# MRSS (MNDIIIU)



ESERVE DISTRICT

CHICAGO, OCTOBER 1, 1923

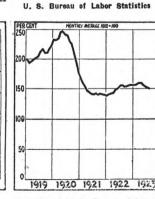
PUBLISHED MONTHLY

#### BUSINESS CONDITIONS IN THE UNITED STATES

HE volume of merchandise distributed during August, as indicated by railway traffic and wholesale and retail trade, was large. Production of certain basic commodities and industrial employment showed further slight decreases.

PRODUCTION—The Federal Reserve Board's index of production in basic industries declined 2 per cent during August and was at the lowest point for this year. The August output, however, was 27 per cent larger than a year ago and production in every month this year has been at a higher level than in any month of the previous five years. Lower production index in August reflected reduced output, after a correction for the usual seasonal trend, of pig iron, woolen goods, flour, and cement. Cotton consumption, sugar meltings, lumber cut, and bituminous coal production increased. The number and value of new building projects, as measured by permits granted in 168 leading cities, in-

INDEX OF PRODUCTION IN BASIC INDUSTRIES Combination of 22 Individual Series Corrected for Seasonal Variation



PRICES-INDEX NUMBER OF

WHOLESALE PRICES

Latest figure August, 1923: 119.

1920 1921 1922 1923

Base adopted by the Bureau of Labor Statistics. Latest figure August, 1923: 150.

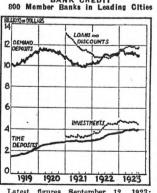
creased during August, but actual contract awards were smaller than in July.

Employment at industrial establishments throughout the United States was slightly smaller in August, while average weekly earnings advanced about one per cent. Increases in wages amounting to 10 per cent were granted to anthracite coal miners, readjustment of wages and hours in the steel industry continued, but wage advances during August were fewer than in any month since last

The principal changes in crop estimates shown by the September 1 forecast of the Department of Agriculture were a large reduction in the expected cotton crop, slight decreases in the probable yield of wheat, barley, and oats, and increases of yields of corn, tobacco, and potatoes.

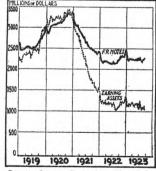
TRADE—Railroad freight shipments were larger in August than in any previous month on record. This was due to seasonal increase in shipments of coal, miscellaneous merchandise, and agricultural





Latest figures September 12, 1923: loans and discounts 11,840 million; investments 4,508 million; demand deposits 11,083 million; time deposits 4,003 million.

BANK CREDIT All Federal Reserve Banks



Latest figures September 19, 1923: Federal reserve notes 2,255 million; earnings assets 1,038 million.

COMPILED SEPTEMBER 27, 1923

products. Wholesale trade, according to the index of the Federal Reserve Board, increased 12 per cent in August, which is more than the usual seasonal increase, and sales were the largest of any month in three years. Sales of clothing, dry goods and shoes showed substantial gains as compared with July and were larger than a year ago. Retail trade also increased in August and sales in all reporting lines were larger than in August, 1922. Department store sales in all sections of the country averaged 12 per cent above last year's level.

PRICES—The general level of wholesale prices, according to the index of the Bureau of Labor Statistics, remained relatively constant in August, the change for the month being a reduction of less than one-fifth of one per cent, compared with declines of about 2 per cent in each of the three preceding months. Prices of building materials, house furnishings and fuel were materially reduced, while prices of farm products and foods increased. Prices of certain raw materials, particularly cotton and silk, advanced substantially during September, while prices of petroleum and copper declined.

BANK CREDIT—After a decline during July and the first part of August the volume of bank credit in use showed a seasonal increase during the last week of August and the first two weeks of September. Total loans and demand deposits of member banks in principal cities in-

creased during recent weeks, reversing the trend of the preceding two months. Loans, chiefly for commercial and agricultural purposes, increased by \$122,000,000 and reached a high point for the year. Investment holdings of these banks, on the contrary, continued to decline and on September 12 were lower than at any time since the middle of October of last year.

Between August 22 and September 19 the amount of accommodation extended to member banks by Federal Reserve banks in industrial districts declined, while in agricultural districts the seasonal demand for credit and currency resulted in a considerable growth of reserve bank credit in use.

The demand for currency arising out of crop moving and fall trade has been reflected in an increase of \$82,000,000 in money in circulation between August 1 and September 1. Of this amount, about \$44,000,000 represents an increase in Federal Reserve note circulation.

Money rates were firmer during the first two weeks of September, but eased somewhat after the fifteenth, partly because government disbursements were temporarily in excess of tax collections.

The Treasury issued on September 15 \$200,000,000 of six months certificates bearing 4½ per cent interest, compared with 4 per cent borne by six months certificates issued in Iune.

#### BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

BUSINESS in the Middle West has entered the autumn period with conditions irregular, but with favorable factors predominating. From agricultural sections have come promising reports of good crops, while in industrial centers labor continues on the whole well employed at high wages. Furthermore, any buying activity which these two factors may prompt, is expected to find rather immediate reflection both in production and distribution, since stocks are generally low. Encouraging the rapid replenishment of inventories are the ample credit and transportation facilities. But guiding all activity is the cautionary attitude, a less potent element doubtless than in recent months, but still a determinant in business policy.

In the coal industry, August production for the country made new weekly records. Inquiry for pig iron and steel improved during the month, while automobile production held up well for this time of year. Although contracts awarded indicated a reduction in building, actual construction during August was large, with building materials in heavy demand.

Of financial interest were the slightly increased savings accounts September 1, the firmer money rates, and the drop during August in debits to individual accounts.

#### MONEY AND BANKING

Slightly increased activity characterized banking operations during August as compared with July. Many sections reported heavier demand for credit accommodation on the part of country banks from city correspondents.

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No change in the general credit situation was evidenced in August. An attitude of caution continues, but the European situation seems to be a less important contributory factor in this attitude than was the case a month ago.

August business failure statistics show an increase of 23.5 per cent in the number of insolvencies in the district and 7.1 per cent in the entire country. Total liabilities in the district increased 14.5 per cent in August as compared with July; for the country as a whole they showed a decrease of 3.8 per cent.

#### COMMERCIAL PAPER AND ACCEPTANCES

The aggregate sales of nine commercial paper dealers reporting to this bank were slightly larger during August compared with July and considerably in excess of a year ago. A good demand from outlying Chicago and country banks and an occasional demand from large banks in the money centers were reported by two dealers. Several other dealers stated that the demand was fair to good. The supply of paper was moderate to good with these dealers.

Selling rates again showed a firming tendency ranging from 5 to 6 per cent during August compared with 5 to 534 per cent in July. The prevailing rates were at 51/4 to 53/4 per cent, a rise of 1/4 of one per cent during the month, although only two dealers reported rates higher than 51/4 per cent.

Operations of six bill dealers in the open bill market during the four-week period ended September 12, show decreased average weekly purchases compared with the weekly average of the preceding period, while sales were somewhat

greater. The average weekly purchases amounted to \$2,169,000 in the period under review compared with \$2,454,000 in the preceding five weeks ended August 15. Sales averaged \$1,955,000, an increase of \$133,000. Bills held on September 12 amounted to \$5,513,000 compared with \$5,047,000 held on August 15. Sales of bills to the Federal Reserve Bank were 18 per cent of the total compared with 21 per cent in the preceding period; sales to other banks were 47 per cent compared with 59 per cent.

The supply of bills from August 16 to September 12 was reported limited by two dealers, and fair by another. On the whole, demand for bills was small, one dealer mentioning particularly the small demand for maturities over 90 days, although another reported a fair demand for bills. According to two dealers there was only a fair movement of bills at offered rates. Bills were offered at the close of the period at rates ranging from 4½@4½ per cent for maturities under 90 days and at 4½@45½ for longer term. Bid rates were slightly easier than in the preceding period, ranging from 4@4½ per cent for short maturities to 4½@4½ for those of longer maturities. Commodities principally involved were: grain, agricultural implements, packing house products, provisions, sugar, and cotton.

Bankers' acceptances executed during August were practically the same in volume as in July, although several of the banks reporting large volumes in July showed considerable decrease during August. The increase in bills bought was due almost entirely to the large purchases made by one bank, as only four other banks were in the market for small quantities of bills. Bills sold increased 21 per cent. Bills held at the close of the month amounted to \$1,165,530 compared with \$314,687 at the close of July; of these holdings nearly all were the accepting banks' own bills. The liability of reporting banks on acceptances outstanding on August 31 was 22 per cent greater than on July 31. Thirteen of the twenty-six banks reporting had no transactions in bankers' acceptances during the month.

The August purchases of bankers' acceptances by this bank amounted to 17 million, a decrease of 12 million from July. There were no bills sold from holdings during the month. Bills held on August 31, amounting to 42 million, were 4 million under those held at the close of July.

#### MEMBER BANKS IN THE DISTRICT

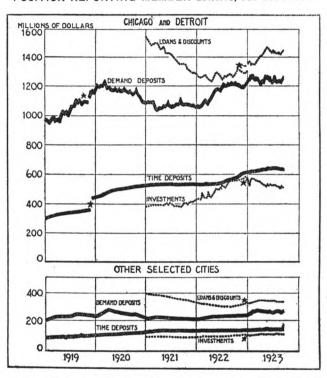
Net demand deposits of reporting member banks in Chicago were subject to minor fluctuations throughout August with small increases on August 29 as well as on September 5 and 12; on the latter date the figure was the largest since July 11. Small weekly changes were also shown by Detroit member banks, but no established trend was manifest. A similar situation prevailed in other selected cities; on September 12 net demand deposits were slightly above August 8 returns.

Investments in Government securities by reporting member banks in Chicago increased 15 per cent on August 29 over the preceding week and decreased very slightly September 5 and 12. In Detroit a decreasing tendency characterized holdings of Government securities until September 12, when a small increase over the previous week was reported, while other securities tended upward until September

5, when a small drop was indicated. A slight increase was shown on September 12. In other selected cities security holdings showed no significant variation; investments in Government securities dropped slightly.

Loans and discounts fluctuated during August and the first two weeks in September, with a general upward trend. Loans of Chicago banks on securities other than Government or stocks and bonds increased gradually the latter half of August and rather sharply on September 5, but declined slightly September 12. Minor fluctuations in loans and discounts outside of Chicago were shown by reporting banks.

#### 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, September 12, 1923.

#### AGRICULTURAL FINANCING

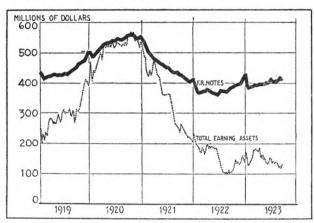
Federal Land bank loans outstanding in the five states of the district increased over two million in August compared with July, approximately the same increase shown in each of the five preceding months. Reports of twenty Joint Stock Land banks show loans outstanding at the end of August of over two million in excess of the July figure, which was approximately two and one-half million above the total of loans outstanding on June 30.

Federal Intermediate Credit bank loans outstanding in the five states lying largely in this district aggregated \$107,-344 on August 31, an increase of \$14,344 over the figure on July 31.

#### POSITION OF THE FEDERAL RESERVE BANK

There was a downward movement in the loans by the Federal Reserve Bank of Chicago to member banks throughout August, with a rise on September 5; but on September 12 loans to member banks were the lowest in volume since February 21. A rise on September 19, however, brought loans approximately to the August 15 level. Total reserves of the reserve bank fluctuated during August with a perceptible upward trend which was also manifested the first week of September. On September 12 they declined almost to the August 15 level and on September 19 a further drop was shown. Federal Reserve notes increased in August and the first week of September, declining slightly on September 12 and 19.

#### POSITION FEDERAL RESERVE BANK OF CHICAGO

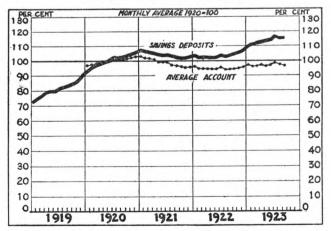


Latest figures shown, September 19, 1923, in thousands of dollars: Federal Reserve notes 412,134; total earning assets 130,108.

#### SAVINGS ACCOUNTS AND DEPOSITS

Reports received by this bank from banks representing approximately 40 per cent of the total savings deposits in the district indicate a slight gain in the savings deposits of

#### INDEX NUMBER OF SAVINGS



Based on reports to this bank as of the first of each month from 208 banks in the Seventh district. Latest figures shown, September 1, 1923; savings deposits 115.6; average account 96.6.

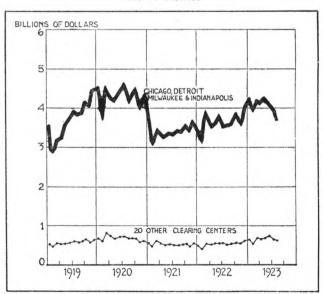
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the district on September 1, as compared with August 1, and one of 11.9 per cent over a year ago. Illinois and Iowa banks reported small losses in the aggregate, while Michigan maintained its unbroken record of increases each month since February of last year. The average account on September 1 was 0.7 per cent less than on August 1, but a gain of 2.9 per cent was shown compared with a year ago. Investment in bonds, home buildings, and payments on homes were again given as the reasons for withdrawals by a number of banks.

#### DEBITS TO INDIVIDUAL ACCOUNTS

Volume of payment by check on clearing house banks in the Seventh district showed a slightly greater decrease in August, as compared with July, than was evidenced in July as compared with the previous month. In the four larger centers the percentage of decrease in August was 6.4 per cent as against 4.6 per cent in July. In twenty smaller centers a decline of 3.0 per cent took place in August, in comparison with 10.6 per cent in July. Seven of these, however, reported August increases, whereas in July only one showed larger payments by check than in June. In 1922 the August volume of payments by check in the four larger cities was 0.4 per cent above July of that year, but the twenty smaller cities showed a decline of 4.3 per cent from July.

## VOLUME OF PAYMENT BY CHECK Checks Drawn on Clearing House Banks, Seventh Federal Reserve District



Figures used are estimates for calendar months based on weekly reports to this bank. Latest figures shown, August, 1923, in thousands of dollars: Chicago, Milwaukee, Detroit, and Indianapolis 3,680,716; 20 other clearing house centers 617,714.

#### BONDS AND INVESTMENTS

Little improvement from the apathy of the preceding two months was shown in the bond market during the latter part of August and the early part of September. Price fluctuations were confined within narrow ranges, with a slight upward tendency recently. The interest of the investment public in new issues apparently remains dormant. Dealers in this section report that the volume of trading in bonds has been very low, with public utilities continuing in best favor, industrials and rails fair, and municipals following their dull course. One of the most important unsuccessful August offerings in the latter group was the fifteen million 4½ per cent State of Illinois soldier bonus bonds for which no bids were made. Investment houses handling first mortgage real estate bonds report a fairly active demand for sound bonds of this type yielding 6½ per cent. As it is now generally recognized that there is still a dearth in

the supply of buildings in most localities, the leading houses underwriting bonds on new construction are resuming the financing of new projects, but great care is being exercised to avoid encouraging speculative or excessive building.

Subscriptions received in the Seventh district to the new offering of \$200,000,000 United States Treasury 4½ per cent certificates of indebtedness, dated September 15, 1923, and maturing March 15, 1923 were nearly double the district quota of \$28,000,000. Final allotment for cash subscriptions in the district amounted to \$21,406,000. In addition nearly \$12,000,000 of certificates of indebtedness maturing September 15 were received in exchange for the new issue.

#### AGRICULTURAL PRODUCTION AND CONDITIONS

Final threshing returns reported by 133 county agents representing 167,503 farmers in the Seventh district show that in 1923 oats yielded more per acre in Illinois, Indiana, and Michigan than a year ago, but in Iowa and Wisconsin the average yield was less than in 1922. These reports also show that the district corn crop is in good condition although in a few counties it has suffered some damage in the last month, owing to hail and wind storms. Maturity of the crop has been delayed somewhat because of heavy rainfall and cool weather during the first part of September.

Information obtained from the county agents indicates that there are prospects of a larger yield of potatoes per acre for 1923 in Indiana and Illinois than a year ago, but in Wisconsin, Michigan, and Iowa the prospective yield is indicated to be slightly below 1922.

# UNITED STATES CROP PRODUCTION Estimated by the Burcau of Agricultural Economics as of September 1 In millions of bushels ALL. WHITE

Forecast. 1923	CORN	WHEAT	OATS	POTATOES	APPLES	PEACHES
	3.076	789	1,312	390	190	45
Final, 1922 Average, 1917-21	2,891	862 835	1,201	451 388	201 160	57 43

The Bureau of Agricultural Economics on the basis of September 1 condition estimated the production of 1,002,-962,000 bushels of corn, 494,214,000 bushels of oats, and 15,986,000 tons of hay in the Seventh district compared with 984,328,000 bushels of corn, 461,600,000 bushels of oats, and 20,677,000 tons of hay produced in 1922.

#### **GRAIN MARKETING**

The receipts of wheat and oats at primary markets showed increases over August, 1922, and because of the new crop movement were seasonally more than in July. Corn exceeded July receipts and shipments, but was less than in August, 1922. Exports of wheat and flour in August were greater than in July, but corn, oats, and rye declined.

September 1 reports from 133 county agents show that approximately 54 per cent of the wheat produced in the district in 1923 had already left the farms; the percentage remaining in each of the states, as indicated by these reports, was: Illinois, 32.9; Indiana, 50.7; Iowa, 38.0; Michigan, 78.8; and Wisconsin, 82.2. These figures do not take into consideration grain held in country elevators.

#### UNITED STATES VISIBLE SUPPLY OF GRAIN

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			-	-
WHEAT	CORN	OATS	RYE	BARLEY
September 8, 1923				
Warehouses and Afloat58,182	2.371	12,515	13.812	2.095
Bonded			1.137	84
		30	1,13/	04
August 11, 1923				
Warehouses and Afloat42,811	2,736	5,765	12,281	1,286
Bonded				200
		81	804	208
September 9, 1922				
Warehouses and Afloat31,166	7.723	38.133	5.063	1,686
	,,,,,			
Bonded 2,357		129	423	14
The test of Tiers of Contract C	1.	1 T	1	1

The total United States, Canadian, and British visible supply of wheat was 114,655,000 bushels on September 1, 1923, compared with 99,389,000 bushels on August 4, 1923, and 95,090,000 bushels on September 2, 1922.

#### FLOUR PRODUCTION

Operations at forty flour mills in the district reporting to this bank were seasonally higher during August, when the operating ratio was 56.8 per cent of capacity compared with 41.8 per cent in July. The total production of flour at these mills was 41.4 per cent greater in August compared with July and 0.9 per cent more than a year ago, when the operating ratio was 54.2 per cent of capacity. Production of wheat flour was 44.6 per cent and 1.9 per cent, respectively, greater during August than in July of this year and August, 1922, while the production of flour other than wheat increased 14.4 per cent over July and was 8.5 per cent under that of a year ago.

Stocks of flour on hand August 31 were 23.6 per cent larger than on July 31 at thirty mills and were 3.7 per cent more than those on hand August 31, 1922, at twenty-four mills. Stocks of wheat on hand were 64.6 per cent above those of July 31, while compared with a year ago they were 24.6 per cent greater. Sales of flour at sixteen mills during August were 20.4 per cent more in volume and 19.4 per cent more in dollar amounts compared with July and 33.9 per cent more in volume and 5.6 per cent more in dollar amounts over a year ago.

#### MOVEMENT OF LIVE STOCK

The total live stock slaughter was slightly less in August than in July but continued in excess of a year ago.

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LIVE STOCK SL	AUGHTER		
CATTLE	Hogs	SHEEP	CALVES
Eight yards in district			
August, 1923225,603	846,214	259,476	84,444
Tuly, 1923233,660	1,028,771	257,403	89,906
Public Stock Yards in U. S.			
August, 1923760,176	2,283,122	902,883	408,088
July, 1923717,209	2,651,881	935,988	387,136
August, 1922740,323	1,975,791	1,020,682	365,264
A large seasonal increase ov	er July wa	s shown	in the
number of sheep, cattle, and	calves shipp	ped back	to the

country for feeding purposes.

AVERAGE PRICES OF LIVE STOCK

Per hundred	pounds at	Cnicago		
	EEK ENDED		MONTHS OF	F
	SEPT. 17.	AUGUST	JULY	August
CLASS	1923	1923	1923	1922
Native Beef Steers (average)	\$	\$10.65	\$ 9.65	\$ 9.65
Fat Cows and Heifers		5.60	6.20	6.30
Canners and Cutters		2.90	2.95	2.95
Calves	. 12.15	11.50	10.65	11.50
Stockers and Feeders	. 6.65	6.10	5.85	6.65
Hogs	. 8.52	7.60	7.00	8.55
Sheep		7.15	5.95	6.45
Yearling Sheep		10.60	10.85	10.25
Lambs	. 13.60	13.20	14.20	12.55

#### MEAT PACKING

The domestic demand for packing house products is very satisfactory in volume. Production, although slightly less in August than in the previous month, continues at a high rate and the output is moving rapidly into consumption channels. Stocks on hand on September 1 were less than on August 1. Fifty-eight meat packing companies in the United States reporting direct to this bank show that in August total sales, measured in dollars, were 5.5 per cent greater than in July and 16.1 per cent greater than a year ago. Wholesale prices were firmer at Chicago during August than in July. Prices of lamb and neutral lard were somewhat easier than in the previous month. There was a nominal increase in employment for the last payroll period in August compared with the corresponding dates in July.

Exporting companies report that the volume of meats and lard forwarded in August for export was larger than in the previous month or a year ago. This increase was due to a resumption of the purchasing of fats by German importers and to the improved English demand for American products. Toward the close of August the demand for United States hams and picnics was less brisk in the United Kingdom. Because of heavy sales in August from spot stocks, inventories of goods already abroad on consignment were indicated to be smaller on September 1 than a month ago. Prices abroad are nearly on a parity with those in the United States. Lard prices in the United Kingdom are slightly below the United States parity.

#### BUTTER, CHEESE, EGGS, AND POULTRY

Creamery butter production declined 13.5 per cent from July but was 5.6 per cent greater than in August a year ago according to direct reports from representative creameries in the Seventh district. Statistics issued by the American Association of Creamery Butter Manufacturers indicate a falling off in the total output of the United States for August compared with the previous month or a year ago. A greater amount of Wisconsin cheese was produced than in August, 1922, although the output for the four weeks ended September 1, 1923, was less than for the corresponding period in July.

Receipts at Chicago of butter, cheese, and eggs were less in August than in July but poultry increased. Compared with August, 1922, the receipts of cheese and eggs increased, but butter and poultry declined. Prices of dairy products were firmer, but August poultry prices were easier than in the previous month. The August sales of creamery butter as shown by reporting companies in the district were 15.9 per cent less than in July and 18.3 per cent below a year ago.

Cold storage holdings of butter, cheese, and eggs in the United States showed a nominal increase on September 1, 1923, compared with the previous month, but poultry stocks declined.

#### INDUSTRIAL EMPLOYMENT CONDITIONS

While the labor needs of middle western manufacturing industries are now being supplied without difficulty, workers in general are well employed. High wages offered at some industrial centers, such as Chicago, rather than a widespread labor surplus, account for an increased number of applicants for available jobs in these centers.

A summary of reports from 296 firms employing approximately 211,000 men shows an increase in employment in August of three-tenths of one per cent, accompanied by a slightly heavier increase in man hours worked. Payrolls showed a gain of 2.9 per cent.

Iron and steel industries as a whole curtailed forces to

some extent, and the production of chemicals and paints declined sharply from the previous month. In brick plants, also, employment fell off, but other building materials showed no reductions. Slight increases were evident in meat packing and footwear, while furniture and boxes and containers made definite gains. The automobile industry, which reduced its working forces materially during July, showed renewed activity.

In comparison with conditions of a year ago, employment at the present time is approximately 15 per cent greater, and payrolls 28 per cent larger, indicating an increase of 11 per cent in the average pay per man.

#### **FUEL AND POWER PRODUCTION**

#### COAL

Production of bituminous coal reached its peak for the year during the week ended September 1 when 11,737,000 net tons were mined. The drop in production during the

following week to approximately 10,433,000 net tons was partly due to lessened output on Labor Day. During the first eight months of this year 368,810,000 net tons were mined, which was 1.5 per cent below the average for the

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three years of industrial activity (1917, 1918, and 1920), and 36.8 per cent above the average for the three years of industrial depression (1919, 1921, and 1922).

Stocks of soft coal in the hands of commercial consumers on August 1 approximated 51,000,000 net tons, an increase of 5,000,000 over the revised figure for July, and a net gain of 29,000,000 tons since the low point of September 1, 1922. According to estimates made by the Federal Fuel Distributor, based on the rate of consumption in July, these stocks were sufficient to last 44 days.

Prices of soft coal advanced slightly the latter part of August and early part of September. The average spot price of bituminous coal during the week ended September 1, as compiled by Coal Age, was \$2.47 compared with \$2.44 the previous week and \$2.36 during the week ended August 6.

In the Seventh district many mines are reported idle because of lack of demand, while others are working only part time. During the first week of the anthracite strike the demand for bituminous coal increased, but fell off when the settlement was reached and has remained fairly steady since, though the continuance of favorable weather has caused a slight slackening. The delay in the agricultural sections in laying in their winter supply of coal is at least partially responsible for the unusually slow domestic demand, especially in the smaller towns. There has been a rather active demand for screenings in some centers, but supplies of lump coal on hand are heavy. Production in Illinois for the month of August amounted to 5,670,970 tons, an increase of 11.3 per cent over July. Reports indicate no general shortage of coal cars, either in the country as a whole or in this district, though in some vicinities car shortages have been reported.

Production of anthracite reached the year's high record during the week ended August 25 when 2,165,000 net tons were mined, but fell during the following week to 1,893,000 net tons because of the lay-off on August 31 in anticipation of the strike inaugurated September 1. Anthracite prices fluctuated with the development of negotiations between the operators and miners. Domestic sizes sold as high as \$14.75 on September 6, but began to decline considerably immediately after the strike settlement was reached. There is a shortage of domestic sizes on the docks, especially pea and egg at Milwaukee and Green Bay.

#### ELECTRIC ENERGY

Output of electric energy in August by eight central station companies in the district reporting to this bank was 513,126,394 K. W. H., an increase of 2.1 per cent over July and 12.6 per cent above August, 1922. The latter gain, though marked, was less than in previous months. The load factor of these plants was at 57.1 per cent during August compared with 56.0 per cent in July and 56.2 per cent a year ago. The peakload demand was 71.4 per cent of the capacity of the reporting companies during the month compared with 70.2 per cent during August, 1922. Plant capacity increased 8.9 per cent during the year.

Sales of electric energy for industrial purposes, which amounted to 234,185,861 K. W. H. during August, were 5.2 per cent greater than July and 21.2 per cent over a year ago. The daily average sales—based on twenty-six working days in August, due to the Harding memorial day—were only 1.1 per cent more than the daily average of July. A comparison of the daily average of August with that of last year shows a gain of 25.9 per cent.

#### MANUFACTURING ACTIVITIES AND OUTPUT

#### AUTOMOBILE PRODUCTION AND DISTRIBUTION

Combined August production figures for passenger cars and motor trucks show an increase of 5.2 per cent over July, owing partly to seasonal causes and partly to the fact that there was one more working day in the month. Production in August, 1922, with two more working days than the preceding month, increased 10.8 per cent. Several companies announced lower prices for their 1924 models.

Manufacturers, reporting through the National Automobile Chamber of Commerce and direct to this bank, representing practically complete July production, built 313,972 passenger cars during August compared with 297,173 in July, an increase of 5.7 per cent. The August output of trucks increased 0.6 per cent for identical companies producing 29,882 trucks compared with 29,712 in July. In August last year a gain over July of approximately 12 per cent was shown in truck production. Comparisons with a year ago indicate a gain of 26 per cent in combined passenger car and truck production.

The distribution of automobiles as shown in reports received by this bank from representative distributors and dealers in the Middle West declined during August compared with July, while comparisons with a year ago indicate a small decline in wholesale and retail values, but an increase in the number of cars sold. Stocks of cars on hand were larger on August 31, both in number and value, compared with July 31, and greater in number but less in value than on August 31, 1922. The number of used cars sold during the month was again less than in the previous month, while stocks on hand on August 31 were slightly larger, amounting to approximately 88 per cent of the August used car sales; stocks on hand August 31, 1922, were less than this year.

#### DISTRIBUTION OF AUTOMOBILES

Changes in	hanges in August, 1923, from previous months						
	PER CENT C	HANGE FROM Aug., 1922	COMPANIE	S INCLUDED			
No. of New Cars Sold Wholesale Retail Value of New Cars Sold		+ 0.7 + 7.5	46 82	35 63			
Wholesale	—17.6 — 9.5	- 0.2 - 2.8	46 82	35 63			
Number Value  No. of Used Cars Sold Salable Used Cars on Hand at End of	+16.4  + 6.1  - 7.9	+4.3 $-12.2$ $+26.5$	79 79 83	50 50 64			
Month Number Value	+ 2.0	$^{+13.1}_{+29.3}$	82	50 54			

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Carload shipments and driveaways during August reported by the National Automobile Chamber of Commerce for all manufacturers increased compared with July, but shipments by boat were less.

Exports of passenger cars from the United States during July, the last month for which figures are available, were less than in June in both number and value, while exports of trucks were larger. July production of casings and inner tubes by fifty-four companies reported by the Rubber Association of America was considerably less than shipments, resulting in a large decrease in inventories. Inventories of casings were more than double July shipments while inner tube inventories were slightly less than twice July shipments.

#### CASTINGS

Casting foundries in the Seventh district report a larger melt in August than in the previous month. The amount of castings shipped during August was greater than in July, and production was nearly equal to the average for the preceding months of 1923. Although the number employed during the last payroll period in August was slightly less, the hours worked and total amount of payrolls were greater than in the corresponding period a month ago.

#### CHANGES IN AUGUST, 1923, FROM PREVIOUS MONTHS

Compiled from o	lirect rep	orts to this ba	nk	
		GE FROM COM		INCLUDED
	JULY	Mo. Av.		Mo. Av.
	1923	7 Mo. 1923	1923	7 Mo. 1923
Pig iron consumed	+17.9	+ 1.6	25	20
Iron scrap consumed	+74.0	+21.4	25	20
	+ 5.4	- 3.0	25	20
Total tonnage consumed	+10.9	-1.6	25	20
	+ 6.7	+ 4.0	24	18
Castings shipped (dollars)	+ 8.5	+13.4	21	17

#### IRON, STEEL, AND OTHER METALS

There has been no pronounced change in steel trade conditions in the last month. The output of steel ingots and pig iron continued in large volume during August but the daily rate of production again declined. Fewer furnaces were in blast on September 1 than a month previous. Inquiry for pig iron and steel improved greatly during August and producers report that the pressure for delivery of steel already booked, although insistent, is not quite so tense as it was a few weeks ago. Demand was slightly less brisk in the early part of September, but purchases of goods for delivery over the next three to six months continue. Shipments are seasonally in excess of current orders. The composite average of iron and steel prices was lower in August than in July. Prices held firm in the early part of September.

Production and shipments of slab zinc were 41,625 and 36,394 tons, respectively, in August compared with 43,065 and 38,998 tons in July, according to statistics issued by the American Zinc Institute.

#### STOVES AND FURNACES

New orders as well as shipments of stoves and furnaces showed a large seasonal increase over July and were even greater than a year ago. The operation of moulding rooms was 6.3 per cent nearer capacity than in the previous month but 0.8 per cent lower than a year ago. Employment for the last payroll period in August showed an increase over the corresponding period in July.

#### CHANGES IN AUGUST, 1923, FROM PREVIOUS MONTHS

Compiled	from direct	reports to th	is bank	
		HANGE FROM	COMPANIES	
	JULY, 1923	Aug., 1922	JULY, 1923	Aug., 1922
Shipments		+21.6	15	15
Orders accepted		+27.4	11	11
Stocks on hand	+ 1.9	+32.2	10	10
Operations (moulding		— 1.2	15	15

#### AGRICULTURAL MACHINERY AND EQUIPMENT

Total sales of 106 agricultural machinery and equipment manufacturers in the United States reporting to this bank declined 7.7 per cent during August compared with July. Based on the monthly average for the first seven months of 1923, the August sales showed a decrease of 2.5 per cent. To what extent this is seasonal cannot be determined owing to comparable statistics for 1922 not being available. Domestic sales decreased during the month, while foreign sales were 33.3 per cent greater. Sales for the majority of manufacturers of wagons, tractors, equipment, and harvesting machinery were larger during August than in July, but tillage tools and pump manufacturers, and some companies manufacturing diversified lines of machinery showed considerable decrease, resulting in smaller sales for the industry as a whole.

Reports from a number of manufacturers mention the usual seasonal dullness during August, although orders for future delivery are holding up well according to other reports received.

#### SHOE MANUFACTURING, TANNING, AND HIDES

Following four months of seasonal decline, shipments in August by shoe manufacturers in the Seventh district were nearly equal to those of March, 1923, or October, 1922, and were in excess of any other month since the beginning of our record in January, 1921. Production was seasonally more than in July and was slightly more than a year ago. Shipments were 13.0 per cent greater than current production in August and inventories declined. Unfilled orders on hand at the end of the month were less than for the corresponding period in July or a year ago but were equal to 152.8 per cent of the August shipments. Twenty-four companies on August 31 had stocks on hand equal to 66.9 per cent of their shipments during August.

## CHANGES IN AUGUST FROM PREVIOUS MONTHS

	Based	on pairs ar	ia compilea	from direct rej	ports to this	Dank
			PER CENT	CHANGE FROM	COMPANIES	INCLUDED
			JULY, 1923	Aug., 1922	JULY, 1923	Aug., 1922
I	roduction		+24.9	+ 2.8	32	32
5	hipments		+35.8	+ 1.7	32	32
		hand		+26.9	24	23
		ders on hand		-20.5	23	21

Little change has taken place in the tanning industry during the last month. Direct reports show production in the district nominally less in August than in the previous month, but sales were indicated as slightly more than in July. The demand has been for novelties, such as suede and patent, and for low grade side, calf, and kip leather. The harness business has been seasonally quiet, but inquiry for bag and case leathers is holding up well. Inventories do not show

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any marked change from those for the previous month. Prices have held fairly steady.

The total shipments of green hides and skins from Chicago were more than in July; packer green hides, however, were less active than in the previous month. There was a steady movement of packer hides in early September. Prices were higher in August than in July and held firmer in the early part of September.

#### **FURNITURE**

A decrease in orders during August, while less marked than in 1922, indicates that the mid-year furniture markets did not materially affect the month's volume of business. According to direct returns to this bank from sixteen reporting firms, orders booked during August fell off 20.3 per cent from July and 0.7 per cent from a year ago, leaving unfilled orders 19.1 per cent less on September 1 than on August 1 and 14.7 per cent less than a year ago. Based on August shipments these firms show an average of a little over five weeks' business on hand September 1. Collections were about the same as in July.

Several firms report that while there was a slump in the industry during August, new business began coming in more briskly the early part of September and a good fall business is anticipated.

#### CLOTHING

An accelerated fall demand in the tailors-to-the-trade industry during August is indicated by the substantial increase in orders, production, and shipments. Greater activity is noticeable in the higher priced ready-to-wear clothing than in the cheaper grades, demand for fine quality overcoats showing a decided quickening.

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#### RAW WOOL AND FINISHED WOOLENS

Woolen mills are reported reluctant to extend their purchases of raw wool beyond current requirements and in some instances are staying out of the market entirely, drawing on their reserves rather than adding to supplies at this time. The August shipments of raw wool from Chicago, although in excess of current receipts, were less in total

volume than in July. Sales by dealers were at a minimum, but some of the pulleries reported an increase in volume compared with July. A better sentiment has been in evidence since the London auctions were held. Demand improved somewhat in early September although much of the present buying is from spot stocks with purchasers of these wools insisting upon immediate delivery. Much of the raw wool consigned to warehouses in Chicago and in the East is still being held because growers have not been able to obtain prices desired.

Although little additional business has been booked in the last month, production and shipments by woolen mills in the district were indicated to be fully as large in August as in July. Many of the users of woolen cloth, however, are showing a waiting attitude and are limiting their orders for light weight goods to sample pieces until they can more definitely determine the trend of retail trade this fall.

#### BOXES AND CONTAINERS

The production of boxes and containers for the month of August shows an increase over the previous month. Reports from seven large companies show that they operated at 75.6 per cent of full capacity as compared with 67.9 per cent for the month of July. Sales were 14.6 per cent higher than in July and 20.4 per cent above the same period last year.

Wooden box sales were 26.2 per cent higher than for the preceding month and 40.5 per cent over last year's August figures. The consumption of lumber was 13.5 per cent above July and 18.4 per cent higher than August, 1922.

#### PAPER INDUSTRY

An earlier resumption of fall activity in the paper industry, evidenced by receipt in September of orders usually placed later, is reported by the American Paper and Pulp Association. Furthermore, as neither manufacturers nor distributors have been accumulating stocks, the industry enters the fall period in sound condition.

Fifteen paper and printing establishments in the district reported at the end of August an employment of 6,008, which is one-tenth of one per cent less than for July. Comparison with August, 1922, the peak month last year, shows the first decrease, the previous seven months having averaged a gain of 6.2 per cent. Payrolls for each month this year have been higher than in 1922 with increases ranging from 8.1 per cent in January to 27.7 per cent in April.

#### **BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES**

#### CEMENT

The demand and production of cement in this district for the month of August were maintained at a high level. Stocks continued downward while prices remained unchanged.

Production for the country increased approximately 3 per cent over July and 11 per cent over the same period last year. Shipments were about 9 per cent higher than for the previous month. Stocks declined to approximately 47 per cent of production for August. For the first time this year the stocks on hand at the close of the month were higher than at the end of the corresponding period last year. The increase over August, 1922, amounted to 6 per cent.

#### BRICK

The demand for brick in the territory around Chicago continued heavy during the month of August. Manufacturers report business above normal, though slightly lower than during the previous month. Production remained high and stocks have shown small increases. Some dealers report a very satisfactory volume of unfilled orders. Prices in most sections are steady, but some reports show a weakening not only for lower grades, such as underburned paving brick and lower priced face brick, but also on common brick.

In parts of Iowa, producers report a continued demand for

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paving brick for which there is a good volume of unfilled orders. From sections where drain tile is manufactured the reports are favorable.

#### LUMBER

The lumber industry during the month of August showed signs of recovery from the decline of early summer. Carloadings of forest products for the country increased about 9 per cent over the previous month while receipts and shipments of lumber at Chicago increased approximately 8 per cent and 7 per cent, respectively. Dealers report a good volume of orders for immediate shipment but practically none for future delivery. Unfilled orders on hand, in most instances, have been reduced to the vanishing point.

Prices on hardwoods showed a firming tendency, although lower in some instances than during the previous month; while prices on soft woods were erratic and showed considerable weakness in many lines. Automobile and hardwood furniture manufacturers were frequent buyers, but their purchases were limited to odd lots.

Orders for hardwoods as reported by the Northern Hemlock and Hardwood Manufacturers Association were approximately 19 per cent less than July, but 4 per cent higher than in June and 19 per cent better than May. Cut and

shipments for the month increased about 6 per cent and 5 per cent, respectively.

#### CONTRACTS AND PERMITS

A gradual slowing down in building activity within the district was again indicated by contracts awarded during August. These amounted to \$45,782,913, a decline of 14 per cent from July and almost 20 per cent below August a year ago. This decline brought the district figures as well as those of the separate states back, approximately, to the level of the early months of the year, before the active spring season began. Labor, however, according to the reports of contractors, is still well employed and a large volume of construction work is being rushed to completion.

The permits issued during the month showed a recovery from the heavy decline of July. Chicago, Indianapolis, and Detroit registered higher than during either June or July, and while a majority of the smaller cities experienced declines, others gained so that the aggregate for these cities was above the previous month. The number of permits increased considerably less than estimated cost, indicating that much of the building being planned is for larger projects. Permits issued so far this year have exceeded those of the corresponding period of last year by 22 per cent in number and 39 per cent in estimated cost.

#### MERCHANDISING CONDITIONS

#### WHOLESALE TRADE

A satisfactory volume of current sales, and an active business anticipated for the remainder of 1923, mark the present wholesale trade in this district. With retailers' stocks in many lines still low, any increased demand is expected to find immediate reflection in wholesale markets.

None of the groups reporting August sales to this bank, however, made as large advances over July as in 1922, and with the exception of groceries none as large as in 1921. In drugs and shoes this difference may be partly accounted for by the seasonal declines in July this year being smaller than in the two previous years; and in dry goods, the comparisons are affected by winter goods being included in some of the July reports.

While most of the dealers reduced their stocks during the month, there was some assembling of goods for future delivery. For all the dry goods firms but one, August 31 inventories were higher than a year ago; shoe stocks with one exception were lower; and other groups show greater variation, with the majority, however, in excess of last year.

Of fifty returns showing collections, fourteen were below August, 1922, and aggregate gains for most groups were less favorable than corresponding increases in July. Accounts outstanding August 31 were heavier than last year for all but eighteen firms, with group comparisons ranging from 1.5 per cent decrease for shoes to 18.1 per cent increase for hardware.

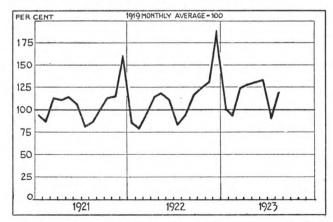
#### DEPARTMENT STORE TRADE

August sales of reporting department stores averaged about 30 per cent above July. This increase, while partly

the result of summer sales, doubtless marks the beginning of the usual upward movement culminating regularly in the holiday trade at the end of the year. From the accompanying chart may be seen the greater impetus with which the up-swing has begun this season than in 1921 or 1922. The chart indicates also the larger volume of business throughout this year as compared with the two preceding.

With four exceptions all firms increased their stocks during the month, and all but eight were inventoried higher

#### DEPARTMENT STORE SALES



Based on returns to this bank from 64 department stores in the district. Latest figures shown, August, 1923: 118.6.

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than on August 31, 1922. The ratio of average stocks to sales during July and August of 399.9, however, compares with 435.4 for last year, evidencing, as in previous months, the closer margin of goods with which firms are operating this year.

Accounts receivable at the end of July for forty-one stores represented 95.6 per cent of July sales; collections during August for the same firms amounted to 40.7 per cent of the July 31 outstanding accounts, as against 40.3, the corresponding 1922 ratio.

#### CHAIN STORE TRADE

Aggregate sales during August for ten chain store systems whose figures are received regularly by this bank exceeded the corresponding 1922 volume by 25.9 per cent, which represents individual gains by all but one firm. Comparisons with July, 1923, show declines in shoe and drug sales, but increases for the musical instrument group and for three out of four grocery chains.

#### MAIL ORDER TRADE

August retail distribution, as reflected by combined sales

of Chicago's two largest mail order houses, was about equal in dollar value to the July business. Buying was stimulated the latter part of the month by the unusually cold weather which prompted demand in some lines of seasonable merchandise. Gains over the corresponding month of 1921 and 1922 were 24.4 and 26.1 per cent, respectively. Compared with August, 1920, however, this year's sales show a decline of 7 per cent.

#### TRANSPORTATION

The weekly average of revenue freight carloadings in August was 1,027,991 cars, the highest weekly average over the period of a month ever recorded. Grain and grain products showed the greatest increase in individual commodities over last month; of the eight major commodities, only coke and ore showed decreases.

During the week ended September 1, carloadings totaled 1,092,567; this is the largest weekly figure on record, and the twelfth time this year that carloadings have exceeded a million. Statistics show that in only seven weeks over a five-year period have loadings reached the million mark, five times in 1920 and twice in 1922.

#### SEVENTH FEDERAL RESERVE DISTRICT SHOWING CLEARING CENTERS REPORTING DEBITS



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#### 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 no		Shown	partiy esti	mated on	basis of feturns feceived to date. D	ata Terer	to the	Seventii	rederar
No. of		July	Aug.	July	No. of	Aug.	July	Aug.	July
Firms	1923	1923	1922	1922		1923	1923	1922	1922
Employment—					Wholesale Trade—				
Iron and Steel Products:	00.2	00.0	m ~ 0	~~ 4	Net Sales (in dollars):	00.0	711	01.0	N1 4
Number Employed 56	90.3	92.2	77.9	77.4	Groceries	82.9	74.1	81.2	$71.4 \\ 88.9$
Amount of Payroll 56 All Industries:	89.2	88.7	65.7	63.2	Shoes 11	$\frac{110.7}{65.6}$	$103.2 \\ 52.1$	97.0 65.9	49.0
Number Employed296	98.1	97.8	85.1	83.9	Drugs 14	102.5	91.2	92.4	80.0
Amount of Payroll296	116.6	112.3	90.8	91.3	Dry Goods 13	114.5	99.3	100.4	82.4
Meat Packing—(United Sta		110.0	00.0	01.0	Automobile Accessories 7	84.7	84.5	88.9	79.4
Sales (in dollars) <sup>1</sup> 63	99.0	93.8	85.8	88.9	Retail Trade (Depart-				17.5
Stoves and Furnaces-					ment Stores)—				
Shipments (in dollars) 18	84.2	59.7	75.9	59.8	Net Sales (in dollars):				
Agricultural Pumps-(Unite	ed Stat	es)—			Chicago9	129.3	92.5	113.3	100.8
Shipments (in dollars) 21	88.5	92.1	105.4	99.0	Detroit6	131.4	93.7	97.7	83.7
Furniture <sup>2</sup> —					Des Moines 3			89.1	77.9
Orders (in dollars) 13	118.8	143.5	113.0	149.9	Indianapolis 3	127.6	119.4	98.9	101.4
Shipments (in dollars) 13	153.4	131.4	125.5	99.1	Milwaukee 3			84.5	81.5
Shoes3—		100.0		44 7 0	Outside	94.3	80.0	81.1	73.5
Production (in pairs) 27	153.9	123.2	149.1	117.3	Seventh District 64	118.6	91.1	92.8	83.1
Shipments (in pairs) 37	177.3	130.6	175.6	120.0	Retail Trade (United State	97.8	90.4	87.2	80.1
Electric Energy— Output of Plants					Department Stores306 Mail Order Houses4	73.3	74.1	57.2	58.4
(KWH) 10	145.5	142.5	128.7	125.1	Chain Stores:	10.0	14.1	01.2	30.1
Industrial Sales (KWH) 10	180.8	171.9	149.2	141.6		165 6	101 5	120.1	1051
Flour Production—	100.0	111.0	110.0	111.0	Drug 8	$165.6 \\ 145.4$	161.5 140.6	139.1 128.7	135.1 126.8
(In barrels) 45	108.3	76.6	107.1	81.9	Shoe 5	99.5	101.2	86.7	101.2
Freight Carloadings-(Unit		es)—			Five and Ten Cent 4	153.7	142.9	130.4	126.3
Grain and Grain Pro-					Music4	102.6	87.7	99.1	83.0
ducts	131.7	109.0	143.6	127.2	Cigar3	125.3	127.7	126.9	127.3
Live Stock	99.6	92.3	87.8	79.9	Boxes and Containers-			-10010	
Coal	116.7	113.5	54.4	45.5	Sales (in dollars) 6	114.4	99.8	95.0	80.0
Coke	144.9	155.5	90.6	103.6	Boxboard Consumption				
Forest Products	133.5	122.5	100.0	95.4	(tons) 6	88.5	89.1	101.4	88.2
Ore	217.7	222.3	180.8	171.4	Movement of Grain at				
Merchandise and Miscel-	105 1	100.4	1170	1147	U. S. Interior Pri-				
Ianeous	$125.1 \\ 127.7$	120.4 $122.5$	$117.2 \\ 105.9$	114.7 $101.0$	mary Markets—				
Iron and Steel—	121.1	122.5	105.5	101.0	Receipts:	4	W0 W	1010	00 -
Pig Iron Production:					Oats	155.6	79.7	131.0	88.5
Illinois and Indiana	155.9	159.2	84.7	116.9	Corn	139.3 $202.8$	123.7 $116.0$	155.4 $189.6$	176.0 133.6
United States	135.1	144.6	71.3	94.4	Wheat	202.0	110.0	109.0	100.0
Steel Ingot Production					Oats	88.4	72.3	94.4	77.5
(U. S.)	127.3	121.7	91.0	102.2	Corn	83.5	78.3	143.7	173.1
Unfilled Orders U. S.					Wheat	85.0	57.0	153.4	70.7
Steel Corp	90.3	98.6	99.3	96.4	Building Construction-	,			
Automobiles—(United State	es)—				Contracts Awarded (in				
Production: Passenger Cars	9979	215.1	170 6	162.3	dollars):	00.0			1000
Trucks	227.3 $115.6$	114.9	$179.6 \\ 93.2$	83.0	Residential	99.3	117.7	117.1	128.3
Shipments (Monthly	110.0	114.5	33.2	00.0	Total	83.3	96.9	103.6	151.3
Average, 1920=100):					Permits:	060 2	926 1	100.0	909 4
Carloads	180.5	155.0	156.9	139.2	Chicago—No Estimated Cost	262.3 231.9	236.1 190.0	190.9 206.4	208.4 186.7
Driveaways	128.6	118.5	93.7	71.6	Indianapolis—No	260.4	227.5	207.9	187.9
Boat (Base Figures					Estimated Cost	247.8	192.8	194.6	314.1
(1920), partly esti-					Des Moines—No	224.5	220.6	139.2	192.2
mated)	261.8	296.3	297.9	207.3	Estimated Cost	145.1	195.2	86.6	176.9
Stamp Tax Collec-					Detroit—No	191.9	167.9	147.9	135.2
tions—(First Illinois					Estimated Cost	224.5	117.2	189.5	106.8
Internal Revenue					Milwaukee-No	216.2	214.3	221.3	184.0
District)—					Estimated Cost	154.5	211.8	133.0	165.3
Sales or Transfer of					Other Cities (45)—No	223.8	219.8	173.5	183.9
Capital Stock	74.9	111.5	102.5	63.5	Estimated Cost	163.5	156.7		217.3
Sales of Produce on					Total (50 Cities)—No	220.4	208.3		174.7
Exchange—Futures	43.9	61.3	55.2	68.4	Estimated Cost	203.4	163.3	175.8	178.7

<sup>1.</sup> Monthly Average 1920-1921=100; 2. Monthly Average 1919-1920-1921=100; 3. Monthly Average of mean production and shipments in 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 shipment—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.

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