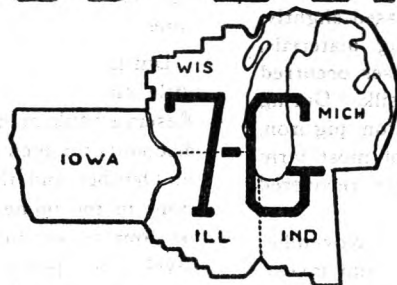


# BUSINESS CONDITIONS

SEVENTH  
FEDERAL



RESERVE  
DISTRICT

Volume 11, No. 12

MONTHLY REVIEW PUBLISHED BY THE  
FEDERAL RESERVE BANK OF CHICAGO

December 1, 1928

## NATIONAL SUMMARY OF BUSINESS CONDITIONS

**I**NDUSTRY continued active in October and the distribution of commodities was in large volume. Wholesale commodity prices declined sharply owing chiefly to decreases in the prices of farm products. Member bank credit in use increased in October and November, while reserve bank credit outstanding showed little change. Conditions in the money market were somewhat easier.

**PRODUCTION.**—Industrial production continued in October at the high level of September and considerably above the level of a year ago. Output of minerals increased over September, while the production of manufactures declined slightly. Factory employment and payrolls increased to the highest level since early in 1927. The production of pig iron was particularly large in October and the first half of November, and the output of steel continued in record volume. Automobile production declined considerably in October after exceptional activity in September, and showed further reduction in November, as is usual at this season. Activity increased in October in meat packing and in the textile industries, with the exception of silk. Copper mining and smelting continued at a high level, and the output of coal and petroleum increased by more than the usual seasonal amount, while the production of zinc declined. There was also a decline in the output of lumber and building materials.

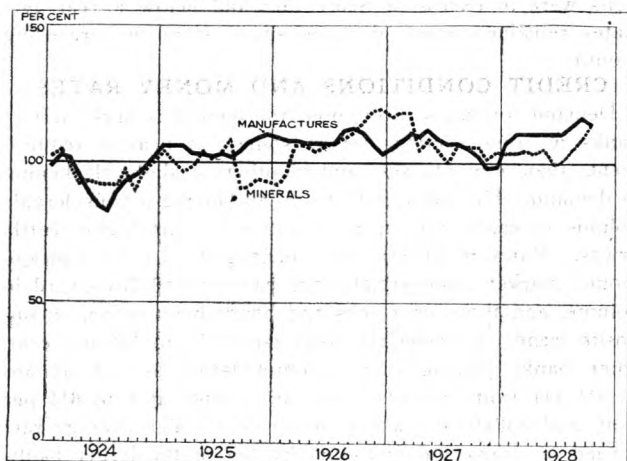
Building contracts awarded continued to increase in October and were larger than in that month of any previous year, but declined sharply during the first two weeks of November. The increase in October was due principally to large contracts for engineering and industrial projects.

The November cotton crop estimate of the Department of Agriculture was slightly larger than the October estimate and indicated a yield of 14,133,000 bales, 1,178,000 more than the production of 1927. Ginnings of the current crop prior to November 14 totaled 11,320,302 bales, compared with 10,894,912 in the similar period of a year ago. Indicated yields of wheat, corn, oats, potatoes, and tobacco were larger than the 1927 crops, while estimates of hay, rye, and flaxseed were smaller.

**TRADE.**—Department store sales in October were in about the same volume as in the same period in the preceding year, but showed somewhat less than the seasonal increase from the high level of September. Inventories of these stores increased during the month, but continued smaller than a year ago. The volume of distribution at wholesale was larger than in September and showed a substantial gain over October, 1927. Freight carloadings continued larger in October and November than a year ago, reflecting chiefly large loadings of miscellaneous freight.

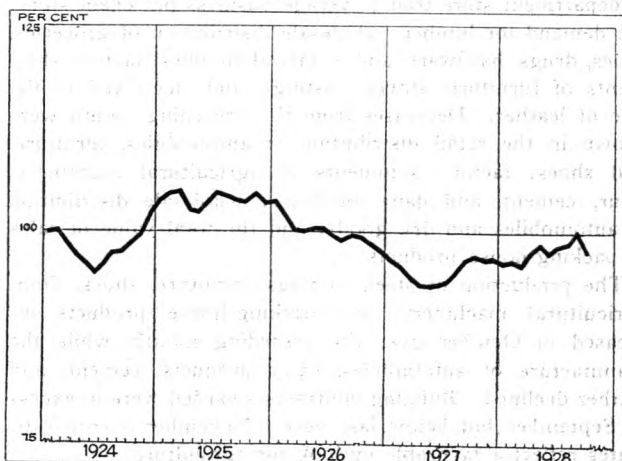
**PRICES.**—Wholesale commodity prices declined in Octo-

PRODUCTION OF MANUFACTURES AND MINERALS



Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-1925 average=100). Latest figures, October, 1928: Manufactures, 114; Minerals, 114.

WHOLESALE PRICES



Index of the U. S. Bureau of Labor Statistics (1926=100, base adopted by the Bureau). Latest figure, October, 1928: 97.8.

Compiled November 26, 1928

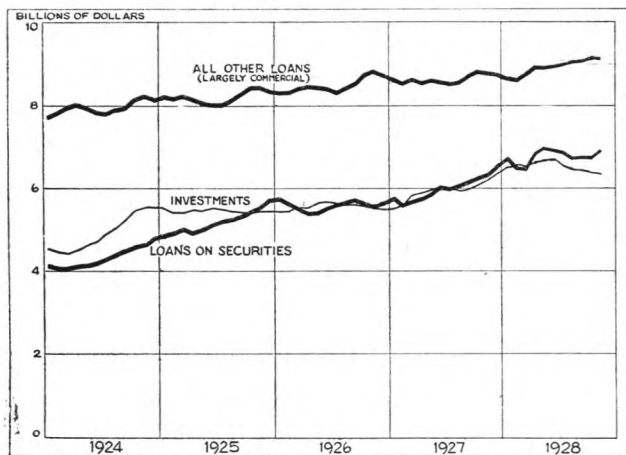
ber after a continuous increase for three months, and the Bureau of Labor Statistics index for October, at 97.8 per cent of the 1926 average, was over 2 per cent below that for September. This decline reflected chiefly large decreases in prices of farm and food products and hides and leather. Prices of industrial commodities increased slightly, with small gains recorded in metals, building materials, and chemicals and drugs. The principal increases occurred in prices of iron and steel, copper, and raw silk. During the first three weeks of November prices of cotton, pig iron, copper, and petroleum increased, and prices of most farm and food products, except corn, pork, and sugar, recovered somewhat after the October decline.

**BANK CREDIT.**—Between October 24 and November 21, there was a considerable increase in loans and investments of member banks in leading cities, but at the end of this period the total was still below the large volume out-

standing at the middle of the year. Loans chiefly for commercial purposes remained at a high level during the period and loans on securities showed further growth, reflecting a marked increase in the volume of loans to brokers and dealers in securities. Investments showed further decline.

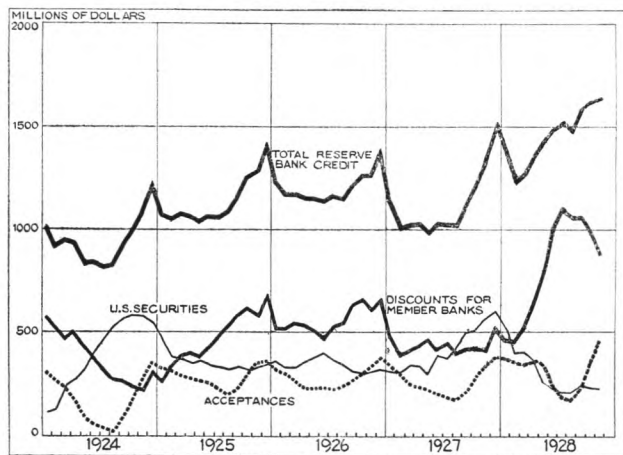
During the four weeks ending November 21, there was little change in the volume of reserve bank credit in use. Reserve bank holdings of acceptances increased further and discounts for member banks declined. During the last week of October and the first three weeks of November, conditions in the money market were somewhat easier; the rate on four to six months' commercial paper declined from a level of  $5\frac{1}{2}$  per cent to a range of from  $5\frac{1}{4}$  to  $5\frac{1}{2}$  per cent, and rates on call and time loans in the open market also declined slightly.

MEMBER BANK CREDIT



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures, averages for first three weekly report dates in November, 1928: All Other Loans (largely commercial), 9,167 million; Loans on Securities, 6,916 million; and Investments, 6,384 million.

RESERVE BANK CREDIT



Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages for first 23 days in November, 1928: Total Reserve Bank Credit, 1,641 million; Discounts for Member Banks, 887 million; U. S. Securities, 236 million; and Acceptances, 467 million.

## BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

Production and distribution of goods in the Seventh Federal Reserve district were at a higher level during October than a year ago. All lines of activity, with a few exceptions, showed gains in the comparison.

Reports to this bank reflect an increase over September in department store trade; average business per chain store; the demand for lumber; wholesale distribution of groceries, shoes, drugs, hardware, and electrical supplies; factory shipments of furniture, stoves, castings, and steel; and in the sale of leather. Decreases from the preceding month were shown in the retail distribution of automobiles, furniture, and shoes; factory shipments of agricultural machinery, flour, cement, and dairy products; wholesale distribution of automobiles and dry goods; and the total value of sales of packing-house products.

The production of steel, castings, furniture, shoes, flour, agricultural machinery, and packing-house products increased in October over the preceding month, while the manufacture of automobiles, dairy products, cement, and leather declined. Building contracts awarded were in excess of September but below last year. November 1 crop estimates reflect a favorable outlook for agriculture.

In financial phases, deposits stood at a higher level than a month ago and slightly above last year; demand for funds was fairly active; reporting member banks showed a slight

recession in loans for commercial purposes as compared with September, which was about offset, however, by an increase in collateral loans. Reports indicate a considerable volume of credit being used this autumn by the cattle industry. Commercial paper and bankers' acceptance transactions were in excess of September and below a year ago. Rates remained practically unchanged from the preceding month.

### CREDIT CONDITIONS AND MONEY RATES

Demand for funds throughout the district is fairly active; banks in some sections report somewhat heavier requirements than a month ago, and in others a slight slackening in demand. The cattle industry is employing a considerable volume of credit this year, reflecting in part higher cattle prices. Rates in general are unchanged. In the Chicago money market, commercial loans have moved downward in volume, and those on stocks and bonds have shown an opposite trend. Commercial loans carry  $5\frac{1}{2}$  to  $5\frac{3}{4}$  per cent, some banks placing such accommodation as low as  $5\frac{1}{2}$  to  $5\frac{3}{4}$  per cent; brokers' loans are quoted at 6 to  $6\frac{1}{2}$  per cent, and collateral loans at 6 per cent. The average rate earned on loans and discounts by ten of the larger banks in Chicago in October was 5.83 per cent, compared with 5.73 in September and 4.82 per cent in October a year ago. Rates in Detroit remain firm, with a good demand for funds.

The prevailing rate on customers' commercial loans in that city during the week ending November 15 was 5½ to 6 per cent; the average rate earned by five large banks in October was 5.77 per cent, as against 5.76 in September and 5.26 per cent in October, 1927.

The volume of reserve bank credit in use in the Seventh district on November 21 aggregated \$213,043,000, which compares with \$207,073,000 October 24 and \$202,830,000 November 23 a year ago. The highest volume since the end of 1926, \$233,975,000, was recorded on October 31 this year. Loans to member banks on November 21 totaled \$137,994,000, as compared with \$143,517,000 on October 24 and \$50,521,000 on November 23, 1927. The total of United States securities rose slightly from the previous week on November 21, aggregating \$35,154,000. The volume of Federal Reserve notes in circulation on November 21 amounted to \$291,845,000, showing a decline from the \$297,737,000 reported October 24 and comparing with \$241,814,000 on November 23 last year.

Loans and discounts of reporting member banks on November 21 established a new high mark, at \$2,470,878,000, over the corresponding date in other months. Comparisons show \$2,467,952,000 as of October 24, and \$2,328,908,000 on November 23, 1927. The small increase in the monthly comparison was due mainly to an increase in collateral loans in Chicago being partially counteracted by a reduction in loans for commercial purposes. Investments on November 21, of \$878,236,000, showed a decline from October 24 (\$870,200,000), and compared with \$867,724,000 November 23 last year. Net demand deposits exhibited a slight gain between October 24 with \$1,884,056,000 and November 21 with \$1,899,860,000. On November 23 a year ago, they stood at \$1,896,990,000. Time deposits aggregated \$1,268,105,000 on November 21, \$1,259,187,000 on October 24, and \$1,195,672,000 on November 23, 1927.

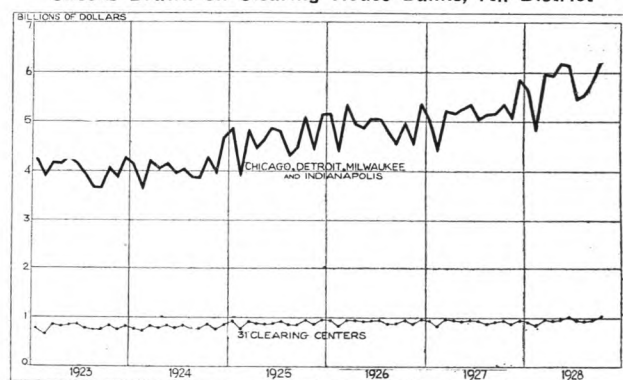
Commercial paper sales in the Middle West increased 13.0 per cent in October over the preceding month and decreased 4.9 per cent from a year ago, according to a compilation for eleven dealers. Individually, however, six of these firms reported gains in the latter comparison. Demand remained moderate and was principally from country and suburban banks; the supply of paper ranged between poor and fair. Sales of three local concerns for the first half of November totaled slightly in excess of the corresponding period of October. Supply and demand were fair. Selling quotations in October ranged from 5¼ per cent for low to 5½ and 6½ per cent for high (mostly 5¾), and averaged 5½ per cent. Rates eased somewhat in November and closed on the fourteenth at 5¼ per cent for low to 5½ and 5¾ per cent for high, with the customary charge 5¼ to 5½ per cent. Outstandings of five dealers in the Middle West totaled 8.4 per cent more on October 31 than at the close of September, but were 15.1 per cent smaller than a year ago; outstandings of twenty-four dealers in the United States amounted to \$427,000,000 compared with \$429,663,977 for the preceding month.

Purchases of six dealers in the Chicago open bill market from October 18 to November 14 averaged 2.0 per cent less on a weekly basis than for the preceding period; sales increased 37.3 per cent, although the volume of business with local banks decreased. Respective declines of 21.1 and 54.5 per cent were recorded from a year ago. Inter-office receipts gained 57.4 per cent over those of September 13 to October 17, but fell 70.8 per cent below last year. Shipments to other offices decreased 50.7 and 51.6 per cent in the comparisons. Supply and demand averaged fair. Ninety- and 60-day maturities were shown the greatest preference.

Rates remained practically unchanged from the preceding month and closed on November 14 at 4½ per cent for 30-day offerings to 4¾ and 4¾ per cent for those of 180 days. Bills covered cotton, grain, dairy products, packing-house products, canned goods, flour, merchandise, tobacco, copper, hides, wool, rice, lumber, books, textiles, rubber, pepper, coffee, sugar, rugs, coconut oil, silk, shoes, burlap, raisins, and sauce. October 31 holdings totaled 4.9 per cent larger than at the close of September and 3.6 per cent smaller than a year ago.

The total value of bills accepted at sixteen reporting banks in the Seventh district was 59.3 per cent greater in October than in the preceding month and 13.6 per cent in excess of a year ago, although seven banks experienced a recession in the latter comparison. Purchases gained 11.3 per cent and sales increased 198.3 per cent over September, but decreased 90.8 and 75.6 per cent, respectively, from last year. Acceptances at three local banks for the first half of November totaled slightly below the corresponding period of October. Commodities involved in the transactions consisted principally of grain, coffee, leather goods, electrical articles, cotton, zinc, dry goods and other merchandise, tea, gasoline and oil, copper, artificial silk, paper, lumber, shoes, and dried fruit. Liability of the banks for outstanding bills aggregated 10.3 per cent larger in volume than on September 29, and 2.9 per cent more than a year ago. October 31 holdings exceeded those of the preceding month by 8.5 per cent, but were 55.3 per cent below the corresponding date of 1927; portfolios contained a 4.3 per cent greater quantity of the originating banks' own acceptances than at the close of September and 0.1 per cent more than a year ago. The Federal Reserve Bank of Chicago bought \$28,472,459 of bankers' acceptances during the month and held \$31,619,485 on October 31.

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



Figures used are estimates for calendar months, based on weekly reports to this bank. Latest figures, October, 1928, in thousands of dollars: Chicago, Detroit, Milwaukee, and Indianapolis, 6,264,100; and 31 Other Clearing House Centers, 1,039,964.

**Volume of Payment by Check**—\$7,337,296,000 made up the October volume of payment by check, as reported by clearing houses of thirty-seven cities within the Seventh district. The figure represented an increase of 9.3 per cent over September and of 16.0 per cent over October, 1927. The total volume of the four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, \$6,264,100,000, reflected similar increases of 9.1 per cent and 17.1 per cent, respectively, in these comparisons. The aggregate in Chicago, \$4,494,035,000, increased 11.4 per cent in the monthly and 12.7 per cent in the yearly comparison. Detroit with \$1,242,702,000, showed a gain of 44.0 per cent over October a year ago, though recording a decrease of 0.2 per cent from a month previous. The amount of \$1,073,196,000 reported by the

thirty-three smaller cities represented an increase of 10.6 per cent over September and of 10.3 per cent over October, 1927.

**Savings Deposits**—The volume of regular savings deposits in the Seventh district increased 1.0 per cent on November 1 over the preceding month, with average accounts and number of depositors 0.5 per cent greater than on October 1, according to a compilation for 204 reporting banks. Gains of 4.5, 2.4, and 2.1 per cent, respectively, were recorded over a year ago. A decline in average deposits in Iowa from October 1 and a decrease in number of accounts in Illinois from last year marked the only recessions in comparisons for individual states. Illinois experienced a smaller expansion over 1927 than other sections of the district. Fifty-one banks of the district showed

deposits at a lower level than a month ago, and thirty-eight reported a decline from last year.

**Bonds**—Prices of bonds rose slightly during October. Investors showed greater favor toward bonds having convertible or stock-purchasing privileges, although some interest was manifested in real estate, public utility, municipal, and foreign issues. Sales continued to increase in the monthly comparison, but were smaller in volume than in October last year. The amount of unsold securities in dealers' hands was held at a low level. New issues, though somewhat heavier than in the preceding month, remained light in volume and were moved without difficulty. Considerable municipal and state financing was authorized by the November election.

## AGRICULTURAL PRODUCTION AND FOODSTUFFS

The November 1 estimates continued to reflect bountiful crops in the Seventh Federal Reserve district this autumn. Mid-month found winter wheat showing a good stand and growth, with the acreage in the five states including this district indicated about 13 per cent less than a year ago. Recent rains have been beneficial to the pastures, but have tended to delay corn husking and other farm work to some extent.

### CROP PRODUCTION

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

	SEVENTH DISTRICT		UNITED STATES		5-YR. AV. 1922-26
	PRELIMINARY 1928	FINAL 1927	PRELIMINARY 1928	FINAL 1927	
Corn	1,033,317	787,986	2,895,449	2,773,708	2,775,634
Winter wheat	34,730	60,256	578,599	553,288	556,016
Spring wheat	6,812	5,304	325,266	319,307	251,362
Oats	616,324	454,805	1,452,966	1,184,146	1,351,723
Barley	83,325(a)	55,144(a)	350,593	264,392	192,020
Buckwheat	1,633(a)	1,618(a)	14,664	16,029	13,711
Flax	326(b)	379(b)	20,026	26,570	20,148
Potatoes, white	76,137	51,925	465,651	406,964	393,776
Dry beans	6,038(c)	5,134(c)	17,056	16,891	16,335
Apples, total crop	19,933(a)	12,907(a)	183,309	123,455	199,236
Pears	1,744(d)	1,195(d)	23,604	18,072	20,677
Grapes*	91(a)	63(a)	2,631	2,465	2,095
Tobacco**	47,089	32,840	1,346,566	1,211,301	1,337,561
Tame Hay*	16,782	20,940	92,688	106,468	90,967
Sugar beets*	523(c)	788(c)	6,914	7,753	7,359
Cucumbers, pickles	2,449(a)	1,096(a)	4,142	2,334	.....

\*In thousands of tons. \*\*In thousands of pounds.  
(a) Five states including Seventh Federal Reserve district. (b) Iowa, Wisconsin. (c) Michigan, Wisconsin. (d) Michigan, Illinois, Indiana, Iowa.

**Grain Marketing**—Interior primary markets in the United States handled larger quantities of wheat and smaller tonnages of corn and oats during October than in the preceding month, a year ago, or the 1923-27 average for the period; reshipments of oats increased in comparison with September. The United States visible supplies of wheat, rye, and barley were larger on November 10 than for the corresponding Saturday of October and considerably in excess of last year; holdings of corn and oats showed an opposite trend. October transactions in grain futures by members of the Chicago Board of Trade were 15.6 per cent greater than in September and 10.2 per cent less than in October, 1927. Grain prices at Chicago averaged higher in October than in the preceding month; quotations for cash corn eased.

### FLOUR PRODUCTION IN THE SEVENTH DISTRICT

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	SEPTEMBER 1928	OCTOBER 1927	
Production (bbls.)	+ 3.7	+ 5.1	30
Stocks of flour at end of month (bbls.)	+ 5.5	+ 4.7	28
Stocks of wheat at end of month (bu.)	+ 6.3	+ 1.7	28
Sales (volume)	-26.8	-24.7	12
Sales (value)	-28.1	-30.6	12

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

**Movement of Live Stock**—The marketing of live stock at public stock yards in the United States showed a

marked seasonal expansion in October over September, with receipts of hogs and lambs exceeding a year ago and cattle arrivals totaling less than in 1927. Lamb receipts increased and the movement of other classes of live stock declined in comparison with the 1923-27 October average.

### LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, October, 1928	254,494	774,466	436,007	114,593
Federally Inspected Slaughter, U. S. October, 1928	801,248	3,712,984	1,408,753	404,945
September, 1928	764,212	2,508,303	1,307,442	352,091
October, 1927	895,269	2,968,683	1,193,671	413,100

Reshipments to feed lots gained as usual in October over the preceding month; the movement of cattle increased over last year, while that of lambs decreased somewhat.

### AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	NOVEMBER 10 1928	OCTOBER 1928	SEPTEMBER 1928	OCTOBER 1927
Native Beef Steers (average)	\$14.15	\$14.55	\$16.00	\$13.50
Fat Cows and Heifers	9.50	9.40	10.25	8.15
Calves	13.85	15.25	17.35	14.00
Hogs (bulk of sales)	9.25	9.80	11.95	10.50
Yearling Sheep	10.00	9.55	10.60	10.30
Lambs	13.20	13.00	14.15	13.85

**Meat Packing**—Production at slaughtering establishments in the United States was seasonally heavier in October than in September, and for the first time since March the total for the month exceeded corresponding figures a year ago. Payrolls for the last period of October showed increases of 3.4 per cent in number of employes, 7.3 per cent in hours worked, and 5.5 per cent in aggregate value over the preceding period. Domestic demand averaged fair for lard and smoked meats, fair to good for fresh pork, good for dry salt meats, and was somewhat draggy for beef and lamb. Sales billed to domestic and foreign customers by fifty-seven meat packing companies in the United States totaled 3.9 per cent less in value than in September and 2.4 per cent greater than last October. Prices of practically all products declined in comparison with September; quotations for veal firmed. Trade in domestic markets showed some improvement the beginning of November and averaged fair to good. The quantity of edible products on hand at packing plants and cold-storage warehouses in the United States was reduced from October 1 but exceeded the 1923-1927 level for November 1. Inventories of pickled and frozen pork decreased from a year ago, and the change more than offset an increase in the other items. Beef and lamb holdings were above the preceding month; stocks of pickled pork fell below the five-year average.

Shipments for export gained slightly in October over the preceding period. Foreign demand for lard averaged a little better than in September; inquiry for oleo and neutral was quiet, and the meat trade remained rather dull. Prices

declined in European markets; quotations on the Continent continued fairly well in line with the United States, and those in the United Kingdom remained below Chicago parity. Consignment stocks already landed or in transit to Europe were indicated as smaller on November 1 than at the beginning of October.

**Dairy Products**—Reports from seventy-one creameries show that butter production in the Seventh district trended downward as usual in October, totaling 13.2 per cent less than in the preceding month but 6.3 per cent in excess of a year ago. Statistics of the American Association of Creamery Butter Manufacturers indicate similar trends for the United States. Sales of creamery butter billed to customers by seventy-three companies in the district decreased 2.0 per cent in volume from September and were 1.5 per cent above last October. Receipts of American cheese at

primary markets in Wisconsin from factories within the state showed a recession during the five weeks ended November 3 of 20.4 per cent from the preceding period and a gain of 7.7 per cent over a year ago; redistribution from these centers declined 17.8 per cent and 1.2 per cent in the comparisons. Inventories of butter at cold-storage warehouses and packing plants in the United States decreased on November 1 in comparison with last year, while stocks of eggs and cheese increased; each showed a reduction from the beginning of October but remained in excess of the 1923-27 average for the month. Chicago receipts of dairy products were smaller for October than in the preceding month; the quantity of butter and eggs increased over a year ago, while the tonnage of cheese continued under that of 1927. Egg prices advanced during October; Chicago quotations for butter and cheese averaged less than in September.

## COAL

Stimulated by the settlement of labor difficulties in Illinois and Indiana, production of bituminous coal in this district increased considerably in October. In Illinois, output totaled 5,890,144 tons, a gain of almost 35 per cent over the preceding month and 28.4 per cent above October last year (the first month operations were resumed after the strike which began in April). There were 181 mines working during the month this year, compared with 167 in September and 178 a year ago; 55,437 men were employed as against 50,785 and 56,772 in the respective comparisons, for an average of 18.9 days as compared with 15.7 and 16.6. Demand for the larger sizes of coal was brisk during the early part of October because of cooler weather, but fell off the latter

part of the month and continued dull in November. No change took place in the quiet conditions prevailing in the industrial coal market, although prices remained fairly stable.

Production of bituminous coal in the United States during October totaled more than in either the preceding month or a year ago, and was the heaviest of any month this year. Commercial stocks of bituminous coal in the hands of consumers on October 1, according to the coal stock report of the Department of Commerce, were estimated as 41,100,000 tons, or slightly under those on July 1, and comparing with 61,900,000 tons on the corresponding date of 1927.

## INDUSTRIAL EMPLOYMENT CONDITIONS

Employment returns for the period September 15 to October 15 reflect an aggregate gain of 0.6 per cent in the number of men employed and of 2.1 per cent in the amount of payrolls. The reporting industries followed in the main the trend of the preceding month. Metals and metal products continued to expand operations, the increases in men and payrolls exceeding those of a month earlier. Lumber, rubber, and certain food products such as meat packing, bakery goods, and confectionery, made further gains in employment. The increase in the lumber industry was due to greater activity in furniture and musical instrument factories. A seasonal demand for paper containers and knit goods was reflected in the returns of the paper and textile industries. Coal and retail trade experienced the effects of the colder weather and the approaching holiday season.

A continued decline in employment was reported for stone, clay, and glass products, in the manufacture of clothing, in the leather and shoe industries, and for a large

number of food products, the downward trend in these industries being more pronounced than during the preceding period. At the canning factories between one-half and three-fourths of the workers were laid off. Employment at Detroit continued to decline, the Employers' Association of that city reporting a loss of 4.5 per cent for the five-week period preceding November 13, and a drop of 7.0 per cent below the high point of September 18. Public utility concerns also have curtailed operations, and the building and construction industries are less active. The free employment offices report diverse trends in the ratio of applicants to available positions for the various states. In Illinois the ratio rose from 130 per cent to 133, the increase in unemployment being due to an influx of workers into the city of Chicago; in Indiana also there was an increase from 104 per cent to 112, while for Iowa the ratio declined from 214 to 207.

### EMPLOYMENT AND EARNINGS—SEVENTH FEDERAL RESERVE DISTRICT

INDUSTRIAL GROUPS	NUMBER OF WAGE EARNERS			TOTAL EARNINGS		
	WEEK ENDED			WEEK ENDED		
	OCTOBER 15 1928	SEPTEMBER 15 1928	PER CENT CHANGE	OCTOBER 15 1928	SEPTEMBER 15 1928	PER CENT CHANGE
All groups (10).....	365,573	363,300	+ 0.6	\$9,968,430	\$9,763,918	+ 2.1
Metals and metal products (other than vehicles).....	145,545	142,124	+ 2.4	3,987,268	3,825,841	+ 4.2
Vehicles.....	38,305	37,880	+ 1.1	1,162,095	1,170,557	- 0.7
Textiles and textile products.....	28,196	27,666	+ 1.9	632,381	626,205	+ 1.0
Food and related products.....	44,926	47,208	- 4.8	1,178,006	1,194,772	- 1.4
Stone, clay, and glass products.....	16,470	16,725	- 1.5	470,566	471,379	- 0.2
Lumber and its products.....	31,173	30,760	+ 1.3	805,358	772,416	+ 4.3
Chemical products.....	10,292	10,062	+ 2.3	282,776	271,262	+ 4.2
Leather products.....	13,789	14,487	- 4.8	288,094	310,335	- 7.2
Rubber products.....	4,111	3,987	+ 3.1	106,989	101,094	+ 5.8
Paper and printing.....	32,766	32,401	+ 1.1	1,054,897	1,020,057	+ 3.4

## MANUFACTURING ACTIVITIES AND OUTPUT

**Automobile Production and Distribution**—The number of automobiles produced in October showed continued expansion over corresponding figures for 1927, though declining from the September volume. Output of passenger automobiles in the United States aggregated 341,705, or 4.8 per cent less than in the preceding month but 86.7 per cent above October last year. Truck production of 57,113 increased 1.2 per cent over September and compared with 36,677 a year ago.

Dealers and distributors in the Middle West report further seasonal declines in sales during October, but the volume sold at both wholesale and retail was decidedly above the level of October, 1927. Used cars sold increased in both the monthly and yearly comparisons. Stocks of new and used cars were heavier on October 31 than a month previous or a year ago. According to the figures of twenty-eight dealers reporting the item, deferred payment sales constituted 46.7 per cent of their total retail sales in October, which compares with 41.1 per cent in September and 44.8 per cent a year ago.

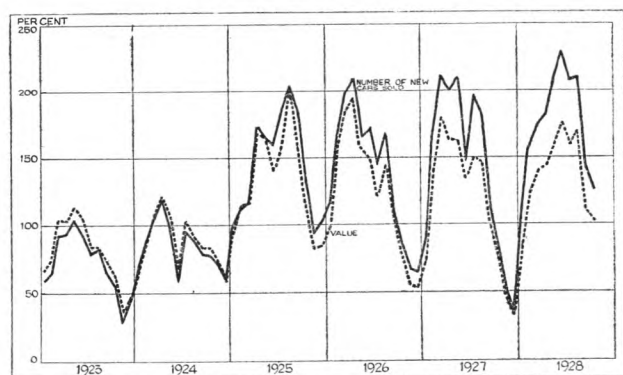
### MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in October, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	SEPTEMBER 1928	OCTOBER 1927	
<b>New cars</b>			
Wholesale—			
Number sold .....	— 9.3	+ 58.3	25
Value .....	— 6.9	+ 40.1	25
Retail—			
Number sold .....	— 8.2	+ 76.8	77
Value .....	— 5.0	+ 43.7	77
On hand October 31—			
Number .....	+ 7.9	+ 21.4	48
Value .....	+ 5.9	+ 9.4	48
<b>Used cars</b>			
Number sold .....	+ 12.7	+ 27.1	76
Salable on hand—			
Number .....	+ 2.0	+ 11.8	45
Value .....	+ 6.5	+ 15.8	45

### AUTOMOBILE DISTRIBUTION IN THE MIDDLE WEST

Sales at Wholesale—32 Firms



1923-1924-1925 monthly average sales=100. Latest figures, October, 1928: Number of new cars sold, 126.6; Value, 102.1.

**Iron and Steel Products**—October orders, specifications, and shipments of finished steel by mills in the Chicago district showed improvement over September and the corresponding month of 1927, and the situation continued favorable during the early part of November. Although lack of railroad buying was still felt, demand for rails and cars had become more active. Steel mill operations the first of November averaged almost 90 per cent of capacity in the district, but they have recently declined somewhat. Pig iron shipments were very heavy in October. Production in the Indiana and Illinois district increased in the daily average over September and was considerably in excess of October last year; output for the United States showed a similar trend. Steel ingot production in the country was the largest of any month on record. Unfilled orders of the

United States Steel Corporation on October 31, of 3,751,030 tons, increased for the third consecutive month, and were higher than on the same date a year ago or of 1926.

Iron and steel price levels have become more firmly established and have shown further advances in recent weeks. The composite average of leading products, as compiled by *Iron Trade Review*, has recorded some increase each week since the middle of August, and on November 20 stood at \$36.19, which compares with \$35.24 on the corresponding date a year ago and contrasts with a downward trend shown at that time. The price of pig iron at Chicago has been raised three times since the middle of October, and now stands at \$20 per ton. Chicago prices of iron and steel scrap were at a higher level the middle of November than a month previous.

Orders booked, shipments, and production of steel casting foundries in the Seventh district were larger in October than in either the preceding month or a year ago. Data from malleable casting foundries showed a similar trend except that orders booked were below the September level. October production, shipments, and new orders of stove and furnace manufacturers were larger than in September, and all three items gained in the comparison with October, 1927.

**Agricultural Machinery and Equipment**—Sales of agricultural machinery and equipment billed to domestic and foreign customers by seventy-four manufacturers in the United States showed a seasonal recession in October from September, decreasing 15.2 per cent in the tractor, thresher, combination harvester-thresher group, and 14.1 per cent in the light machinery group, though increasing 10.6 per cent in the barn equipment group. Business in the heavy machinery line exceeded a year ago by 41.3 per cent, and a gain of 10.1 per cent was reported for "all other" (exclusive of barn supplies), while sales of barn equipment declined 5.3 per cent.

### PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in October, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	SEPTEMBER 1928	OCTOBER 1927	
Domestic sales billed.....	—10.9	+14.6	74
Sales billed for export.....	—21.1	+54.6	41
Total sales billed .....	—14.1	+23.8	74
Production .....	+ 2.5	+32.3	73

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

**Shoe Manufacturing, Tanning, and Hides**—Shoe manufacturing in the Seventh Federal Reserve district showed a seasonal expansion of 9.8 per cent in October over the preceding month, according to a preliminary compilation of the United States Department of Commerce. Tanning operations, as reported to this bank by representative concerns in the district, decreased from September and a year ago, while sales of leather totaled slightly more than in the preceding month and below last year. Prices were somewhat irregular.

Chicago trading in packer green hides and calf skins was rather limited during the period and in smaller volume than in September; shipments from the city increased. Prices trended downward in October and then firmed early in November.

**Furniture**—For the second consecutive month, furniture manufacturers in the Seventh Federal Reserve district report an increase in orders booked and shipments over a year ago; total orders received during October by twenty-six firms increased 15.2 per cent and shipments showed a gain of 11.2 per cent, a majority of the firms reporting increases in both cases. In the comparison with September, orders

booked declined 8.6 per cent, while shipments were 1.5 per cent higher. The volume of shipments exceeded the amount of new orders, and this amount plus cancellations reduced unfilled orders on hand October 31 to 19.3 per cent below those held September 30; they were also 6.1 per cent smaller than on the corresponding date a year ago. The rate of operations averaged slightly higher than during September and also above that of a year ago.

**Raw Wool and Finished Woolens**—Trading in raw wool was quiet and irregular through most of October. Toward the latter part of the month and early November, however, considerably greater activity was reported. Prices remained

about steady at September levels, although fine wools showed slight declines; as the demand became broader, the prevailing weakness in these disappeared. Colonial wools were reported firm. A report from the Bureau of Census shows that stocks of wool in dealers' hands September 29 were slightly lower than the amount held June 30, but increased over a year ago; manufacturers' stocks on September 29 registered a decline in both comparisons. Mills in the Middle West generally indicated increased production and sales in October, though with some business was not entirely satisfactory. There has been an increase of stocks of finished goods because of orders held for later delivery.

## BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

The demand for lumber increased in October, sales of twenty wholesalers and manufacturers of the district showing a gain of 9.4 per cent in dollar value over the preceding month, while at 142 retail yards the increase was 5.1 per cent. A substantial gain of 9.3 per cent was also registered over October, 1927, by wholesale concerns, retail sales increasing 1.9 per cent in this comparison. Sales in board foot measure, as reported by sixteen wholesalers, aggregated 1.1 per cent less than in September but were 5.8 per cent larger than last October. Outstanding wholesale accounts were 130 per cent of monthly sales, a ratio similar to that of a year ago but slightly lower than the 134 per cent of the preceding month. At retail, the ratio of outstanding to sales was 252 per cent at the close of October, as compared with 265 for September and 272 last October. Stocks were somewhat lower than a month earlier, according to a majority of the reporting firms. Lumber received at Chicago as well as shipments out of the city exceeded the volume of the preceding month and of a year ago. Net receipts showed gains of 10.4 and 6.0 per cent in the two comparisons.

In the cement industry, operations showed a further curtailment; both production and shipments, however, continue on a level considerably above that of 1927. The move-

ment of brick continued large, especially in the Chicago district, and stocks were reduced.

**Building Construction**—Building contracts awarded in the Seventh Federal Reserve district during October amounted to \$110,794,985, denoting an increase of 11.7 per cent over September but a decline of 21.7 per cent in comparison with October, 1927. The awards for the year to date are 6.8 per cent ahead of the corresponding period of 1927, as compared with an increase of 11.1 per cent at the close of September and of 13.0 per cent for the first half of the year. Residential awards were \$56,032,736 in October, or 43.5 per cent more than in September and 1.6 per cent above October a year ago; for the year to date, these awards are 11.3 per cent in excess of the first ten months of 1927. Permits issued in fifty cities of the district numbered 14.3 per cent more than in September and showed an increase of 22.3 per cent in estimated cost. In comparison with last October, there was a decline of 2.8 per cent in number but a gain of 11.0 per cent in cost. Returns for fifty-four additional cities for which the monthly comparison is available, showed a gain of 0.6 per cent over September in estimated cost, while the number of permits increased 9.8 per cent.

## MERCHANDISING CONDITIONS

**Wholesale Trade**—The six lines of wholesale trade reporting to this bank indicated increased sales in October over the corresponding month of 1927, and with the exception of a slight decline in dry goods, all likewise recorded gains in the comparison with the preceding month. Drug, shoe, and electrical supply firms continued to show expansion for the year to date over the same period of 1927, the increases amounting to 3.1, 3.2, and 15.8 per cent, respec-

tively, while in the grocery, hardware, and dry goods trade declines of 0.2, 2.5, and 1.9 per cent were recorded. Collections increased in both the month-to-month and yearly comparisons, and were indicated as fair to good. Prices in most lines have remained steady, although a slightly downward trend is apparent in shoes and a continued upward tendency in groceries.

WHOLESALE TRADE DURING THE MONTH OF OCTOBER, 1928

	Net Sales During Month		Stocks at End of Month		Accounts Outstanding End of Month			Collections During Month	
	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR	RATIO TO NET SALES DURING MONTH	PER CENT CHANGE FROM PRECEDING MONTH	PER CENT CHANGE FROM SAME MONTH LAST YEAR
Groceries .....	(34)+ 2.3	(34)+ 3.4	(23)+ 5.5	(23)+ 0.1	(31)+ 1.6	(31)- 7.7	(31) 98.6	(26)+ 6.9	(26)+ 5.4
Hardware .....	(14)+16.3	(14)+11.9	(10)+ 0.5	(10)- 6.1	(14)+ 4.8	(14)+ 8.2	(14) 178.2	(12)+24.6	(12)+ 9.1
Dry Goods .....	(13)- 2.0	(13)+ 6.3	(10)- 8.8	(10)- 7.5	(13)+ 4.8	(11)+ 1.8	(13) 282.8	(11)+22.9	(9)+ 8.1
Drugs .....	(13)+ 6.6	(13)+ 6.4	(11)+ 3.5	(11)- 0.4	(12)+ 1.3	(13)- 0.2	(13) 135.1	(8)+ 2.7	(6)+ 4.6
Shoes .....	(9)+ 5.1	(8)+10.1	(7)+ 1.3	(6)+ 1.1	(8)- 1.4	(7)- 0.8	(8) 251.8	(6)+19.1	(5)+12.8
Electrical Supplies .....	(37)+34.0	(37)+38.7	(27)+11.0	(27)+ 6.7	(36)+17.1	(36)+27.9	(36) 115.4	(26)+16.5	(27)+24.2

Figures in parentheses indicate number of firms included.

**Department Store Trade**—Further expansion was reported in Seventh district department store trade during October. Sales by 105 stores aggregated 5.2 per cent more than in September and gained 5.1 per cent over October last year. With the exception of Detroit, the larger cities as well as the smaller centers shared in the increase over the preceding month, while Milwaukee and Indianapolis had

smaller sales than last October, and the totals for Chicago, Detroit, and fifty-three smaller cities were larger in this comparison. Sales by reporting firms in the district for the first ten months of 1928 exceeded the corresponding period of 1927 by 5.3 per cent. Gains of 9.3 per cent over September 29 and 4.5 per cent over a year ago were recorded in stocks on hand October 31. Stock turnover

for October (the ratio of sales to average stocks during the month) was 33.7 per cent compared with 32.9 per cent last October; for the cumulative period through October, turnover was 315.3 per cent this year compared with 307.2 per cent in 1927. Department store collections showed large increases in October, gaining 30.1 per cent over the preceding month and 18.2 per cent over a year ago. Accounts receivable the end of the month exceeded those outstanding the end of September by 5.7 per cent and were 13.4 per cent above the corresponding date last year. October collections totaled 41.6 per cent of accounts receivable the end of September, which compares with 40.5 per cent a year ago.

**Retail Shoe Trade**—Sales of shoes during October by twenty-four dealers and twenty-three department stores of the district aggregated 17.2 per cent less than in the preceding month and 2.7 per cent more than last October, the cumulative total for the year to date showing a gain of 2.1 per cent over the corresponding period of 1927. In the monthly comparison, most of the dealers reported gains, sales by department stores effecting the decline shown. Although a gain was recorded in the total over October a year ago, the majority of dealers and department stores reported smaller sales. Stocks on hand the end of the

month were 8.3 per cent heavier than on September 29 and 7.2 per cent above a year ago. Accounts receivable increased 21.6 per cent over a month previous and 14.0 per cent over last year; their ratio to sales during the month was 66.2 per cent for October, 56.8 per cent in September; and 59.2 per cent a year ago. Collections during October gained 27.8 and 23.0 per cent in the respective monthly and yearly comparisons.

**Chain Store Trade**—Increases in both the number of stores operated and aggregate sales by twenty-one chains were reported in October over the preceding month and a year ago, while average sales per store expanded in the former but declined in the latter comparison. The 2,345 stores in operation during October represented an increase of 1.1 per cent over September and of 19.6 per cent over last year, and their total sales gained 5.6 and 11.4 per cent in the respective comparisons. Average sales per store were 4.4 per cent heavier than a month previous, but fell 6.9 per cent below a year ago. As compared with October, 1927, sales of cigar, musical instrument, and women's clothing chains declined, while those by grocery, five-and-ten-cent, drug, shoe, men's clothing, and furniture chains were larger. All groups recorded gains in aggregate sales over September.

### 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	Oct. 1928	Sept. 1928	Oct. 1927	Sept. 1927
<b>Meat Packing—(U. S.—</b>					
Sales (in dollars).....	59	123.4	128.4	120.5	115.3
<b>Casting Foundries—</b>					
Shipments:					
Steel—In dollars .....	15	71.6	63.9	63.8	68.9
In tons .....	15	71.1	61.7	63.0	72.6
Malleable—In dollars .....	17	83.0	68.2	57.9	60.3
In tons .....	15	113.7	101.0	75.9	75.1
<b>Stoves and Furnaces—</b>					
Shipments (in dollars).....	12	216.5	168.7	206.9	164.2
<b>Agricultural Machinery</b>					
<b>&amp; Equipment—(U. S.)—</b>					
Domestic Sales (in dollars).....	83	128.4	145.8	110.7	134.4
Exports (in dollars).....	56	277.2	354.0	178.0	277.0
Total Sales (in dollars).....	83	151.2	179.3	121.5	157.2
Production .....	82	148.9	145.5	112.4	106.2
<b>Furniture—</b>					
Orders (in dollars).....	27	115.0	126.4	105.1	116.6
Shipments (in dollars).....	27	134.3	132.4	125.8	122.7
<b>Electric Energy—</b>					
Output of Plants (KWH).....	8	162.0	145.6	141.3	132.4
Industrial Sales (KWH).....	8	193.1	186.4	161.1	156.5
<b>Flour—</b>					
Production (in bbls.).....	32	122.3	112.8	116.5	118.5
<b>Output of Butter by Creameries—</b>					
Production .....	74	94.6	109.2	88.9	97.0
Sales .....	74	92.7	97.6	88.5	95.9
<b>Automobiles—</b>					
Distribution in Middle West:					
New cars—Wholesale—Number sold.....	32	126.6	142.4	84.4	113.4
Value .....	32	102.1	111.8	76.0	99.2
New cars—Retail—Number sold.....	84	84.7	93.4	49.3	52.6
Value .....	84	105.9	111.9	75.4	78.6
New cars—On hand—Number .....	48	148.1	138.3	127.6	139.1
Value .....	48	130.4	124.7	124.2	124.3
Used cars—Number sold.....	78	146.2	133.0	111.8	98.3
Used cars—On hand—Number .....	46	130.9	129.9	118.7	115.5
Value .....	46	153.6	146.1	136.8	134.8
Production (U. S.): Passenger cars.....		116.1	121.9	62.2	76.9
Trucks .....		159.2	157.2	102.2	94.6
<b>Freight Carloadings—(U. S.)—</b>					
Grain and Grain Products.....		119.2	135.3	118.0	133.0
Live Stock .....		115.4	106.9	118.2	101.1
Coal .....		119.1	109.3	109.0	109.6
Coke .....		90.1	88.4	78.6	84.8
Forest Products .....		93.0	93.2	93.8	98.0
Ore .....		152.2	169.5	120.2	147.3
Merchandise and Miscellaneous.....		125.3	125.7	120.3	122.8
Total .....		122.0	121.4	115.6	118.9
<b>Iron and Steel—</b>					
Pig Iron Production: <sup>1</sup>					
Illinois and Indiana.....		121.9	117.3	94.2	102.6
United States .....		110.8	103.9	91.4	94.2
Steel Ingot Production—(U. S.) <sup>1</sup> .....		129.2	124.5	95.7	94.3
Unfilled Orders U. S. Steel Corp.....		78.6	77.5	70.0	65.9

	No. of Firms	Oct. 1928	Sept. 1928	Oct. 1927	Sept. 1927
<b>Wholesale Trade—</b>					
Net Sales (in dollars):					
Groceries .....	37	106.8	103.9	103.0	104.9
Hardware .....	16	112.0	97.2	100.1	96.2
Dry Goods.....	12	107.6	109.7	100.8	105.2
Drugs .....	10	114.0	104.4	106.9	110.9
Shoes .....	8	114.7	110.5	104.2	119.9
<b>Retail Trade (Dept. Stores)—</b>					
Net Sales (in dollars):					
Chicago .....	31	126.9	107.7	123.8	95.8
Detroit .....	4	172.2	205.9	141.2	168.2
Indianapolis .....	5	122.9	98.7	123.3	90.0
Milwaukee .....	5	119.9	113.6	121.2	104.3
Outside .....	58	113.9	103.7	111.2	92.4
Seventh District .....	103	131.4	124.2	124.2	108.3
<b>Retail Trade—(U. S.)—</b>					
Department Stores.....	565	123	106	119	100
Mail Order Houses.....	4	183	143	147	118
<b>Chain Stores:</b>					
Grocery .....	34	228	200	190	171
Drug .....	13	169	164	151	137
Shoe .....	7	126	130	121	108
Five and Ten Cent.....	14	163	144	153	128
Candy .....	4	134	122	124	119
Apparel .....	5	289	246	250	198
Cigar .....	4	107	105	111	106
<b>Stamp Tax Collections—<sup>2</sup></b>					
Sales or Transfers of Capital Stock.....		284.6	271.6	108.9	105.8
Sales of Produce on Exchange—Futures.....		93.2	80.9	93.2	110.2
<b>U. S. Primary Markets—<sup>3</sup></b>					
<b>Grain Receipts:</b>					
Oats .....		67.1	70.3	68.4	77.6
Corn .....		70.6	91.2	88.7	108.5
Wheat .....		243.4	214.8	211.5	235.9
<b>Grain Shipments:</b>					
Oats .....		49.4	47.3	52.8	45.2
Corn .....		44.1	60.3	44.3	64.3
Wheat .....		140.3	118.3	137.3	147.8
<b>Building Construction—</b>					
Contracts awarded (in dollars):					
Residential .....		190.9	133.0	187.9	170.1
Total .....		161.8	144.8	206.6	155.2
<b>Permits:</b>					
Chicago .....		Number 60.7	43.5	66.7	57.8
Cost.....		101.5	71.7	91.4	99.7
Indianapolis .....		Number 72.4	68.5	89.6	79.0
Cost.....		108.0	92.5	70.6	65.5
Des Moines.....		Number 79.9	78.4	78.9	67.0
Cost.....		44.2	44.5	53.5	23.2
Detroit .....		Number 88.6	84.4	77.0	78.0
Cost.....		95.9	81.0	59.9	115.6
Milwaukee .....		Number 112.6	82.0	119.2	92.1
Cost.....		128.4	116.1	172.1	86.1
Others (45) .....		Number 115.5	106.8	120.5	103.7
Cost.....		103.8	100.5	107.6	99.7
Fifty Cities.....		Number 99.2	86.7	102.0	88.4
Cost.....		102.0	83.3	91.9	100.3

1. Average daily production; 2. First Illinois internal revenue district; 3. Monthly average receipts 1923-24-25=100.