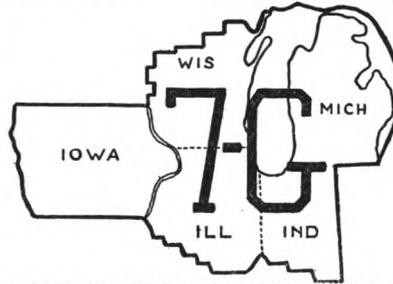


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

Volume 7. No. 2

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

February 1, 1924

BUSINESS CONDITIONS IN THE UNITED STATES

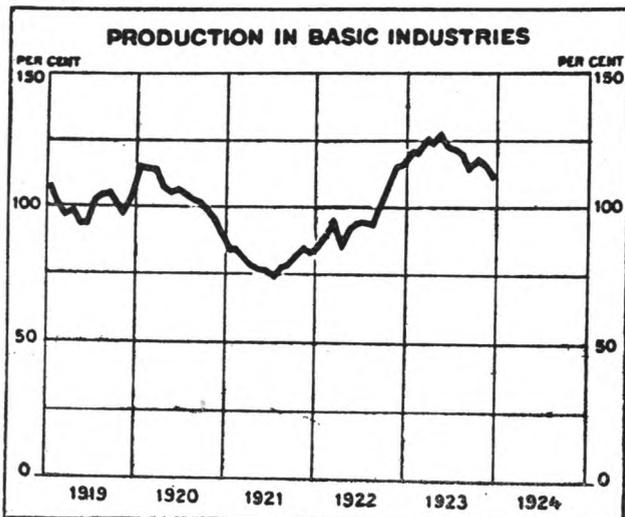
PRODUCTION of basic commodities showed further decline in December and wholesale prices receded slightly. Christmas trade was somewhat larger than a year ago. Changes in the banking situation in January reflected chiefly an unusually large return flow of currency after the holiday season.

PRODUCTION—The index of production in basic industries declined 4 per cent in December to the low point of the year. The decrease for the month reflected principally a large reduction in consumption of cotton, but also reduced operations in the woolen, petroleum, sugar, and lumber industries. Production of pig iron and anthracite increased. The Federal Reserve Board's index of factory employment decreased one per cent, and was 4 per cent lower than in the spring. The largest decreases were at plants manufacturing food products and railroad equipment. Building contract awards in

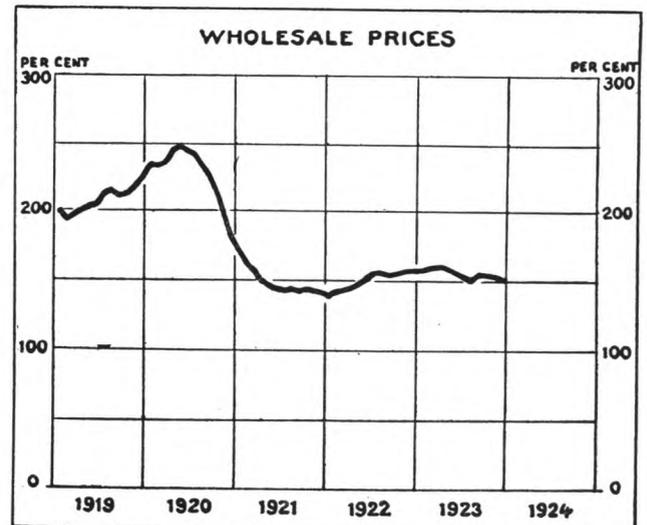
December were smaller than in November, but almost 25 per cent larger than a year ago.

TRADE—Railroad shipments continued to decrease during December and were slightly less than in December, 1922. Loadings of coal and grain were smaller than a year ago, while loadings of miscellaneous merchandise and live stock were in larger volume. The volume of wholesale trade showed more than the usual seasonal decrease and was at about the same level as a year ago. Sales of meat, hardware, and drugs were larger than in December, 1922, while sales of dry goods and shoes were smaller. Retail trade, though larger in December, 1923, than in any other month on record, did not show as large an increase over November as is usual at the Christmas season.

PRICES—Wholesale prices, according to the index of the Bureau of Labor Statistics, decreased less than one per cent during December. The chief



Index of 22 basic commodities corrected for seasonal variation (1919=100). Latest figure December, 1923: 111.



Index of U. S. Bureau of Labor Statistics (1913=100, base adopted by the Bureau). Latest figure December, 1923: 151.

Compiled January 28, 1924

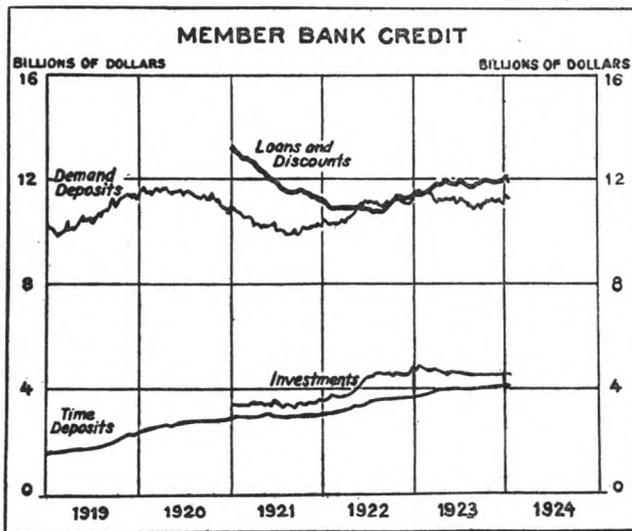
reductions occurred in prices of fuel and building materials, while prices of clothing and metals increased, and prices of farm products remained unchanged. During the first two weeks of January prices of corn, wheat, pig iron, petroleum, and lumber advanced, while quotations on cotton, sugar, and copper were lower.

BANK CREDIT—The volume of credit extended by the Federal Reserve Banks showed the usual sharp increase during the latter part of December in response to holiday requirements for credit and currency and financial settlements falling due on the first of January. With the passing of the seasonal demands there was an unusually rapid return flow of currency to the reserve banks, reflected both in an increase of reserve and a decrease of Federal Reserve note circulation. Member banks used the currency returned from circulation to reduce their borrowings, with the consequence that the earning assets of the Federal Reserve Banks declined by \$360,000,000 during the four

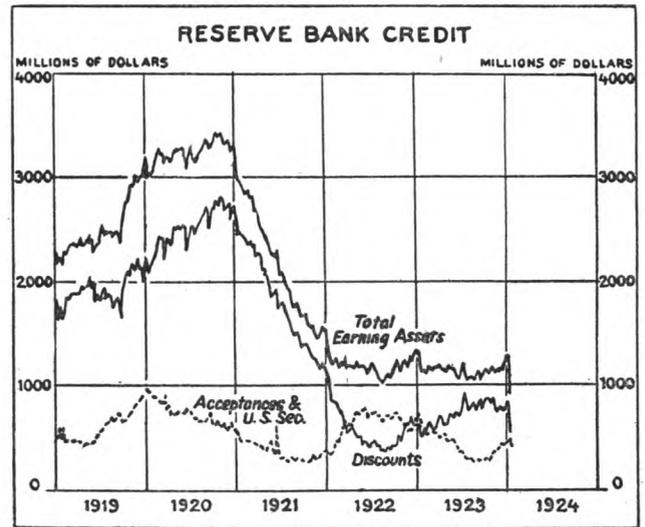
weeks following Christmas, or approximately \$150,000,000 more than during the corresponding period of 1923. At the middle of January the volume of reserve bank credit outstanding was below \$1,000,000,000 for the first time since early in 1918.

Loans made largely for commercial purposes by member banks in principal cities declined between December 12 and January 16 to a point \$264,000,000 lower than at the peak in October and to about the level of July, 1923. This decrease in loans, which was general throughout the country, was accompanied by a movement of funds to the financial centers and an increase in loans on securities, principally in New York.

Easier money conditions in January were reflected in a further slight decline in the rate on prime commercial paper to $4\frac{3}{4}$ per cent, compared with $4\frac{3}{4}$ to 5 per cent in December, and in increased activity in the investment markets.



Weekly figures for member banks in 101 leading cities. Latest figures January 9, 1924: Loans and Discounts, 11,931 million; Investments, 4,507 million; Demand Deposits, 11,285 million; Time Deposits, 4,106 million.



Weekly figures for 12 Federal Reserve Banks. Latest figures, January 16, 1924: Earning Assets, 944 million; Discounts, 534 million; Acceptances and United States Securities, 409 million.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

BUSINESS started off the New Year with a more reassuring attitude than a year ago. The December returns now available make an analysis of the figures for the calendar year 1923 possible and bear testimony to markedly sounder basic conditions prevailing in the Middle West.

In themselves, the December reports reflect the usual year-end characteristics, with retail trade at its annual height, but with general slackening in primary and finished production, and with inventory periods reducing employment at industrial plants and producing the customary quiet in wholesale markets.

Comparisons with December, 1922, differ, the majority of activities used as trade barometers for this district, however, showing substantial gains. Building permits and awards formed one of the exceptions, although for the year as a whole, actual construction was within one per

cent of the 1922 volume. In pig iron output, automobile manufacture, and carloadings, yearly totals exceeded all previous records. Department store, mail order house, and chain store trade, as well as primary distribution in most commodities, surpassed the two preceding years. The amount of coal mined in the district also was the largest since 1920.

CREDIT AND FINANCE

Credit demand for commercial and industrial purposes in December was strong, and in agricultural sections requirements were fairly heavy, principally to care for purchases of feeding cattle, and for hog shipments. The volume of obligations of many country banks, however, is considerably reduced from a year ago. In dairy sections of the district the situation appears uniformly healthy. Debits to individual accounts increased in December, though to a lesser degree than in December, 1922, com-

pared with the preceding month of that year. Deposits aggregated greater than a year ago, and the growth in savings in the district was very general. Holiday trade was excellent. The failure of many expected difficulties to materialize in 1923 has resulted in improved sentiment so that business and banking entered the New Year with an attitude of conservative optimism.

Business Failures—An increase over November of 1.7 per cent in the number of business failures in the district was reported by Dun's Review, representing, however, a 20 per cent decline in the aggregate of liabilities involved. For the country as a whole failures increased 8 per cent, and liabilities 2.6 per cent. In the preceding month, the percentage of increase in number for the Seventh district was 10.5 above October, and liabilities 34.3; for the entire United States 1.9 per cent more failures occurred, but liabilities shrank 36.6 per cent.

Commercial Paper—Commercial paper sales in December were 9.5 per cent greater in volume than in November, compared with a 7.2 per cent decline that month from October. Reports indicated the continued maintenance of a substantially higher volume of sales than last year. In December, 1923, sales were 26.4 per cent larger than in December, 1922. A fair to good demand for paper is reported by the dealers, but the supply is limited. Rates again declined, customary being $4\frac{3}{4}$ to 5 per cent in December and 5 to $5\frac{1}{4}$ per cent in November. December was the second successive month showing easier rates.

Open Bill Market—Operations in the open bill market during the four-week period ended January 9 were characterized by large decreases in the volume of bills purchased and sold. Reports from six dealers, one of whom had no transactions, disclose that the volume of bills bought declined 30.9 per cent from the previous four-week period. Sales to the Federal Reserve bank represented about 36 per cent of the total sales in the period under review; in the previous period they were approximately 4 per cent of the total. Aggregate sales declined 15.9 per cent in volume. Holdings at the close of the period were 14.3 per cent smaller than at the close of the previous four weeks. The supply of bills was limited and the demand was reported as fair; their movement was not generally good at the offered rates, which remained unchanged from the previous period. The shorter maturities were in best demand.

Acceptances—As against the increase of 95.0 per cent over October in the volume of acceptances executed in November, December shows a decrease of 44.1 per cent from the previous month, as reflected by reports from twenty-seven banks, eleven of which had no transactions that month. In line with this decrease is the falling off in the volume of bills bought and sold, which declined 57.3 per cent and 51.4 per cent, respectively. Bills held at the close of the month continue to increase and were 5.1 per cent greater than at the close of November. The liability of the reporting banks as acceptors was augmented 8.5 per cent in December, while the holdings of their own acceptances were 13.6 per cent in excess of those of November.

The Federal Reserve bank purchased 27 million in

bankers' acceptances in December, the largest volume since July. This compares with 22 million in November. There were no sales from holdings during the month; and holdings at the close of the month were 42 million as compared with 39 million at the end of November.

AGRICULTURAL FINANCING

An increase in December of approximately \$1,300,000 was shown in the aggregate loans outstanding of twenty Joint Stock Land banks operating in the five states lying wholly or partly in the Seventh district. The total on December 31 was \$142,640,864, as compared with \$141,356,881 November 30. Four Federal Land banks increased their aggregate of loans outstanding in the same states by slightly under \$2,500,000 between these dates, and Intermediate Credit banks by about \$140,000.

The distribution by states of the outstanding loans of these classes of banks on December 31 is given in the tabulation below:

	JOINT STOCK LAND BANKS	FEDERAL LAND BANKS	INTERMEDIATE CREDIT BANKS
Number of banks.....	20	4	4
Illinois	\$ 40,006,359	\$ 19,181,340	\$347,828
Iowa	70,140,845	41,118,750	84,345
Indiana	27,087,260	27,141,200	10,406
Wisconsin	4,172,200	20,848,500	116,872
Michigan	1,234,200	15,686,900	.....
	\$142,640,864	\$123,976,690	\$559,451

Dealers' subscriptions to a \$60,000,000 issue of Federal Land Bank bonds were closed on the date of issue, January 14. These bonds are priced at $100\frac{1}{2}$ to yield 4.70 per cent to the redeemable date, 1934, and $4\frac{3}{4}$ per cent thereafter, and the offering is made by six well known houses in New York, Chicago, and Baltimore. The bonds are tax exempt, and while not Government obligations, they constitute secured obligations of banks operating under Federal charter with Government supervision, on whose boards of direction the Government is represented.

The Des Moines Joint Stock Land bank late in December offered 5,000 shares of stock, par value \$100, priced at \$128 to net 7.05 per cent. This operation was followed in January by an issue of \$2,000,000 of 5 per cent farm loan bonds, due December 1, 1933, callable November 1, 1933, at 101 and interest to yield 4.87 per cent to 1933 and 5 per cent thereafter.

MEMBER BANKS IN THE DISTRICT

Loans and discounts of member banks in the district moved upward in volume the latter half of December, but on January 9 the trend was reversed, to a much greater extent in the aggregate for Chicago and Detroit reporting members than in the total of those in other selected cities.

The volume of Government securities held by Chicago member banks increased steadily until January 9, when a drop of 20 million was shown; "other" security holdings followed the same direction, declining nearly 10 million on January 9. In Detroit only negligible changes were evident in "other" security holdings, and Government investments showed small declines after December 19. In other selected cities the tendency in holdings of Government securities has been slowly downward since December 19, with little change manifested in the investments in securities other than Government.

Demand deposits of reporting member banks showed marked seasonal increases on January 2, followed by a considerable drop the subsequent week, particularly in the aggregate of Chicago and Detroit reporting members. Time deposits in these cities moved downward after December 19, and in other selected cities the same tendency has been evident, though much less extensively than in Chicago and Detroit.

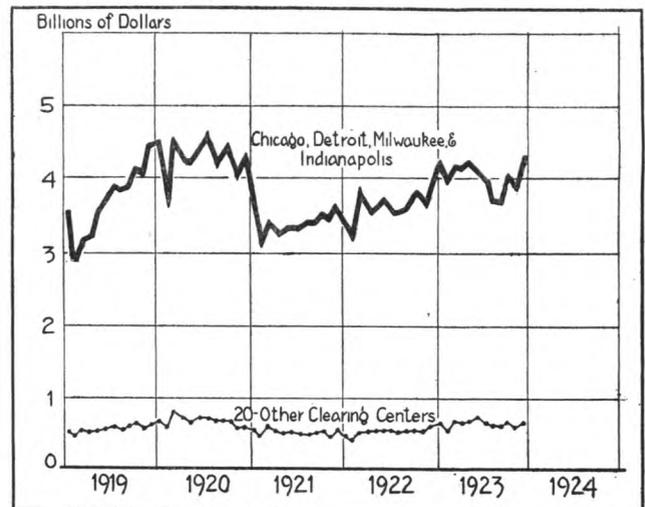
continued demand for credit to finance purchases of feeding cattle, and shipments of hogs and grain, the former in unusually heavy volume this year.

Total earning assets have moved downward, reflecting the lessened volume of discounts during recent weeks; Federal Reserve notes showed the same trend, having moved from 420 million on December 26 to 376 million January 16. Total reserves changed little during the entire month of December and until January 16, upon which date a drop of about 21 million was shown.

DEBITS TO INDIVIDUAL ACCOUNTS

The usual holiday activity in business in December was reflected this year in a 10.4 per cent advance in volume of payments by check in twenty-four clearing house centers in the district. The four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, showed an aggregate increase of 10.6 per cent, and a gain of 8.9 per cent was evidenced in twenty smaller cities. In November, debits to individual accounts as reported by these centers declined 5.1 per cent, the result, however, of a shorter month and a national holiday, rather than any marked slowing down as compared with October. In 1922, the increase of December volume of payments by check over November was 13.8 per cent.

VOLUME OF PAYMENT BY CHECK Checks Drawn on Clearing House Banks, 7th District

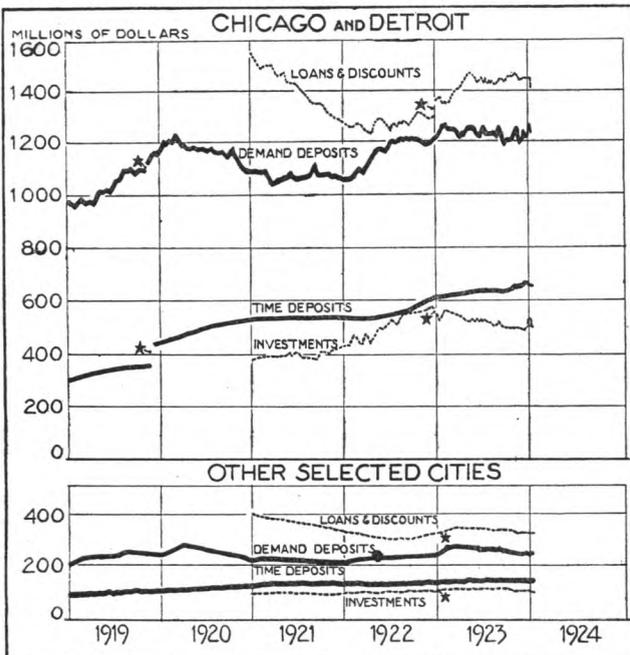


Figures used are estimates for calendar months based on weekly reports to this bank. Latest figures shown, December, 1923, in thousands of dollars: Chicago, Milwaukee, Detroit, and Indianapolis, 4,290,803; 20 Other Clearing House Centers, 653,448.

SAVINGS ACCOUNTS AND DEPOSITS

The crediting of semi-annual interest was largely responsible for the aggregate gain of 1.8 per cent in savings deposits as reported on January 1 by banks representing approximately 40 per cent of the savings deposits in the district. The largest increase was in Illinois where a gain of 3.5 per cent was reported, while in Michigan, which was the only state in the district to show a downward trend, the decrease was 0.7 per cent. Among the reasons given for the shrinkage in Michigan deposits after the steady gain since February, 1922, were the withdrawal of funds by 1923 Christmas Savings Club members and

POSITION REPORTING MEMBER BANKS, 7TH DISTRICT

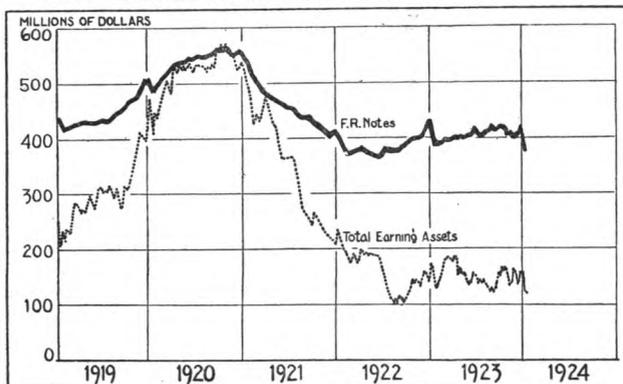


*Break in curve indicates data not comparable with preceding. Based on weekly reports to this bank by approximately 49 member banks in Chicago, 13 in Detroit, and 44 in other selected cities. Latest figures shown, January 9, 1924.

POSITION OF THE FEDERAL RESERVE BANK

Loans to member banks have shown a steady downward trend since December 26, particularly marked during the second week of January. The shrinkage in loans is consequent upon the arrival of the annual liquidation period. Loans to members in industrial areas, especially the larger cities, show the greatest decline; in agricultural sections the volume has changed relatively little, explained by

POSITION FEDERAL RESERVE BANK OF CHICAGO



Latest figures shown, January 16, 1924, in thousands of dollars: Federal Reserve Notes, 376,136; Total Earning Assets, 118,607.

the payment of winter taxes. Aggregate deposits for the district, compared with a year ago, increased 9.4 per cent, with Michigan showing the greatest gain.

The increase of 1.2 per cent in the average savings account in the district between December 1, 1923, and January 1, 1924, was due chiefly to the gains in Illinois and Wisconsin of 2.6 per cent and 2.2 per cent, respectively. Michigan's average account decreased 0.7 per cent, while Indiana and Iowa showed gains of 0.8 and 0.3 per cent, respectively. Compared with a year ago, the average account for the entire district increased 0.9 per cent.

BONDS AND INVESTMENTS

The stimulus shown in the bond market in the early

part of December continued in fair degree throughout the month, despite the usual deterrent effect of the holiday season. This factor, no doubt, was partly offset by trading in the market to establish tax losses. Since the first of January there has been a decided improvement with advancing prices. This condition is the result of a substantially increased investment demand at a time when there is an unusual dearth of new issues. Public utilities continued the most active and popular; high class railroad issues have been in good demand as also have been some of the industrials; and municipal obligations, especially county issues, showed some improvement. First mortgage building bonds have been in good demand.

AGRICULTURAL PRODUCTION AND CONDITIONS

The Bureau of Agricultural Economics in its pig survey for December shows that the number of sows farrowed this autumn decreased 8.7 per cent in the United States, and 6.1 per cent in the corn belt, compared with that in the fall of 1922. The number of pigs saved declined to a lesser extent than total farrowings, and was 6.8 per cent less than a year ago in the United States; in the corn belt states the decline was 3.8 per cent.

LIVE STOCK ON FARMS IN THE UNITED STATES ON JANUARY 1

	1924	1923	1922
Hogs	65,301,000	68,227,000	58,127,000
Sheep	38,361,000	37,223,000	36,327,000
Milk Cows	24,675,000	24,437,000	24,082,000
Other Cattle	42,126,000	42,803,000	41,977,000
Horses	18,263,000	18,627,000	19,056,000
Mules	5,436,000	5,485,000	5,467,000

GRAIN MARKETING

Owing largely to the marketing of a smaller volume of wheat, less grain was handled through the primary markets of the United States during December, 1923, than in the corresponding month of 1922. The receipts of oats and corn were seasonally greater than in November, 1923. Corn in slightly larger volume was received and shipped from these markets in December than in either the previous month or a year ago. Exports of oats and rye declined in December, but those of wheat, corn, and barley showed slight increases.

The total United States, Canadian, and British visible supply of wheat was 252,762,000 bushels on January 5, 1924, compared with 249,962,000 bushels on December 1, 1923, and 190,559,000 bushels on January 6, 1923.

VISIBLE SUPPLY OF GRAIN IN THE UNITED STATES

Stocks in public and private warehouses, at principal points of accumulation, at lake and seaboard points, and in transit by water in the United States. Figures supplied by the Secretary of the Chicago Board of Trade.
(In thousands of bushels)

	WHEAT	CORN	OATS	RYE	BARLEY
January 12, 1924					
Warehouses and Afloat.....	72,566	9,335	19,534	19,379	3,047
Bonded	30,563	.....	1,487	2,285	269
December 15, 1923					
Warehouses and Afloat.....	73,808	4,722	18,157	18,365	3,319
Bonded	32,375	.....	2,598	1,893	311
January 13, 1923					
Warehouses and Afloat.....	40,193	18,816	31,116	10,772	3,248
Bonded	29,722	.....	3,019	2,894	1,668

Chicago prices of small grains did not show any material change in December from the average maintained in November, but corn declined.

FLOUR

Although activity in the flour industry during December exceeded that of December a year ago, there was a con-

tinuation of the downward trend in production which began in November. During December operations of thirty-eight flour mills in the district averaged 52.0 per cent of capacity compared with 55.9 per cent in November and 44.8 per cent in December, 1922. Total aggregate production at these mills declined 7.0 per cent from the previous month's level, with wheat flour showing a decrease of 7.8 per cent, and other flour 1.2 per cent; compared with a year ago there were increases of 16.0 per cent in total flour production, 8.7 per cent in wheat flour, and 108.0 per cent in flour other than wheat.

Stocks of flour at the end of December showed little change either from November 30 or a year ago, but wheat stocks decreased 8.2 per cent during December and 14.3 per cent during the calendar year 1923. December sales of flour decreased 7.7 per cent in volume and 8.3 per cent in value from the previous month; compared with December, 1922, there were decreases of 6.1 per cent in volume and 19.0 per cent in value.

The Chicago Board of Trade reported an increase in receipts of flour at Chicago during December over the previous month, but they were less than in September or October. Receipts amounted to 922,000 barrels compared with 879,000 barrels in November and 1,270,000 barrels a year ago. Flour shipments from Chicago, which continued to reflect the declining activity in the industry, aggregated 650,000 barrels compared with 735,000 barrels the previous month and 1,054,000 barrels in December, 1922.

MOVEMENT OF LIVE STOCK

December receipts and slaughter of live stock continued in excess of a year ago, although those of cattle and calves were seasonally less than in November. Hogs were received in larger volume during December than in the previous month; and consequently slaughter of this class of live stock was seasonally greater than in November. The total receipts of hogs for the calendar year increased considerably over 1922; for cattle, calves, and sheep the increase was slight. Slaughter for 1923 showed corresponding increases over that of the previous calendar year.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	SHEEP	CALVES
Public stock yards in U. S.				
December, 1923.....	706,567	3,918,572	836,574	311,841
November, 1923.....	754,084	3,657,036	777,091	352,101
December, 1922.....	701,578	3,359,714	820,459	295,859
December, 1921.....	495,130	2,147,287	803,824	246,931

Reshipment of cattle, calves, and sheep back to farms in December showed a large seasonal decrease in volume compared with the previous month. Shipments of feeder cattle to farms for the year 1923 were in smaller total than for 1922, but sheep were sent back to farms in greater numbers.

AVERAGE PRICES OF LIVE STOCK
Per hundred pounds at Chicago

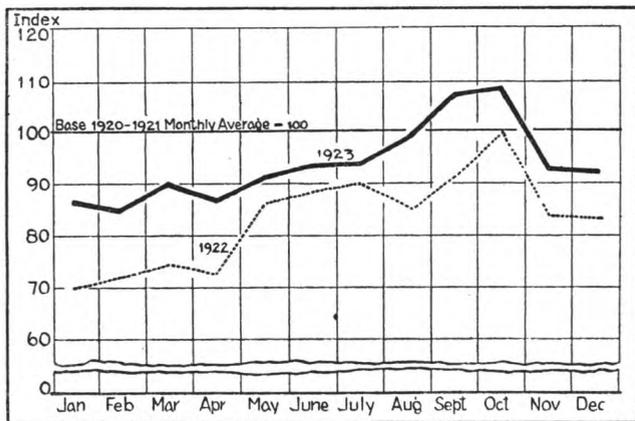
CLASS	WEEK ENDED		MONTHS OF	
	JANUARY 12, 1924	DECEMBER 1923	NOVEMBER 1923	DECEMBER 1922
Native Beef Steers (average)....	\$ 9.50	\$ 9.50	\$ 9.70	\$ 9.20
Fat Cows and Heifers.....	5.70	5.50	5.30	5.10
Canners and Cutters.....	2.90	2.75	2.75	3.10
Calves	11.60	9.30	8.80	9.55
Stockers and Feeders.....	6.20	6.00	5.95	6.30
Hogs (bulk of sales).....	7.15	6.95	6.90	8.20
Sheep	7.25	7.00	7.00	7.35
Yearling Sheep.....	11.40	10.40	10.35	11.15
Lambs	13.25	12.80	12.75	14.20

MEAT PACKING

December production of meats and their by-products continued in large volume at slaughtering establishments in the United States. This condition is the result principally of continued movement to market of hogs in numbers somewhat greater than usual at this time of the year, coupled with normal seasonal slaughter of other live stock.

January 1 inventories, although exceeding those for the previous month, approximated the January 1 average for the five years immediately preceding. Employment declined 1.3 per cent in number, 5.9 per cent in total pay-rolls, and 5.8 per cent in hours worked during the period covered by the last pay-date in December compared with the same period a month previous. Sales in dollars declined 2.0 per cent in December from November, but were 4.1 per cent more than in December, 1922, according to statistics compiled by this bank from direct reports

INDEX OF SALES—MEAT PACKING COMPANIES IN THE UNITED STATES



Computed from dollar amounts. Latest figure shown, December, 1923: 91.0, partly estimated.

FUEL AND POWER PRODUCTION

COAL

Weekly production of bituminous coal in the United States during December continued around 10,000,000 tons with the exception of the week ended December 29 when the universal observance of Christmas, prolonged to three days at many of the mines, caused output to drop to 6,713,000 tons, the lowest level reached during the entire

of fifty-six meat packing companies in the United States. During December wholesale prices of veal and fresh skinned hams were firmer, but those of other edible meat products averaged lower at Chicago than in the previous month. The majority of prices trended slightly downward in the first part of January; however, those for pork loins, lamb, and fresh hams were firmer than in December.

Purchasing of hog fats by Continental buyers has held up remarkably well, although there was some slackening during the holiday period. Prices realized on the Continent have been fully on a parity with those in the United States, and in a few instances some of the commodities have been sold at a premium. Unfavorable conditions have prevailed in English markets because of the large supply of Danish meats, so that prices in the United Kingdom, after taking into consideration the decline in sterling, in the majority of cases have been below a parity with those in Chicago. Reports from representative packers engaged in foreign trade show that on account of their filling orders placed in previous months calling for December delivery, their total forwardings of meats and lard in that month for export were slightly greater than in November.

January 1 inventories of stocks already abroad were indicated less than a month previous.

DAIRY PRODUCTS AND POULTRY

Statistics compiled from direct reports of representative creameries show that although butter production in the Seventh district was seasonally small during December, it was 4.9 per cent greater than in November. These factories reported a total production 7.7 per cent larger than in December, 1922. The weekly summaries issued by the American Association of Creamery Butter Manufacturers indicate that the total December output in the United States was also greater than in either November, 1923, or December, 1922. During December a smaller volume of factory cheese was produced in Wisconsin than in November, although the outturn was in excess of that for the corresponding period a year ago.

Chicago receipts of butter, eggs, and poultry were in larger total volume in December than in either the preceding month or December, 1922, but receipts of cheese declined. Wholesale prices of butter, fowls, and chickens averaged higher, while those of eggs, cheese, turkeys, ducks, and geese were generally lower at Chicago during December than in November.

Cold storage holdings of poultry were greater in the United States on January 1, 1924, than a month previous, but stocks of butter, eggs, and cheese declined.

year. During New Year's week production amounted to 9,068,000 tons, and the daily average rose from 1,343,000 tons during the preceding week to 1,754,000 tons. The following week showed a further increase in aggregate production to 11,921,000 tons, a record higher than any reached in the year 1923. Total output for 1923, which was larger than that for any year since 1920, approximated

545,300,000 tons compared with 422,268,000 tons in 1922.

December reports from Illinois and Indiana mines indicate a continued upward trend in time lost by miners on account of a sagging market. Illinois output during the month showed only a slight decrease from November, but declined 17.5 per cent from December, 1922. The state's total production for the year increased 42.7 per cent over that of 1922.

During December demand for bituminous coal in this vicinity showed little change from the previous month. Screenings remained in greatest favor, while domestic sizes continued to accumulate at the mines. With the advent of cold weather in January, however, demand for domestic increased to such an extent that the heavy stocks of that size were soon materially reduced, and Illinois and Indiana mines which had not already closed down on account of the lack of demand for coal considerably increased their running time. It is reported that some movement of steam sizes to customers for storage purposes has begun to develop in anticipation of a possible suspension of operations in the bituminous fields on April 1. Demand for Pocahontas showed some strengthening during the past month, mine-run selling at \$2.00@ \$2.50 on January 22, compared with \$1.75@ \$2.00 on December 15.

Despite the increased demand for coal with the approach of cold weather, prices in general showed little change. The average spot price of bituminous coal for the week ended December 24 was \$2.16, a new low record for the year. After this a slight upward tendency in prices began to manifest itself and during the week ended January 7, the average spot price was \$2.20, and remained unchanged during the following week.

INDUSTRIAL EMPLOYMENT CONDITIONS

Holidays and the closing of many plants for the customary inventory season caused a decided drop in employment figures as reported for the last payroll period of December. The returns of 296 representative industrial concerns of the district showed a falling off of over 6 per cent from the previous month in average payrolls with similar reduction in total man-hours of work and a decrease of 2.7 per cent in volume of employment. While largely seasonal, the curtailment was slightly heavier than a year ago when declines of 2.6 per cent in men and 5.0 in payrolls were reported by practically the same firms for which returns are received now.

The declines were general for practically all of the

MANUFACTURING ACTIVITIES AND OUTPUT

AUTOMOBILE PRODUCTION AND DISTRIBUTION

The December output of passenger cars and trucks combined decreased 3.1 per cent from November, although the output of trucks remained practically the same. This shrinkage, largely seasonal, was slightly less than December a year ago, when the loss amounted to 4.0 per cent. Compared with December, 1922, the output increased 33.1

Anthracite production in the United States during December reached its highest level during the week ended December 15 when 2,013,000 tons were mined. On account of Christmas and almost complete suspension of operations during the day following, anthracite output, during the week ended December 29 when 1,236,000 tons were produced, reached its lowest level since the strike. During the first week of January 1,435,000 tons of anthracite were mined, production reaching 1,840,000 tons the subsequent week. Supplies of domestic sizes were adequate, while little movement in the steam sizes was reported.

ELECTRIC ENERGY

Seasonally increased output and decreased sales to industrial users are shown in the December reports of nine central station companies in the district. No variation in the percentage comparisons of industrial sales in the aggregate and daily average bases is shown, by reason of the fact that the number of working days in the respective months were equal. Approximately the same level above the previous year's operations as was shown last month was maintained in December.

CHANGES IN DECEMBER, 1923, FROM PREVIOUS MONTHS

Compiled from direct reports to this bank. Nine companies reporting.

	PER CENT CHANGE FROM		
	DECEMBER, 1923	NOVEMBER, 1923	DECEMBER, 1922
Plant capacity (K.W.).....	1,794,750	+2.0	+ 6.8
Plant output (K.W.H.).....	578,949,736	+4.3	+10.7
Plant output (daily average-K.W.H.)	18,675,798	+0.9	+10.7
Peakload demand (K.W.).....	1,483,703	+2.9	+ 7.5
Industrial sales (K.W.H.).....	209,284,054	-4.5	+14.6
Industrial sales (working day average-K.W.H.)	8,371,362	-4.5	+14.6
	DECEMBER, 1923	NOVEMBER, 1923	DECEMBER, 1922
Ratio peakload demand to plant capacity	82.7	81.9	82.1
Load factor.....	52.4	53.5	51.0

industries represented in these returns. In brick and clay products alone, where plants had closed for repairs as early as November, there was a definite increase registered in the December returns. A similar condition caused an increased volume of employment in plants reporting under the heading of unclassified iron and steel, but was not sufficient to prevent heavy reductions in hours and payrolls. Other industrial groups that maintained their previous volume of employment were metals other than iron and steel, lumber, musical instruments, bakery products, and leather. With the exception of brick and clay products, however, only two groups, those of public utilities and agricultural machinery, maintained their payrolls.

per cent, approximately the same increase as reported in November over the corresponding month of 1922. Several price changes were announced during the month.

Complete figures of passenger cars and trucks produced in 1923 were 4,002,558, which compared with the 1922 production of 2,570,958, showed a gain of 55.7 per cent for last year. Production of passenger cars alone amounted

to 3,637,345, an increase of 55.9 per cent, while the output of trucks was 365,213, an increase of 53.3 per cent.

According to production statistics of identical manufacturers reporting direct to this bank and through the National Automobile Chamber of Commerce, representing practically complete November production, 275,121 passenger cars were built in December compared with 284,758 in November, a decrease of 3.4 per cent. The output of trucks by manufacturers producing 27,374 during November amounted to 27,275 in December, a decrease of 0.4 per cent.

Automobile statistics reported by the Census Bureau show 275,268 passenger cars produced in December compared with 284,921 in November. Truck output amounted to 27,875 in December, a slight decline from the 28,066 output of November.

Reports from seventy-seven distributors and dealers in the Middle West indicate a further increase in the wholesale distribution of automobiles during December compared with November, although comparisons with a year ago show a falling off in both the number and value. Retail sales increased slightly in number compared with November while the value declined, but they were above December, 1922, both in number and in value. Inventories on December 31 indicate a further stocking up of new cars.

Used car sales decreased from November and increased over a year ago. Salable used cars on hand December 31, increased in number and value over the preceding month and year.

DISTRIBUTION OF AUTOMOBILES

	Changes in December, 1923, from previous months		COMPANIES INCLUDED	
	PER CENT CHANGE FROM		NOVEMBER, 1923	DECEMBER, 1922
Number of new cars sold				
Wholesale	+13.8	-13.5	43	36
Retail	+2.0	+2.8	74	61
Value of new cars sold				
Wholesale	+14.3	-4.9	43	36
Retail	-1.3	+0.7	74	61
New cars on hand at end of month				
Number	+20.5	+32.9	74	52
Value	+16.2	+19.9	74	52
Used cars sold during the month	-14.6	+25.0	73	57
Salable used cars on hand at end of month				
Number	+15.1	+20.3	75	50
Value	+11.0	+28.5	75	50

Shipments of automobiles during December reported by the National Automobile Chamber of Commerce were seasonally less than in November.

Exports of passenger cars during November from the United States numbered 10,875, an increase of 411 from October. The value amounted to \$8,437,410, an increase of \$348,578. The number of trucks exported increased from 2,311 in October to 2,920, while the value rose from \$1,415,419 to \$2,012,584. Shipments of casings during November were again in excess of production with a corresponding decrease in inventories as of November 30. Inner tube shipments were slightly under production during the month.

CASTING FOUNDRIES

Consumption of iron and steel by twenty-six casting foundries in the district continued to decline in December. Iron scrap was the only item showing an advance over

November; pig iron declined from that month slightly, as contrasted with the decrease in November from October, while consumption of steel scrap showed an even more extensive falling off in December than in the previous month. Shipments, in tonnage and value, decreased less extensively than in November as compared with October. All items were substantially below the average of the previous eleven months.

CHANGES IN DECEMBER, 1923, FROM PREVIOUS MONTHS

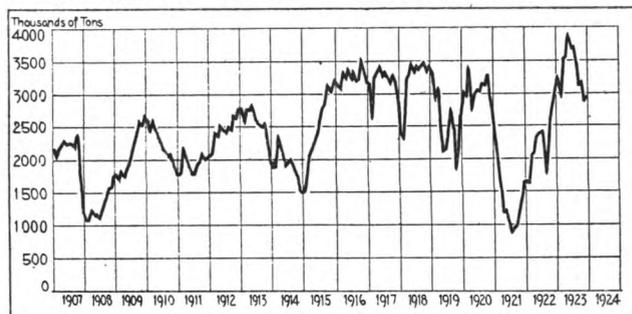
	Compiled from direct reports to this bank		COMPANIES INCLUDED	
	PER CENT CHANGE FROM		NOVEMBER, 1923	11 MONTHS, 1923
Pig iron consumed	-7.9	-30.7	26	22
Iron scrap consumed	+2.1	-13.2	26	22
Steel scrap consumed	-27.3	-36.1	26	22
Total tonnage consumed	-21.4	-34.0	26	22
Castings shipped (tonnage)	-11.5	-23.1	16	22
Castings shipped (dollars)	-11.8	-18.4	25	25

IRON AND STEEL

Showing a decline for the seventh consecutive month, average daily production of pig iron in December was 2 per cent less than in November. This, however, is a lessening in the rate at which output has been falling off since mid-year. The decline in pig iron production in the Chicago district was more pronounced than in the country as a whole. A shrinkage was also shown in the production of steel ingots, which, in comparison with November, dropped considerably more than pig iron output, although less than the decrease shown in November.

In the early part of the month pig iron buying slackened but a fairly stable market was maintained and, despite occasional dullness, the condition was generally satisfactory considering the large volume booked in November. Sales of steel, in fair volume early in December, showed gradual expansion so that by the first of January new business was appearing in considerably greater volume. Steel mills in the Chicago district report satisfactory bookings covering the first quarter of 1924, as well as favorable indications for the first half year. Normal inventories at district mills are reported, but stocks held by customers are indicated at a level slightly lower than usual for this time of the year. For the first time since March unfilled orders showed an increase in comparison with the previous month. Prices firmed considerably during December and at the close of the month the composite price of iron and steel products was at a substantially higher level than at the end of

PIG IRON PRODUCTION IN THE UNITED STATES



Total monthly production of pig iron. Latest figure shown, December, 1923: 2,920,982 tons.

November. This rise was due in large part to the strength of pig iron prices.

Production of slab zinc continued to increase in December and totaled 46,485 tons, which compared with 44,280 tons in November. Shipments likewise advanced, and aggregated 40,811 tons in December; 39,163 tons were moved in November.

STOVES AND FURNACES

Reports from eighteen manufacturers show that shipments of stoves and furnaces declined in December even more extensively than in November. Production, as measured by operations in the moulding room, also lowered in volume; but bookings were slightly expanded, largely as a result of orders received by one firm; and inventories decreased to about the same degree as in the previous month.

CHANGES IN DECEMBER, 1923, FROM PREVIOUS MONTHS

Compiled from direct reports to this bank

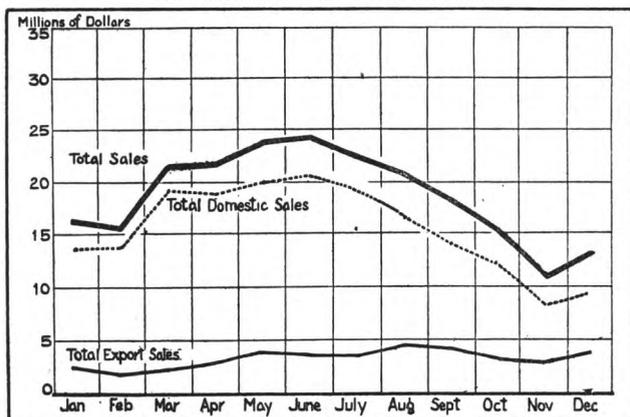
	PER CENT CHANGE FROM		COMPANIES INCLUDED	
	NOVEMBER, 1923	DECEMBER, 1922	NOVEMBER, 1923	DECEMBER, 1922
Shipments	-38.0	-11.4	18	18
Orders accepted.....	+ 5.3	+29.7	12	12
Inventories	- 3.3	+14.3	13	13
Operations (moulding room)	-19.5	- 0.9	16	16

AGRICULTURAL MACHINERY AND EQUIPMENT

The total domestic and export sales billed by 109 manufacturers of agricultural machinery and equipment in the United States were 19.2 per cent more in December than in the previous month, according to reports submitted direct to this bank in dollar amounts. Export billings increased 34.9 per cent over November, and domestic sales increased 13.9 per cent. Figures for all these companies are not available for the corresponding month in 1922, but eighty-nine of the firms have reported sales for December, 1923, and 1922. Statistics compiled from these figures indicate that the aggregate sales for December, 1923, were 21.0 per cent greater than in December a year ago.

Based on the monthly sales reported direct to this bank by 133 companies and on all other data at hand, the total of domestic and export sales of agricultural machinery and

SALES OF AGRICULTURAL MACHINERY AND EQUIPMENT IN THE UNITED STATES—1923



Compiled from monthly reports from 133 manufacturers. Latest figures shown, December, 1923, in thousands of dollars: Total Sales, 13,132; Total Domestic Sales, 9,345; Export Sales, 3,787. December figures partly estimated.

equipment manufactured in the United States is estimated at \$267,000,000 for the calendar year 1923, compared with \$244,571,000 reported by the Census Bureau for 1922.

Production was maintained at a slightly higher rate in December than in the previous month, according to employment statistics compiled by this bank. The total number employed during December was 64.5 per cent of the normal for December, while in November, 1923, the employment figure was 62.6 per cent of the rate normally employed during November.

SHOE MANUFACTURING, TANNING AND HIDES

The production and shipments of shoes in the Seventh district were in smaller total volume during December than in either the previous month or the corresponding period a year ago. The December production was about equal to current shipments. On January 1, 1924, thirty companies held sufficient stocks to care for three weeks' shipments, based on the rate of activity maintained in December. The unfilled orders held by twenty-five firms were equivalent to 227.1 per cent of the December shipments by the same companies.

CHANGES IN SHOE MANUFACTURING INDUSTRY, IN DECEMBER, 1923, COMPARED WITH PREVIOUS MONTHS

	PER CENT CHANGE FROM		COMPANIES INCLUDED	
	NOVEMBER, 1923	DECEMBER, 1922	NOVEMBER, 1923	DECEMBER, 1922
Production	-15.2	-13.5	35	35
Shipments	-13.4	-14.5	35	35
Inventories	+ 0.6	+11.3	30	30
Unfilled orders.....	- 7.4	-33.8	25	23

Reports from representative tanners in the district indicate a falling off both in sales and in the volume of leather tanned during December, compared with November, 1923, or December a year ago. Shipments of leather, however, were slightly in excess of those in November. Inquiries were more numerous the early part of January and a firmer undertone in the leather markets seems to be present than during the closing months of 1923. Hours worked and total payrolls declined in December, compared with November.

Calf and kip skin and packer green hide markets were less active at Chicago during December than in November. The December purchases of raw material by reporting tanners in the district were in slightly smaller total volume than a month previous. However, the statistics compiled by the Board of Trade show receipts of green hides and skins greater at Chicago during December than in November and also show a corresponding increase in shipments from this market. Prices trended upward during the closing weeks in December and present quotations are now more nearly on a par with those prevailing during the nineteen weeks immediately prior to the slump which took place about the middle of November.

RAW WOOL AND FINISHED WOOLENS

The wool market during the latter part of December and early January may be characterized as "marking time" pending the close of the inventory period for the mills and the opening of the heavy-weight season the middle of January. There has been considerable inquiry on the part of mills, but offerings were scarce, with sellers holding firm for asking prices. Fine wools showed some activity,

but the medium and lower grades continued in greatest favor. The maintenance of local prices at the high levels reported, despite the restricted volume of wool trading, was due in no small measure to the continued strength of foreign markets. It is reported that the woolen goods market, which was quiet during the early part of December, showed a slight strengthening tendency toward the end of the month.

FURNITURE

The further decline in activity in the furniture industry during December may be attributed to the fact that buyers were withholding the placing of orders until the opening of the Chicago and Grand Rapids markets in January. Sixteen plants operated at an average of 80.7 per cent of

capacity during December, compared with 82.3 per cent the previous month. According to reports from twenty-one firms, orders booked and shipments made during December were considerably less than in November, orders showing a decrease of 38.6 per cent and shipments 22.6 per cent; compared with a year ago reports from twenty firms show declines of 26.7 per cent in orders and 21.3 per cent in shipments. Although shrinkages in unfilled orders of 20.9 per cent during December and 33.6 per cent during the calendar year were reported, there remained an average of four weeks' business on hand at these plants on December 31, based on shipments during the month. Collections showed little change, either from November or from a year ago.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

CEMENT

Cement production continued heavy in plants in this district, though production fell below last month. Plants report capacity operations with orders and shipments low during the month. Stocks are accumulating and some producers have expressed the hope that if conditions continue as they are at present, they will fill all available storage space by the time the spring building demand begins.

According to figures issued by the Geological Survey, production for the country declined 20.7 per cent during December, while shipments were 37.5 per cent lower than November. Compared with December, 1922, however, production and shipments increased 15.3 and 31.9 per cent, respectively. Stocks increased during the month 51.4 per cent, and at the close of December were 15.8 per cent higher than at the same time last year.

BRICK

The demand for common brick during December continued low in the rural parts of the district. In Iowa roads are impassable on account of storms, so that there is no movement of stocks. Face brick plants are operating in some sections, although there is little demand. Producers in this line hope to accumulate sufficient stocks to carry them through the winter, rather than resume operations, as they formerly did, for short periods during the dull season.

In the territory around Chicago plants are still operating at capacity, and some producers report that stocks are considerably lower than at the end of November. At present plants in this vicinity are not planning to close during this season.

LUMBER

The low seasonal demand for lumber in November continued without much change during December. Slight gains reported by some dealers were offset by declines reported by others, while in the rural sections business practically came to a standstill during the latter part of the month. Some lumber dealers in Iowa report accounts for 1923 well paid up, and although some of the older accounts are still lagging, the outlook is much better than a

year ago. Stocks on hand are a little above normal in most lines. Northern hardwood stocks are low, however, because of the fact that during the last five months, orders and shipments as reported by the Northern Hemlock and Hardwood Manufacturers Association, have been considerably above production. Firming price tendencies were reported in some lines, though quotations on Douglas fir were lower.

Movement of lumber for the country as a whole decreased, due to the holiday and inventory periods. Shipments reported by approximately four hundred mills of the National Lumber Manufacturers Association were 12.1 per cent below November. Receipts at Chicago were 4.8 per cent lower than November, and shipments decreased 9.1 per cent during the same period. Compared with December, 1922, receipts and shipments here declined 3.0 per cent and 7.7 per cent, respectively.

CONTRACTS AND PERMITS

The slackening of building activities continued during December, although the decline was less marked than during the previous month. Total valuation of contracts awarded in the district was 7.4 per cent lower than in November, while the value of residential contracts increased 1.9 per cent. Total awards for all types during the year were 1.0 per cent below 1922, whereas contracts for residential structures during the same period increased 14.4 per cent. The greatest gains for December were reported in Iowa, where total contracts increased 11.2 per cent, and residential awards gained 37.2 per cent, while Michigan reported the greatest decline, amounting to about 21 per cent in both residential and total.

Estimated cost of permits issued in fifty cities of the district was 11.0 per cent below November and 20.1 per cent below December last year. Decreases were reported in all states except Iowa, where there was a gain of 19.1 per cent. Illinois outside of Chicago reported expansion, but the decline in Chicago, amounting to 19.9 per cent, more than offset this gain. Of the five larger cities, Detroit showed an increase of 24.4 per cent, while Indianapolis remained practically the same. Milwaukee and Des Moines reported declines.

MERCHANDISING CONDITIONS

WHOLESALE TRADE

Over two-thirds of the wholesalers reporting December sales to this bank showed decreases from the previous year, and all but one group averaged more marked seasonal declines from November than in 1922. Many of the dealers, especially in dry goods, attributed part of the reduced volume to the unusually mild weather. An explanation given for the general decrease in hardware sales is the fact that with the advancing markets in 1922, merchants bought ahead, whereas during the latter part of 1923 purchases were determined more closely by immediate requirements.

For the group of dry goods dealers, the decrease from 1922 was the only one of the year. In shoes, however, December was the eighth time in which sales had fallen below the corresponding month of 1922, making the average decrease for the year 4.5 per cent. Yearly increases over 1922 for other commodities ranged from 7.0 per cent in groceries to 29.7 in automobile accessories. Corresponding gains over 1921 were larger except for groceries. Sales in all commodities were below the 1920 volume, and for all but drugs and hardware below 1919.

December 31 inventories for all groups except drugs were higher than at the end of 1922, shoe dealers averaging their only gain of the year. The majority of grocery, hardware, and dry goods dealers lowered their stocks during the month, and drug firms continued the reduction which has been in process since April.

Without exception accounts outstanding for all firms were reduced during December; comparisons with 1922 ranged from 4.6 per cent decrease in shoes to 11.8 per cent increase in drugs. Collections were heavier than in November for thirty out of sixty-five firms; by groups groceries and shoes showed declines from the previous year.

DEPARTMENT STORE TRADE

The group of department stores reporting regularly to this bank closed the year 1923 with net sales averaging an excess of nearly 15 per cent over the previous twelve months. Larger increases had been in evidence the first part of 1923, but by December nearly half the stores were showing declines from 1922, making the aggregate gain for the month, 8.7 per cent, the third lowest of the year.

This smaller percentage increase reflects not curtailed buying, but the result of comparison with a large volume of business in December, 1922. In fact, the holiday trade this year was exceedingly heavy, so that despite the lessened demand for seasonable goods, December sales showed practically the same rate of expansion over November as in 1921 and 1922.

With one exception all the stores reduced their stocks during December, averaging a decrease of 19.3 per cent, the largest change yet noted in a single month. For all but seven firms, year-end inventories were higher than on December 31, 1922. In proportion to sales, however, stocks throughout the year were lower than during 1922.

Of forty-two firms reporting collections, twenty-five showed decreases from November; all but ten were larger than for December, 1922. Total accounts outstanding increased 2.5 per cent during December, and were 17.1 per cent higher than at the end of 1922.

CHAIN STORE TRADE

New monthly sales records were attained during December by five systems of chain stores reporting to this bank; for two others, business was next to the highest of any month yet noted, and for an eighth group, although slightly below the monthly average for 1923, was larger in volume than in any previous December.

With the exception of one firm, whose sales were below 1920, aggregate sales during 1923 exceeded all previous years. Individually, the increases over 1922 varied from about 5 per cent for one firm to nearly 50 per cent for another; the majority ranged from 10 to 25 per cent.

MAIL ORDER TRADE

For Chicago's two leading mail order houses total sales during 1923 were third largest on record, being within 4.3 per cent of the 1920 peak. Compared with 1922, sales for the year just closed show an increase of 27.5 per cent—an average of monthly gains which had ranged from 43.9 per cent in February to 10.7 per cent in both November and December. The gain over 1921 was 37.9 per cent.

In sales of seasonable merchandise, mild weather during December continued an adverse factor, largely offset, however, by the extremely heavy trade in holiday goods. Inventories are reported low.

TRANSPORTATION

The volume of traffic moved in December was the lowest in any month of 1923, which is in line with the seasonal trend of previous years.

During the past year nearly 50,000,000 cars were loaded with revenue freight, compared with 43,000,000, 39,000,000 and 45,000,000 in 1922, 1921, and 1920, respectively.

The net operating income of Class I railroads for the first eleven months of 1923, according to the Bureau of Railway Economics, amounted to \$906,061,895, a gain of \$209,749,550 over 1922. Considering the exceptionally large expenditures for new equipment and construction of roadways during the past year, this earning represents a more substantial income than is evidenced by actual figures.

The total expenditure for the year 1923 estimated by the Bureau of Railway Economics was \$1,075,897,940, compared with \$440,000,000 in 1922. Of this outlay \$690,857,266 was spent for locomotives, freight and passenger cars, and miscellaneous rolling stock, the remainder, \$385,040,674, going for roadway and structures. This apportionment differs widely from the usual distribution of expenditure for maintenance, which affords about three dollars for roadway and structures to each dollar for rolling stock.

MONTHLY BUSINESS INDICES COMPUTED BY FEDERAL RESERVE BANK OF CHICAGO

(Index numbers express a comparison of unit or dollar volume for the month indicated, using the monthly average for 1919 as a base, unless otherwise indicated. Figures for latest month shown partly estimated on basis of returns received to date. Data refer to the Seventh Federal Reserve district unless otherwise noted.)

	No. of Firms	Dec. 1923	Nov. 1923	Dec. 1922	Nov. 1922		No. of Firms	Dec. 1923	Nov. 1923	Dec. 1922	Nov. 1922
Employment—						Wholesale Trade—					
Iron and Steel Products:						Net Sales (in dollars):					
Number Employed	56	83.0	84.3	83.9	83.0	Groceries	40	66.0	80.7	69.2	79.2
Amount of Payroll....	56	74.9	79.6	70.2	73.4	Hardware	21	81.6	101.1	80.1	92.6
All Industries:						Shoes	11	46.6	50.6	60.8	64.7
Number Employed	296	94.2	96.7	90.5	92.6	Drugs	14	92.5	102.4	84.4	92.5
Amount of Payroll....	296	104.0	111.1	97.4	101.7	Dry Goods	13	58.2	90.6	68.7	87.0
Meat Packing—(U. S.)—						Automobile Acces-					
Sales (in dollars) ¹	63	91.0	92.9	83.4	84.0	sories	7	68.9	82.5	41.3	55.7
Stoves and Furnaces—						Retail Trade (Depart-					
Shipments (in dollars)..	18	63.6	97.4	75.9	106.3	ment Stores)—					
Agricultural Pumps—(U. S.)—						Net Sales (in dollars):					
Shipments (in dollars)..	21	70.0	89.4	89.3	87.2	Chicago	9	203.9	134.3	198.1	129.7
Furniture²—						Detroit	6	216.5	148.9	193.0	143.8
Orders (in dollars).....	13	78.6	121.8	108.1	141.8	Des Moines	3	.....	.....	163.7	106.8
Shipments (in dollars)..	13	95.1	122.4	128.9	143.3	Indianapolis	4	238.3	175.6	223.1	163.3
Shoes³—						Milwaukee	5	229.0	166.9	216.5	145.0
Production (in pairs)....	37	132.5	155.2	154.2	167.2	Outside	43	173.8	126.8	159.6	110.1
Shipments (in pairs)....	37	137.9	152.8	157.0	158.1	Seventh District	70	207.7	147.4	191.1	134.9
Electric Energy—						Retail Trade—(U. S.)—					
Output of Plants (KWH)	10	161.9	155.2	146.3	140.8	Department Stores.....	333	203	142	188	131
Industrial Sales (KWH)	10	157.3	164.7	137.4	141.1	Mail Order Houses.....	4	118	122	108	110
Flour Production—						Chain Stores:					
(In barrels)	45	95.2	102.3	82.0	112.6	Grocery	32	185	187	166	162
Freight Carloadings—(U. S.)—						Drug	10	185	141	162	123
Grain and Grain						Shoe	6	171	131	162	123
Products		116.1	125.7	128.6	136.5	Five and Ten Cent....	5	331	176	279	151
Live Stock		106.3	127.1	100.7	119.6	Music	4	214	149	204	121
Coal		95.0	111.0	109.9	119.0	Candy	4	261	174	220	145
Coke		120.3	123.8	139.5	133.5	Cigar	3	192	134	179	127
Forest Products		104.8	130.3	100.1	108.2	Movement of Grain					
Ore		29.1	111.5	27.0	90.6	at U. S. Interior					
Merchandise and						Primary Markets⁴—					
Miscellaneous		113.3	131.8	108.2	120.7	Receipts:					
Total		102.9	125.9	103.4	118.9	Oats		108.3	91.2	110.1	117.4
Iron and Steel—						Corn		253.1	157.0	254.5	153.9
Pig Iron Production:						Wheat		91.5	118.7	146.2	131.8
Illinois and Indiana....		129.4	132.5	124.0	113.6	Shipments:					
United States		114.6	113.6	121.1	111.8	Oats		75.6	80.1	82.8	97.5
Steel Ingot Production						Corn		131.1	69.7	99.6	92.7
(U. S.)		98.4	107.8	114.2	118.7	Wheat		51.9	58.9	76.1	86.9
Unfilled Orders U. S.						Building Construction—					
Steel Corp.		74.2	72.9	112.5	114.1	Contracts Awarded (in					
Automobiles—(U. S.)—						dollars):					
Production:						Residential		130.0	127.6	111.6	138.8
Passenger Cars		199.2	206.1	150.2	155.8	Total		73.6	79.5	82.1	82.7
Trucks		105.5	105.9	76.0	82.4	Permits:					
Shipments (Monthly						Chicago		218.4	288.9	146.8	206.0
Average, 1920=100):						Cost.....		250.4	312.4	396.2	235.4
Carloads		167.2	182.3	130.2	130.2	Indianapolis		128.0	181.5	98.2	158.3
Driveaways		70.4	83.7	68.1	69.8	Cost.....		173.9	172.4	162.2	234.8
Boat (Base Figures						Des Moines		161.8	218.6	114.7	173.5
(1920), partly esti-						Cost.....		88.5	162.7	145.8	949.1
imated)		117.9	189.1	38.5	149.5	Detroit		117.4	136.8	84.2	123.1
Stamp Tax Collec-						Cost.....		151.0	121.3	102.1	111.8
tions—(First Illinois						Milwaukee		143.1	176.5	142.3	185.7
Internal Revenue						Cost.....		122.7	156.5	114.8	129.6
District)—						Others (45).....		121.4	172.9	82.6	144.1
Sales or Transfer of						Cost.....		136.9	156.5	170.0	122.2
Capital Stock		148.4	136.9	153.6	111.0	Fifty Cities.....		129.1	174.9	102.3	154.2
Sales of Produce on						Cost.....		176.5	198.2	220.5	174.2
Exchange — Futures..		39.2	45.3	55.9	52.6						

1. Monthly average 1920-1921=100; 2. Monthly average 1919-1920-1921=100; 3. Monthly average of mean of production and shipments in 1919=100; 4. Monthly average receipts 1919=100.

The following are sources of data used in obtaining the index numbers in cases where they are not based on direct returns to this bank: Iron and Steel—Iron Age, Iron Trade Review, and Steel and Metal Digest; Automobile shipments—National Automobile Chamber of Commerce; Freight Carloadings—American Railway Association; Retail Trade, United States—Federal Reserve Board; Movement of Grain—Howard, Bartels & Co., Daily Trade Bulletin.