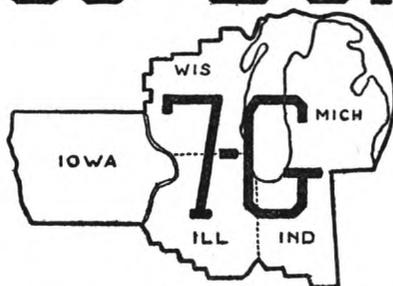


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

Volume 10, No. 10

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

October 1, 1927

NATIONAL SUMMARY OF BUSINESS CONDITIONS

INDUSTRIAL production increased in August, reflecting a growth in the output of mines, and the distribution of commodities, both at wholesale and at retail, increased by more than the usual seasonal amount. The general level of wholesale commodity prices rose about one per cent, owing chiefly to advances in the prices of farm products.

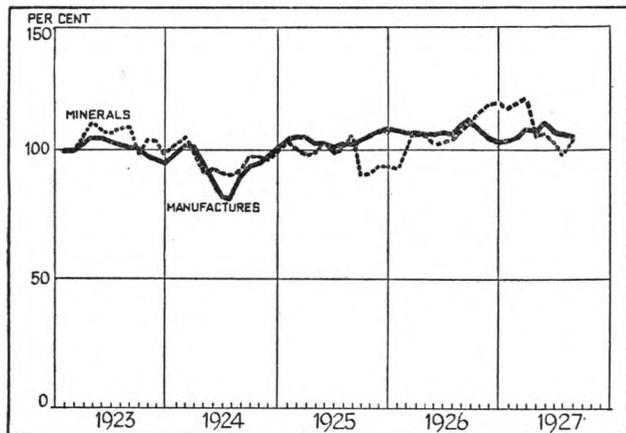
PRODUCTION—Production of anthracite and bituminous coal, which showed a considerable decline earlier in the season, increased sharply in August and the early weeks of September, and this rise was reflected in an advance in the Board's index of mineral output from 98 per cent of the 1923-1925 average in July, to 106 per cent in August. The index of manufacturers as a whole showed practically no change for the month. The iron and steel industry continued during August and September with little change in demand or in production, and the output of newsprint, lumber, and cement showed only customary seasonal changes in August. Consumption of cotton remained unusually large for this season of the year, and there was an increase in the production of automobiles, which, however, remained below the output of August last year. Output of shoes and rubber tires increased from July to August by less than the customary seasonal amount. Factory employment was in practically the same volume in August as in July, and both employment and production

were smaller than a year ago. The volume of building contracts awarded in August was smaller than in August, 1926, which was a month of unusually large awards. The largest decreases, as compared with last year, were in the Boston, New York, and Chicago Federal Reserve districts. In the first half of September awards were in practically the same volume as in the corresponding period of last year.

The Department of Agriculture's estimate of corn production on the basis of September 1 condition was 2,457,000,000 bushels, compared with 2,647,000,000 harvested in 1926. The total yield of wheat is expected to be somewhat larger than a year ago. The forecast of the yield of cotton was 12,692,000 bales, representing a reduction of 800,000 bales from the August estimate and of over 5,000,000 bales from last year's crop.

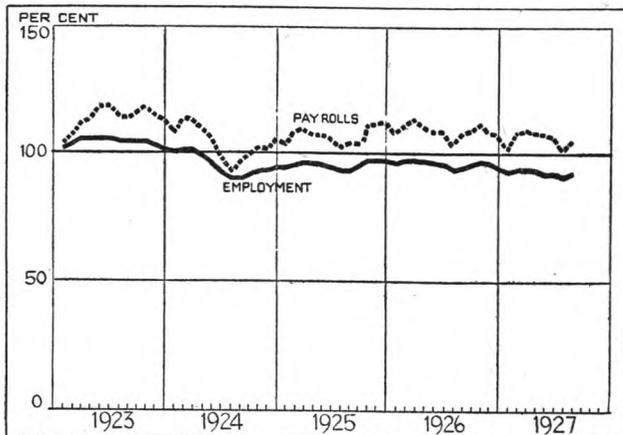
TRADE—Distribution of merchandise at wholesale and retail increased more than is usual in August, and sales were generally larger than in August of last year. Sales of wholesale firms in most leading lines were larger than a year ago. Inventories of department stores showed less than the usual seasonal increase in August and at the end of the month were in about the same dollar volume as a year ago. Stocks carried by wholesale firms continued in August generally smaller than last year. Freight carloadings of nearly all types of commodities increased con-

PRODUCTION OF MANUFACTURES AND MINERALS



Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-1925 average = 100). Latest figures, August, 1927: Manufactures, 106; Minerals, 106.

FACTORY EMPLOYMENT AND PAYROLLS



Federal Reserve Board's indexes of factory employment and payrolls (1919 = 100). Latest figures, August, 1927: Employment, 91.2; Payrolls, 104.4.

Compiled September 27, 1927

siderably in August and the early part of September, but, with the exception of grains and miscellaneous products, loadings for all groups continued in smaller volume than in the same period of last year.

PRICES—Wholesale commodity prices, as measured by the index of the Bureau of Labor Statistics, increased from 145 in July to 147 in August. There were large increases in the prices of farm products and of clothing materials, while most of the other groups showed only slight changes. The price of raw cotton advanced from 17½ cents a pound on August 1 to over 23 cents on September 8, but since that date has declined by about three cents a pound. Prices of cotton goods, cattle, hogs, and sugar also increased during August and the first three weeks of September, while those of grains declined; recently there have been reductions in the prices of some iron and steel products.

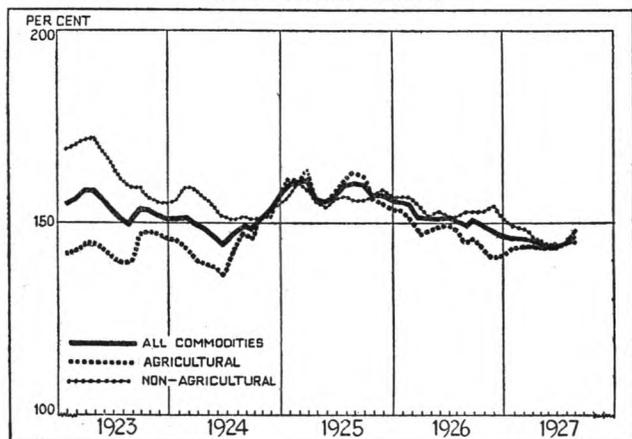
BANK CREDIT—Total loans and investments of member banks in leading cities between August 17 and Septem-

ber 21 increased by \$400,000,000 to the largest figure on record. There were increases in loans on securities and in investments, as well as the usual seasonal growth in loans for agricultural and commercial purposes.

The volume of reserve bank credit increased during the month ending September 21, reflecting the seasonal growth in the demand for currency and an export of gold. The increase was entirely in the holdings of acceptances and United States securities, as there was little change in discounts for member banks.

In the open money markets, rates on security loans increased slightly during September, while rates on commercial paper and 90-day bankers' acceptances remained unchanged at the lowest levels of the year. Discount rates at the Federal Reserve banks of Philadelphia, Chicago, San Francisco, and Minneapolis were reduced during September from 4 to 3½ per cent, the rate prevailing in the other eight districts.

WHOLESALE PRICES



Indexes of U. S. Bureau of Labor Statistics (1913 = 100). Latest figures, August, 1927: All Commodities, 146.6; Non-agricultural Commodities, 144.5; Agricultural Commodities, 148.1.

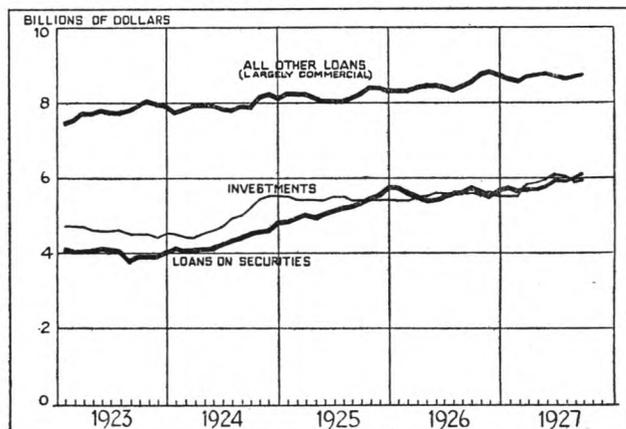
BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

General conditions in the Middle West have changed little during the last few weeks. In agricultural districts, interest still centers on the corn crop, with the production estimate lowered on September 1 but later modified by the high temperatures which followed.

Other features of the agricultural situation are the effect of the August drought on various crops and farm activities; the heavy shipments of wheat to market during the month; the more than seasonal gains in live stock receipts, and increased sales by meat packing companies; and in dairy products, the decline in output and distribution from July but gains as compared with last year.

Industrial and commercial operations during August indicate some seasonal broadening over the preceding month. Factory employment as a whole reflected recovery of the previous month's vacation and inventory losses. The automobile industry showed heavier production. Output of farm machinery, though still below the 1926 level, advanced slightly over the preceding month; sales averaged gains in both comparisons. August building contracts and permits exceeded the July volume, but were below a year ago; lumber sales likewise were heavier in the monthly comparison, but declined in the yearly; while the cement industry reported gains in both, and brick yards declines. To be noted also are increases in various branches of wholesale trade, marked expansion in department store sales, and larger shipments by furniture manufacturers and heavier sales at

MEMBER BANK CREDIT



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures, averages for first three weekly reporting dates in September, 1927: All Other Loans, 8,710 million; Loans on Securities, 6,070 million; Investments, 5,967 million.

retail. The wool market was more active than usual for August, and the increase in output at shoe plants more pronounced than customary.

Among financial items were the continued improvement in the bond market, good demand for commercial paper, a further slight decline in savings deposits, heavier check payments, and increased holdings of acceptances by dealers in the open market and by banks.

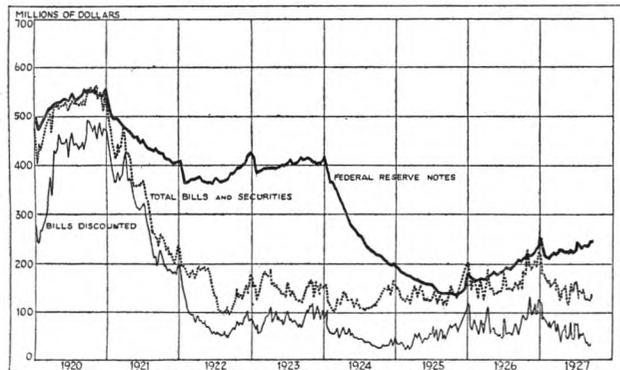
CREDIT CONDITIONS AND MONEY RATES

Little change in the general credit situation in the Seventh district has taken place during the past month. Banks in some sections report a moderately expanded demand toward the end of August, but uncertainty with respect to the corn crop throughout that month tended to retard any marked increase in business activity. Unusual warmth in September, while improving the outlook for corn, has slowed down retail trade, and drought throughout most of the district has had a similar influence. Easy conditions continue in the Chicago money market, and rates have tended slightly downward, this trend appearing in a greater volume of transactions at the lower figures of range quotations than a month ago. Present rates are as follows: Commercial paper 3¾ to 4½ per cent, collateral loans 4½ to 5, and over-the-counter 4¾ to 5 per cent. The average rate earned in August by ten of the larger banks in Chicago was 4.80 per cent, as against 4.87 per cent in July and 4.77 per cent in August, 1926. The

prevailing rate on commercial loans in Detroit for the week ending September 14 was $4\frac{1}{2}$ to 6 per cent.

Loans to member banks by the Federal Reserve Bank of Chicago on September 7 touched the lowest aggregate (\$30,570,000) since March 18, 1925, when \$27,441,000 was reported. On the fourteenth, a rise of about seven million (to \$37,638,000) took place. On September 15, 1926, this item stood at \$53,538,000. Total bills and securities on September 14 were \$134,247,000, representing a rise of ten million from September 7, and compared with \$124,976,000 August 17 and \$163,830,000 on the corresponding reporting date a year ago. Federal Reserve notes in circulation, reported as totaling \$245,164,000 September 14, compared with \$236,835,000 August 17 and \$208,545,000 September 15, 1926.

POSITION OF THE FEDERAL RESERVE BANK OF CHICAGO



Latest figures, September 14, 1927, in thousands of dollars: Federal Reserve Notes, 245,164; Total Bills and Securities, 134,247; Bills Discounted, 37,638.

Loans and discounts of reporting member banks in the Seventh district have fluctuated rather widely from week to week, amounting to \$2,239,976,000 September 14 as against \$2,217,655,000 the preceding week and \$2,263,446,000 August 17. On September 15, 1926, the aggregate was \$2,199,300,000. The rise on September 14 from September 7 reflected principally an expansion of commercial loans in Chicago and Detroit, accompanied by a lesser increase in loans on stocks and bonds in the former city. Investments of reporting member banks have increased during September, standing at \$791,768,000 on the fourteenth, as compared with \$788,068,000 the preceding week and \$780,960,000 August 31. On September 15, 1926, the figure was \$781,221,000. Net demand deposits on September 14 touched \$1,883,766,000, as compared with \$1,870,062,000 August 17 and \$1,897,464,000 September 15, 1926. Time deposits have moved downward thus far in September, the aggregate on September 14 amounting to \$1,117,653,000 compared with \$1,125,447,000 August 31.

Commercial paper continued in good demand during August, but the supply in general was indicated as small. Total sales for eleven reporting houses exceeded the July volume by 6.6 per cent, and were 27.4 per cent heavier than August, 1926; individually, seven dealers registered increases in the former comparison, and all but one in the latter. Rates tended to ease during August, with seven firms reducing their quotation for low from 4 per cent to $3\frac{3}{4}$, and customary ranging from 4 to $4\frac{1}{4}$, as compared with $4\frac{1}{4}$ in June and July; high was maintained at $4\frac{1}{2}$. After September 1 a large amount of paper moved at $3\frac{3}{4}$. Of five dealers reporting the volume of paper outstanding on August 31, four showed gains over July 31, and two over August 31, 1926; the aggregate advanced 6.2 per cent in the monthly comparison, and was within 0.4 per cent of last year's level. Twenty-six firms located throughout the country reported outstanding paper of \$591,158,000.

Total bills bought from acceptors and others by six reporting dealers operating in the Chicago open market from August 18 to September 14 averaged on a weekly basis 1.8 per cent less than purchases during the preceding five weeks. Sales in the same comparison showed a gain of 244.5 per cent, those to local banks and to others constituting the bulk of transactions, although sales to the Federal Reserve Bank and to out-of-town banks registered increases also. Receipts from other offices were very heavy, but forwardings declined. Demand for the most part was reported as fair or good, with sixty- and ninety-day maturities most popular. A small to fair supply of paper was available; cotton, grain, tobacco, meats and lard, rubber, and canned goods were the principal items involved. Holdings continued to advance each week until September 7 when they nearly touched the February 16 peak; the total on September 14 dropped 6.1 per cent below the preceding week. Rates remained stable during the period, quotations at the close ruling the same as on August 17, except for thirty-day paper which fell from $3\frac{1}{8}$ to 3 per cent.

The volume of bills accepted during August by reporting banks in this district exceeded that of any month in nearly three years, and purchases were the largest since our records were begun (March, 1921); gains over July averaged 90.2 and 161.0 per cent for the two items, and those over a year ago 142.9 and 253.1, respectively. The increases are attributable mainly to very heavy receipts of paper covering butter, eggs, and cheese. Paper accepted during the first two weeks of September by three Chicago banks covered transactions primarily for meat and lard, cotton, coffee, tea, rubber, copper, iron, tobacco, and grain. August sales showed a gain of 15.3 per cent over July and 5.3 over last year. The banks' liability for acceptances outstanding advanced 38.8 per cent from July 31 to August 31, and was 74.8 per cent above a year ago; the majority of banks registered increases in both comparisons. Bills originating with the banks and held on August 31, as well as total holdings, aggregated the highest since early in 1925. Holdings by the Federal Reserve Bank of Chicago dropped to \$20,713,462; August purchases amounted to \$19,401,817.

Volume of Payment by Check—Volume of payment by check in August, as reported by thirty-seven clearing house centers in the Seventh district, aggregated \$6,063,246,000 as against \$6,012,222,000 in July, or a gain of 0.8 per cent. Of the four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, Chicago alone showed a gain over the preceding month (4.4 per cent); the change for their aggregate was an increase of 2.0 per cent over July. Thirty-three smaller cities reporting debits decreased in their total 5.1 per cent from July. In comparison with August, 1926, Chicago increased 10.5 per cent, the aggregate of the four larger cities 7.5 per cent, and the thirty-seven cities 6.4 per cent.

Savings—Total savings deposits on September 1 for 212 reporting banks in this district were within 0.2 per cent of the August 1 figure, and 1.7 per cent above a year ago. By states, Indiana, Iowa, and Wisconsin averaged gains and Illinois and Michigan declines in the monthly comparison, while in the yearly Iowa registered the one decrease; individually, half the banks showed gains over August 1, and 133 as compared with September 1, 1926. For all five states the number of accounts advanced over a year ago and except for Illinois exceeded the August 1 figures, with Indiana, Iowa, and Michigan reaching new levels; district increases amounted to 0.3 per cent in the monthly comparison and 2.8 per cent in the yearly, the former reflecting 149 increases and the latter 144.

Bonds—Since the middle of summer, the bond market, while not particularly active, has shown continued improvement, in that inventories have been cut down and prices have strengthened. A substantial number of new issues were brought out after September 1, and in most cases

readily taken, the market being in a position to absorb offerings properly priced. Public utilities and high grade industrials move well; foreign securities are popular; municipals have stiffened materially; and demand for real estate bonds continues strong.

AGRICULTURAL PRODUCTION AND FOODSTUFFS

September 1 estimates of 1927 corn production in the Seventh district fell below expectations of August 1. The outlook became much more favorable after that date, however, owing to high temperatures, fair moisture, and abundant sunshine prevailing in September. Three and in some cases as many as six weeks of good weather after September 15 were needed to bring the crop to full maturity before a killing frost, however, as mid-month found only a fair percentage of kernels fully dented, half the crop in the dough or still denting, and the remainder of the ears about in the blister stage. Some of the very late planted corn has only a remote possibility of making ears. Drought had been quite general throughout the district during August and the first few days of September, affecting garden truck, pastures, sugar beets, tobacco, late corn, and delaying fall plowing, but was relieved by rains in most counties during the second week of September. A few localities not visited by showers were still suffering from lack of sufficient moisture. Threshing neared completion.

The United States Bureau of Agricultural Economics, on the basis of September 1 condition, estimates the 1927 crop of Danish cabbage in Wisconsin and Michigan as 88,500 tons and the cabbage grown for kraut in Illinois, Indiana, Michigan, and Wisconsin as 44,700 tons, compared with respective harvests of 82,100 and 42,000 tons in 1926. Michigan celery production shows an increase of 12.7 per cent over a year ago.

CROP PRODUCTION

Estimated by the Bureau of Agricultural Economics as of September 1 (In thousands of bushels unless otherwise specified)

	SEVENTH DISTRICT		UNITED STATES		5-YR. AV. 1922-26
	1927	1926	1927	1926	
Corn	650,215	910,389	2,456,561	2,646,853	2,766,561
Oats	453,184	490,757	1,191,396	1,250,019	1,352,357
Winter Wheat	61,278	66,262	552,767	627,433	556,017
Spring Wheat	5,198	3,453	308,125	205,376	251,715
Barley	52,106†	39,813†	259,406	188,340	192,707
Rye	10,273†	10,415†	61,484	41,010	63,874
Potatoes (white)	54,016	59,417	399,798	356,123	394,135
Potatoes (sweet)	1,619*	2,069*	89,344	83,658	81,292
Apples (total crop)	14,033†	27,830†	123,574	246,460	199,224
Peaches	1,906†	5,221†	44,762	69,715	54,272
Grapes**	63†	78†	2,529	2,349	2,099
Tobacco***	30,652	34,715	1,168,413	1,301,211	1,338,226
All tame hay**	24,285†	19,661†	101,269	86,184	90,904
Canning Crops					
Sweet corn**	192†	437†	396	803
Tomatoes**	219†	218†	1,027	998
Cucumbers	1,726†	2,122†	2,818	3,637

†Five states including Seventh district.

‡Indiana, Illinois, Iowa, and Michigan.

*Illinois, Indiana, and Iowa.

**In thousands of tons.

***In thousands of pounds.

Grain Marketing—Wheat receipts at interior primary markets in the United States were considerably larger and those of corn and oats somewhat smaller for August than the 1922-26 average for the month; each of the grains increased in volume, however, over July and a year ago. The quantity of wheat reshipments from these centers gained and oats and barley decreased in comparison with July and the 1922-26 August average, with oats showing the only recession from last year. Visible supplies of corn were reduced slightly, and holdings of other grain in the United States showed a seasonal gain on September 10 as compared with the corresponding Saturday in August. Barley and corn inventories exceeded a year ago, but stocks of wheat, oats, and rye were smaller than on September 11, 1926. Trading in future delivery grain by

members of the Chicago Board of Trade increased 20.0 per cent in August over July and was 15.9 per cent heavier than a year ago. Chicago quotations firmed a little for oats, declined for wheat and rye, and advanced for corn in August compared with July. Wheat, corn, and rye prices tended to ease during the first half of September.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in August, 1927, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JULY 1927	AUGUST 1926	
Production (bbls.)	+21.5	— 1.8	32
Stocks of flour at end of month (bbls.)	+28.4	+ 6.1	29
Stocks of wheat at end of month (bu.)	+106.3	+ 3.9	28
Sales (volume)	+26.8	— 7.3	14
Sales (value)	+20.6	—12.2	14

Production includes wheat and other flours. Balance of items refer to wheat flour only.

Movement of Live Stock—August receipts of live stock exceeded a year ago with more than the usual gain over July in the movement of cattle, calves, and lambs, and a smaller recession than ordinarily takes place in hog arrivals. Cattle and hog marketings were reduced somewhat from the 1922-26 August average, but the volume of other animals increased. Seasonal liquidation of grass cattle (carrying exceptionally good quality this year) from ranges and native territory, together with a fairly heavy movement of warmed-up or short-fed steers and heifers from feed lots, accounted for the gain in cattle receipts over July. The weight of the hogs averaged less in August than a year ago, owing to the uncertain outlook of the corn crop. Lambs arrived from ranges and native territory, western offerings containing a greater number of grassers than in July.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, August, 1927	265,830	657,100	341,077	85,155
Federally Inspected Slaughter U. S. August, 1927	837,858	3,049,893	1,168,404	389,369
July, 1927	742,524	3,430,677	1,013,852	354,504
August, 1926	811,225	2,833,615	1,093,251	379,311

Reshipments from public stock yards to feed lots were heavier for August than for July, with the cattle and calf movement greater and that of lambs considerably under a year ago.

AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	SEPT. 10 1927	AUGUST 1927	JULY 1927	AUGUST 1926
Native Beef Steers (average)	\$12.05	\$11.80	\$11.75	\$ 9.50
Fat Cows and Heifers	7.80	8.10	7.90	6.80
Hogs (bulk of sales)	10.00	9.10	9.15	11.55
Yearling Sheep	9.75	10.45	11.30	10.80
Lambs (average)	13.00	13.85	14.35	14.10

Meat Packing—Production at slaughtering establishments in the United States totaled a little less in August than in the preceding month, a recession in the pork section more than offsetting greater activity in the beef and mutton departments. Employment for the last week of the period declined 1.6 per cent in number, 3.6 per cent in hours worked, and 1.3 per cent in payrolls from corresponding figures for July. Domestic demand continued active for smoked meat, improved a little for pork, and averaged between fair and good for other products. Sales billed to domestic and foreign customers by fifty-eight meat packing companies in the United States increased 7.4 per

cent in total value over July, but showed a recession of 4.1 per cent in comparison with August, 1926. At the beginning of September, domestic demand averaged between fair and good, with a slight improvement indicated over a month ago. Chicago quotations for lamb, lard, smoked ham, and most pork cuts declined in August from July; prices of veal, mutton, fresh pork loins, bacon, and dry salt heavy fat backs advanced; while those for beef and pickled clear bellies remained steady to slightly firmer. September 1 inventories of pork, lard, and miscellaneous meat at packing plants and cold-storage warehouses in the United States decreased from the preceding month, but exceeded a year ago and the 1922-26 September 1 average. Lamb and mutton stocks gained slightly over August 1 but fell below September 1, 1926, and the five-year average for the date; beef holdings declined in all three comparisons.

A majority of packers reported August shipments of meat and lard forwarded for export a little heavier in volume than in the preceding period. Foreign demand for hog fats improved somewhat over July, there was fair trade in meats with Continental countries, and a slightly better inquiry from England for hams. September 1 consignment inventories abroad and in transit to European markets were indicated a little below a month ago. Prices realized on foreign sales averaged somewhat nearer Chicago parity during August than in July.

Dairy Products—Butter production in the Seventh Federal Reserve district decreased 11.7 per cent in August from the preceding month and increased 15.1 per cent over a year ago, according to a compilation of the reports sent direct to this bank by sixty-one creameries. A similar trend for the United States is indicated by the statistics of the American Association of Creamery Butter Manufacturers. The quantity of creamery butter billed to customers by sixty-three companies in the Seventh district aggregated 6.6 per cent less for the month than in July but exceeded that of August, 1926, by 10.7 per cent. Wisconsin factories supplied markets in that state with a 16.8 per cent smaller tonnage of American cheese during the five weeks ended September 3 than in the preceding period, although the volume was 5.5 per cent above a year ago; redistribution declined 5.6 per cent and increased 5.8 per cent, respectively, in these comparisons. Seasonally larger inventories of butter and cheese and smaller stocks of eggs were reported by cold-storage warehouses and packing plants in the United States on September 1 than at the beginning of August. Butter holdings gained considerably over the 1922-26 September average, and there was a slight gain in the tonnage of other items, while cheese stocks showed the only recession in volume from a year ago. Receipts of dairy products at Chicago totaled less in August than in July. Chicago quotations for August averaged above those of the preceding month. Prices tended to firm during the early part of September.

INDUSTRIAL EMPLOYMENT CONDITIONS

Reports from manufacturing plants of the Seventh Federal Reserve district for the period July 15 to August 15 reflect the closing of the customary vacation and inventory season, gains of 1.1 per cent in number of employes and of 4.3 per cent in their earnings partly balancing the losses of the preceding month. Leather and paper products, having registered slight increases in employment during July, made further gains for August, while in textiles and food products the previous gains were followed by seasonal declines. Stone, clay, and glass products show a gradual reduction in employment continued from the preceding month. Other industrial groups indicate increases, those for lumber and rubber products more than offsetting the earlier declines, while metals, vehicles, and chemicals registered only a partial recovery. Increases of 2.9 per cent in men and 4.6 per cent in amount of payrolls for the metal industries contrasted with losses of 5.4 and 9.2 per cent the prior month; the group showed a decline of approximately 10 per cent from August, 1926. With the exception of rubber and paper products, other

industries also declined generally in comparison with a year ago, the decreases in employment ranging from less than one per cent for textiles, leather, and stone, clay, and glass products, to about 14 per cent for vehicles. The rubber products group has registered only one decrease during the year 1927, that of July, and is close to 20 per cent above the level of a year ago. In paper goods the advance for the year amounts to less than one per cent.

At Detroit, according to reports received from the Employers' Association, employment fell off 2.9 per cent for the month closing the second week in September, and was 17.2 per cent below the level of a year ago as compared with only 13 per cent in August. The unemployment ratio, measured by the number of applicants to available positions at the free employment offices of the state, was 165 per cent the last week in August for Illinois as against 170 per cent a month earlier; for Iowa there was a drop from 248 per cent to 233; while for Indiana the ratio showed a rising trend in August, but fell subsequently to 146 per cent the second week in September.

EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED		PER CENT CHANGE	WEEK ENDED		PER CENT CHANGE
	AUGUST 15 1927	JULY 15 1927		AUGUST 15 1927	JULY 15 1927	
All groups (10).....	335,464	331,906	+1.1	\$9,178,474	\$8,798,712	+ 4.3
Metals and metal products (other than vehicles).....	130,341	126,653	+2.9	3,421,347	3,270,444	+ 4.6
Vehicles.....	32,793	32,250	+1.7	1,103,498	921,037	+19.8
Textiles and textile products.....	26,698	27,001	-1.1	671,119	673,555	- 0.4
Food and related products.....	47,086	49,277	-4.4	1,284,293	1,355,211	- 5.2
Stone, clay, and glass products.....	11,891	12,001	-0.9	362,389	352,082	+ 2.9
Lumber and its products.....	29,991	29,701	+1.0	748,317	693,090	+ 8.0
Chemical products.....	9,784	9,519	+2.8	260,565	257,788	+ 1.1
Leather products.....	14,683	14,247	+3.1	333,365	303,730	+ 9.8
Rubber products.....	3,787	3,546	+6.8	99,156	80,784	+22.7
Paper and printing.....	28,410	27,711	+2.5	894,425	890,991	+ 0.4

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—Total output of both passenger automobiles and trucks by manufac-

turers in the United States increased seasonally in August over July, but the aggregates remain well below the

1926 levels. Wholesale distribution of automobiles in the Middle West declined in August from July; the number sold increased over August, 1926, but the aggregate value was less. Sales at retail continued the decline started in May, and are still considerably under the volume of a year ago. Stocks of new cars on hand August 31 totaled in excess of those held July 31 and on the corresponding date of 1926, although more than half the firms reported a falling-off in both comparisons. Used car sales and stocks declined in August from the preceding month and August last year, except the value of used cars held continued higher than a year ago. Deferred payment sales totaled 39.7 per cent of the retail sales of twenty-eight dealers in August; this ratio compares with 41.5 in the preceding month and 35.7 for August, 1926.

MIDWEST DISTRIBUTION OF AUTOMOBILES

	Changes in August, 1927, from previous months		COMPANIES INCLUDED	
	PER CENT CHANGE FROM		JULY	AUGUST
	JULY	AUGUST	1927	1926
New cars				
Wholesale—				
Number sold	- 7.3	+ 2.2	30	30
Value	- 0.4	- 6.2	30	30
Retail—				
Number sold	-16.0	-28.8	77	75
Value	-14.2	-19.4	77	75
On hand August 31—				
Number	+15.4	+55.7	48	46
Value	+ 4.4	+40.3	48	46
Used cars				
Number sold	- 5.3	- 8.0	78	76
Saleable on hand—				
Number	- 1.6	- 3.8	47	45
Value	- 4.0	+23.4	47	45

Agricultural Machinery and Equipment—The aggregate value of agricultural machinery and equipment billed to domestic and foreign customers during August by seventy-seven manufacturers in the United States increased 19.8 per cent over July in the thrasher, combination harvester-thresher, tractor group; gained 2.5 per cent for "all other" exclusive of barn supplies; and declined 2.6 per cent in the barn equipment group. A comparison with sales a year ago showed gains in August, 1927, of 24.1 per cent in heavy machinery lines, and recessions of 0.3 per cent in the light group and of 12.7 per cent in barn equipment.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

	Changes in August, 1927, from previous months		COMPANIES INCLUDED
	PER CENT CHANGE FROM		
	JULY	AUGUST	
Domestic sales billed.....	+ 7.6	+14.0	77
Sales billed for export.....	+29.0	- 2.0	42
Total sales billed.....	+10.8	+10.9	77
Production	+ 3.3	- 7.5	75

Production computed from average number employed during the month. Sales based on value.

Iron and Steel Products—Sales of steel were only fair during August in the Chicago district; lack of railroad car buying, also of orders for rails and accessories, and a lessened demand for oil storage tanks reduced operations at mills. Unfilled orders of the United States Steel Corporation gained for the third consecutive month, on August 31 totaling 3,196,037 tons, an increase of approximately 54,000 tons over July 31. Production of steel ingots expanded slightly during August for the country as a whole, averaging 128,552 tons, or 1.1 per cent above the preceding month, but 16.2 per cent below a year ago. Output of pig iron in the Illinois and Indiana district averaged 18,472 tons daily for August, which is 2.6 per cent less than in July and 11.2 per cent under August, 1926; the daily average for the United States was almost equal to that of July, but showed a decline of 7.9 per cent from last year.

The *Iron Trade Review* composite price of leading iron and steel products registered little change through August and the first half of September, \$36.25 on September 14 comparing with \$36.26 August 3, but dropped to \$36.10 on

September 21. Sheet steel prices at Chicago remained firm; a decline took place during August in the price of bars, shapes, and plates; there was no change in pig iron; and quotations for scrap iron and steel also varied little.

The value of orders booked by steel foundries in the district reporting to this bank declined 11.6 per cent in August from the preceding month and was 6.5 per cent less than in August, 1926; tonnage booked decreased 13.4 and 1.6 per cent, respectively, in these comparisons. Shipments advanced 20.9 per cent in value over July and 23.4 per cent in tonnage, and showed gains over a year ago of 16.2 and 18.4 per cent. Production increased 14.5 and 18.3 per cent in the respective monthly and year-to-year comparisons. Orders booked by malleable foundries of the district indicated a gain of 7.5 per cent in value and of 4.2 per cent in tonnage over the preceding month, and losses of 25.3 and 25.4 per cent from last year. Shipments and production showed the same trend as orders.

Electric Energy—Eight central station companies in the Seventh Federal Reserve district report changes in August from a month and a year previous as indicated in the first table below, while indices of industrial production, as measured by electric energy consumption, compiled by McGraw-Hill Publishing Company, are given in the second table.

CHANGES IN AUGUST, 1927, FROM PREVIOUS MONTHS

	PER CENT CHANGE FROM	
	(Compiled from direct reports to this bank by eight companies)	
	JULY	AUGUST
Plant capacity (KW).....	+3.4	+13.5
Plant output (KWH).....	+6.2	+ 7.5
Plant output (daily average—KWH).....	+6.2	+ 7.5
Peakload demand (KW).....	+2.9	+ 6.0
Industrial sales (KWH).....	+5.6	+ 5.9
Industrial sales (working day average—KWH).....	-2.2	+ 2.0

	AUGUST	JULY	AUGUST
	1927	1927	1926
Ratio peakload demand to plant capacity.....	63.9	64.1	68.4
Load factor	58.7	56.9	57.9

INDUSTRIAL PRODUCTION AS MEASURED BY ELECTRIC ENERGY CONSUMPTION

(Monthly average 1923-1925=100)

	AUGUST	JULY	AUGUST
	1927	1927	1926
North Central States.....	116.7	111.1	117.2
United States	114.8	106.3	110.9

Shoe Manufacturing, Tanning, and Hides—Shoe manufacturing establishments in the Seventh district reported more than a seasonal gain in August volume over July, with shipments leading current production by 12.4 per cent. Unfilled orders of twenty-four companies gave assurance of nearly five and one-half weeks' future operation at the present rate of distribution. Stock shoes reported on hand by twenty-eight of the factories were equivalent in the aggregate to 54.2 per cent of August shipments by these concerns.

CHANGES IN THE SHOE MANUFACTURING INDUSTRY IN AUGUST, 1927, FROM PREVIOUS MONTHS

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	JULY	AUGUST	
Production	+32.8	+18.0	32
Shipments	+48.0	+21.5	32
Stock shoes on hand.....	-14.4	+ 6.0	29
Unfilled orders	- 8.5	- 1.8	25

Leather production in the district increased over July but fell somewhat under August, 1926. Sales billed to customers during August slightly exceeded those of the preceding month and were above a year ago. Prices remained strong to slightly firmer.

Chicago trading in calf and kip skins showed a recession in August from the preceding month, but sales of packer green hides were about double the volume of July. Tanners in the Seventh district increased their purchases during the period. Shipments of hides and skins from Chicago, however, as reported by the local Board of Trade, were slightly less than in July. Quotations at Chicago averaged lower for August than for July, and then tended to firm during the early part of September.

Furniture—Of twenty-seven furniture manufacturers sending August reports to this bank, sixteen showed gains over July in orders booked, but the aggregate declined 16.5 per cent. Shipments increased 30.7 per cent in the month-to-month comparison, only two firms indicating declines. The amount of unfilled orders on hand August 31 was reduced to 6.8 per cent below the July 31 figure. In the comparison with August last year, orders booked by nineteen firms aggregated 2.2 per cent less, shipments increased 5.9 per cent, and unfilled orders at the end of the month were 9.5 per cent below the corresponding date of 1926. Operations averaged 78.3 per cent of capacity in August for twenty-one

firms, a gain over the preceding month.

Raw Wool and Finished Woolens—A moderate volume of wool moved to manufacturers in August, although activity was not quite so great as in July; August is usually a dull month in the wool business, but the quantity sold this year was heavier than the average for the month. Prices remained very firm with a higher tendency on the finer grades. Foreign primary markets opened strong. In the finished goods market the later openings for the Spring, 1928, season brought considerable activity on the part of buyers. Some mills are still busy on belated orders for the fall season, while others are preparing offerings for spring.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

Although lumber dealers reported that no outstanding purchases were made during the month of August, with the development of a general tendency toward hand-to-mouth buying, lumber sales, as reflected by reports of 237 retail yards, advanced 9.5 per cent over July; there was, however, a decline of 9.7 per cent from August of last year. Twenty-three wholesale dealers indicated sales volume as 8.0 per cent in excess of the preceding month and 2.1 per cent under a year ago. As measured in board feet, business of wholesalers advanced 6.1 per cent over July and decreased 10.1 per cent from August, 1926. The ratio of accounts outstanding on August 31 to total sales during the month at wholesale was 134.2 per cent, as compared with 146.2 and 130.0 per cent, respectively, for July and for August, 1926; for retail yards these respective percentages were 292.4, 312.1, and 283.2. Stocks of wholesale dealers on August 31 were somewhat smaller than either thirty days or a year earlier; few retail yards, however, indicated any change in the volume on hand. Hardwoods continued in demand for furniture, flooring, and to some extent for automobile construction; considerable quantities were also being used in the manufacture of heels and musical instruments; railroad companies, which have been buying extensively for equipment and maintenance of way materials, were not in the

market during August; softwoods were used in large quantities for the manufacture of boxes, crates, and wooden machinery.

The seasonal building decline was reflected in the brick industry where marked decreases were indicated during August in both the month-to-month and yearly comparisons; many yards closed down because of lack of further storage space. In Iowa, however, the industry showed improvement over both July and a year ago. The cement industry, favored by the long dry spell, reported increases in both production and shipments over July and last August. Stocks were somewhat larger than a year ago, but declined markedly from the preceding month.

Building Construction—Contracts awarded in the Seventh district during August amounted to \$107,554,246, which was 2.4 per cent more than the total for July, but 16.1 per cent under the figure for August, 1926. Residential building, representing \$42,123,343 of the total, exceeded July by 8.5 and August, 1926, by 3.7 per cent. Contemplated new work, as reported by fifty leading cities, was 14.5 per cent ahead of July in the number of undertakings and 17.0 per cent greater in estimated costs; as compared with August, 1926, these figures declined 12.8 and 18.1 per cent, respectively.

MERCHANDISING CONDITIONS

Wholesale Trade—With the exception of hardware, the five lines of wholesale trade reporting to this bank indicated a larger sales volume in August than during the preceding month; as compared with August of last year, hardware, grocery, and dry goods firms fell behind. Failure of the hardware trade to show the advance of other lines was due in large part to the fact that purchasing by farmers was influenced by crop uncertainty. This situation has been noticeable to a degree in all wholesale lines. Accounts

receivable on August 31 were generally higher than at the end of July, but not so large as a year ago. Collections in the month-to-month comparison were smaller in all lines except dry goods and shoes, but were larger as compared with August, 1926, except for dry goods. For the eight months' period, sales have been smaller than in 1926 for all of the groups. Hardware dealers, with a decline of 0.4 per cent, showed a smaller decrease than any of the other four lines.

WHOLESALE TRADE DURING THE MONTH OF AUGUST, 1927

	Net Sales During Month		Stocks at End of Month		Accounts Outstanding End of Month			Collections During Month	
	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	RATIO TO NET SALES DURING MONTH	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR
Groceries	(33)+ 5.5	(33)—3.4	(21)—4.6	(21)—16.7	(29)—0.4	(29)—2.9	(29) 106.6	(24)—0.9	(24)+1.2
Hardware	(15)— 3.1	(16)—4.6	(9)—0.8	(10)— 0.0	(15)+1.4	(16)—3.5	(16) 200.9	(13)—0.7	(13)+1.0
Dry Goods	(13)+32.8	(13)—1.3	(10)—6.2	(10)—19.9	(11)+8.3	(10)—3.6	(11) 262.0	(9)+0.0	(9)—6.4
Drugs	(12)+ 4.3	(12)+4.0	(10)+1.3	(9)— 0.5	(11)+1.3	(11)—5.9	(12) 137.2	(6)—4.6	(6)+3.2
Shoes	(9)+62.1	(9)+9.8	(6)+0.4	(6)+ 0.4	(7)+14.9	(7)—4.5	(7) 212.8	(6)+8.6	(6)+1.3

Figures in parentheses indicate number of firms included.

Department Store Trade—According to eighty-three department stores reporting to this bank, total sales during August exceeded the July volume by 19.2 per cent and were 10.3 per cent ahead of August a year ago; both increases were the largest in these comparisons of any August since 1923. Sales for the year so far, owing mainly to business in the larger cities, exceeded the eight months' total of 1926 by 2.5 per cent; stores in smaller communities

indicated a slight decline from the figure for January 1 to August 31, 1926. Stocks were 5.8 per cent larger at the end of August than thirty days earlier, but declined 1.8 per cent from the total for August 31, 1926; the ratio of total sales to average stocks was 31.7 per cent for August this year, 28.3 for August, 1926, 247.2 for the first eight months of 1927, and 237.0 for the same period a year ago. Accounts outstanding on August 31 and collections during the month

both showed decreases as compared with July, the former of 0.2 and the latter of 11.2 per cent; these items were larger than a year ago by 5.4 and 8.0 per cent, respectively. The ratio of collections at the end of August to accounts receivable on July 31 was 37.2 per cent as against 35.9 per cent a year ago.

Retail Shoe Trade—Sixteen retail shoe dealers and the shoe sections of twenty-five department stores indicated August sales as 1.9 per cent larger than the July total and 0.7 per cent over August a year ago. Individually, a majority of the shoe dealers showed declines from July, while a majority of the department stores indicated advances; in the yearly comparison a greater number of both types of stores reported decreased sales; the eight months' total dropped 4.0 per cent behind the same period of 1926. Stocks on hand at the end of the month were 9.6 per cent larger than thirty days previous and 8.9 per cent under the aggregate for August 31, 1926. According to data from the sixteen shoe dealers, accounts outstanding on August 31 were 10.0 per cent less than the figure for July 31 and 26.1 per cent smaller than a year ago; collections during the month decreased 9.1 and 20.7 per cent in the same comparisons. The ratio of accounts at the end of August to total sales was 61.0 per cent; a month earlier the figure was 63.5, and last year it was 81.6 per cent.

Retail Furniture Trade—Retail furniture sales during August, as indicated by reports received from twenty-four dealers and the furniture sections of twenty-seven department stores, increased 25.0 per cent over July and 5.6 per cent over August, 1926. Stocks at the end of the month were somewhat larger than thirty days earlier, but showed a decrease of 4.7 per cent as compared with a year ago. Installment sales, as reported by dealers, advanced 23.6 and 13.9 per cent over July, 1927, and August, 1926, respectively; collections on this type of business increased 6.7 and 17.6 per cent, as against expansions for total collections of 1.2 and 10.3 per cent in the same comparisons. Accounts outstanding on August 31 were 1.1 per cent larger than on July 31 and 13.3 per cent more than at the end of August a year ago.

Chain Store Trade—Sixteen chains, with a total of 1,453 individual stores, representing grocery, drug, cigar, musical instrument, shoe, and five-and-ten-cent lines, indicated aggregate sales increases in August over July for five-and-ten-cent and musical instrument chains, little change in cigar stores, and declines in all others. As compared with August, 1926, sales were larger for all but musical instrument dealers. The number of individual stores in operation was approximately the same as in July, but considerably greater than at this time last year.

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 1923-1924-1925 as a base, unless otherwise indicated. Where figures for latest month shown are partly estimated on basis of returns received to date, revisions will be given the following month. Data refer to the Seventh Federal Reserve District unless otherwise noted.)

	No. of Firms	Aug. 1927	July 1927	Aug. 1926	July 1926
Meat Packing—(U. S.)—					
Sales (in dollars).....	62	109.9	102.3	114.6	110.5
Casting Foundries—					
Shipments (in dollars).....	27	89.9	75.6	85.5	87.5
Stoves and Furnaces—					
Shipments (in dollars).....	13	114.3	80.6	115.1	79.8
Agricultural Machinery & Equipment—(U. S.)—					
Domestic Sales (in dollars).....	90	166.1	158.5	141.8	162.5
Exports (in dollars).....	60	210.1	158.8	219.7	124.5
Total Sales (in dollars).....	90	173.4	158.5	154.3	156.4
Production.....	88	128.5	127.8	131.6	140.1
Furniture—					
Orders (in dollars).....	19	101.6	119.3	103.2	136.5
Shipments (in dollars).....	19	117.4	99.0	106.3	94.4
Shoes—¹					
Production (in pairs).....	34	134.7	102.5	113.0	89.0
Shipments (in pairs).....	34	150.1	103.3	121.2	96.1
Electric Energy—					
Output of Plants (KWH).....	8	133.7	125.9	124.4	116.1
Industrial Sales (KWH).....	8	160.2	151.6	151.2	136.5
Flour—					
Production (in bbls.).....	34	117.6	96.4	119.2	111.1
Output of Butter by Creameries—					
Production.....	76	136.4	153.2	119.4	145.8
Sales.....	76	119.8	130.0	106.8	132.2
Automobiles—					
Distribution in Middle West:					
New cars—Wholesale—Number sold..	28	178.7	205.8	163.1	142.0
Value.....	28	148.2	148.8	158.0	139.2
New cars—Retail —Number sold..	48	73.7	91.7	99.0	113.3
Value.....	48	89.5	109.6	105.4	99.4
New cars—On hand —Number.....	42	125.3	107.7	81.2	75.9
Value.....	42	105.7	102.6	74.4	71.4
Used cars—Number sold..	41	128.8	141.7	134.2	150.6
Used cars—On hand —Number.....	41	117.5	119.4	122.0	129.0
Value.....	41	122.7	133.6	95.0	88.9
Production (U. S.): Passenger Cars.....			80.6	131.2	109.4
Trucks.....			93.2	130.7	116.3
Freight Carloadings—(U. S.)—					
Grain and Grain Products.....	121.3	104.8	121.5	125.7	
Live Stock.....	85.6	80.4	89.8	84.5	
Coal.....	102.0	87.0	110.9	106.5	
Coke.....	81.7	84.6	96.8	97.9	
Forest Products.....	96.3	92.6	99.1	97.0	
Ore.....	160.3	179.0	199.7	206.1	
Merchandise and Miscellaneous.....	114.2	111.9	113.8	112.0	
Total.....	111.5	106.5	115.0	112.8	
Iron and Steel—					
Pig Iron Production:²					
Illinois and Indiana.....	106.6	109.4	120.0	124.4	
United States.....	96.8	96.9	105.1	105.9	
Steel Ingot Production—(U. S.)²	96.5	95.4	115.1	104.9	
Unfilled Orders U. S. Steel Corp.....	66.9	65.8	74.2	75.4	

	No. of Firms	Aug. 1927	July 1927	Aug. 1926	July 1926
Wholesale Trade—					
Net Sales (in dollars):					
Groceries.....	38	100.3	97.8	103.4	104.7
Hardware.....	19	90.1	93.6	94.4	96.5
Dry Goods.....	13	97.8	73.0	99.5	82.6
Drugs.....	11	96.8	92.2	97.5	97.3
Shoes.....	9	108.4	66.9	98.7	71.6
Retail Trade (Dept. Stores)—					
Net Sales (in dollars):					
Chicago.....	7	81.2	80.4	80.7	88.6
Detroit.....	5	118.6	89.9	99.2	89.0
Indianapolis.....	5	90.2	77.0	78.2	75.1
Milwaukee.....	6	89.7	81.2	82.3	81.3
Outside.....	57	90.1	77.3	89.2	83.4
Seventh District.....	80	98.7	82.4	89.2	84.3
Retail Trade—(U. S.)³	359	113	97	105	99
Department Stores.....	4	112	100	98	97
Mail Order Houses.....					
Chain Stores:					
Grocery.....	27	385	373	296	317
Drug.....	9	215	217	193	195
Shoe.....	6	132	140	122	145
Five and Ten Cent.....	5	237	221	204	206
Candy.....	5	208	211	194	210
Music.....	4	98	80	121	108
Cigar.....	3	147	153	148	155
Stamp Tax Collections—⁴					
Sales or Transfers of Capital Stock.....		237.0	80.8	146.2	115.8
Sales of Produce on Exchange—Futures.....		88.5	115.3	99.4	84.2
U. S. Primary Markets—⁵					
Grain Receipts:					
Oats.....		119.3	41.0	117.8	44.7
Corn.....		79.0	72.0	53.4	62.0
Wheat.....		234.8	188.6	204.9	225.8
Grain Shipments:					
Oats.....		38.4	43.0	41.3	55.3
Corn.....		55.2	59.0	41.6	47.7
Wheat.....		136.2	80.3	100.9	82.8
Building Construction—					
Contracts awarded (in dollars):					
Residential.....		146.7	135.2	141.1	121.5
Total.....		159.8	156.2	190.5	158.5
Permits:					
Chicago.....	Number	66.1	63.2	89.1	116.3
Cost.....		98.7	74.5	124.1	93.6
Indianapolis.....	Number	89.3	85.7	117.9	107.5
Cost.....		91.6	66.0	117.4	112.2
Des Moines.....	Number	73.2	49.0	60.8	54.6
Cost.....		43.3	57.1	89.3	97.7
Detroit.....	Number	78.6	69.4	117.8	124.1
Cost.....		66.0	101.3	110.5	124.5
Milwaukee.....	Number	111.3	93.5	106.6	106.2
Cost.....		103.3	96.0	103.2	132.5
Others (45).....	Number	115.5	100.3	121.9	121.1
Cost.....		148.6	103.5	149.4	130.1
Fifty Cities.....	Number	98.7	86.4	113.3	115.7
Cost.....		102.5	87.7	125.2	111.1

1. Monthly average of mean of production and shipments in 1923-24-25=100; 2. Average daily production; 3. Monthly average 1919=100; 4. First Illinois internal revenue district; 5. Monthly average receipts 1923-24-25=100.