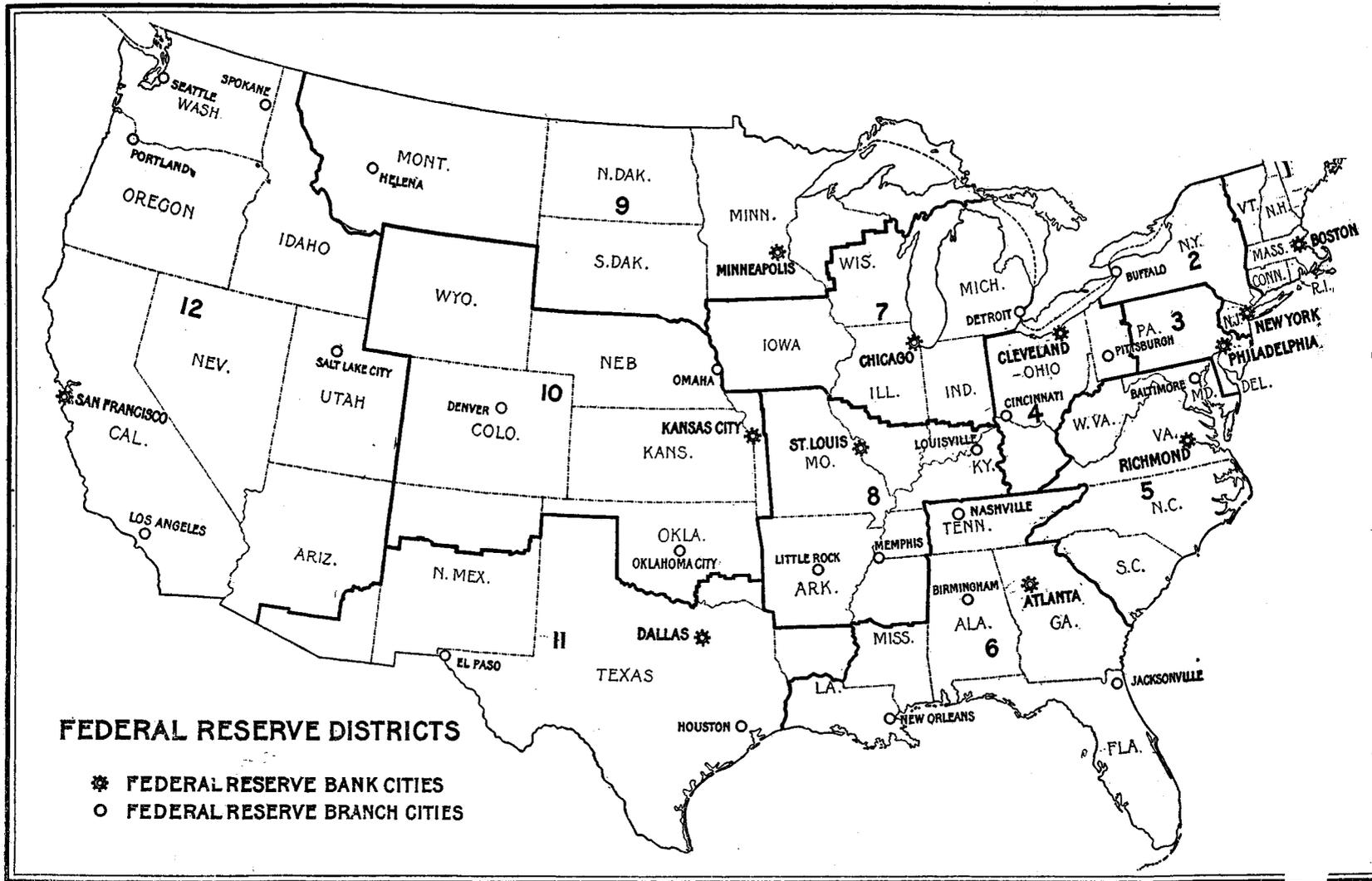
Federal Reserve Bank.	Discounted bills maturing within 90 days (including member banks' 15-day collateral notes) secured by—		Bankers' acceptances maturing within 3 months.	Trade acceptances maturing within 90 days.	Discounted bills secured otherwise than by Government war obligations, also unsecured, maturing within—	
	Treasury certificates of indebtedness.	Liberty bonds and Victory notes.			90 days (including member banks' 15-day collateral notes)	91 to 180 days (agricultural and live-stock paper).
Boston.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
New York.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Philadelphia.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Cleveland.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Richmond.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Atlanta.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Chicago.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
St. Louis.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Minneapolis.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	5 $\frac{1}{2}$	6	6
Kansas City.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
Dallas.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6
San Francisco.....	4 $\frac{3}{4}$	5 $\frac{1}{2}$	5	6	6	6

NOTE.—Rate on paper secured by War Finance Corporation bonds 1 per cent higher than rate on commercial paper shown in column 5.

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The branches at Helena, Mont., and Oklahoma City, Okla., have been authorized by the Federal Reserve Board but are not yet open for business.