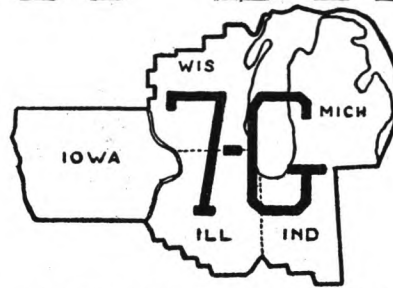


BUSINESS CONDITIONS

SEVENTH
FEDERAL



RESERVE
DISTRICT

Volume 11, No. 5

MONTHLY REVIEW PUBLISHED BY THE
FEDERAL RESERVE BANK OF CHICAGO

May 1, 1928

NATIONAL SUMMARY OF BUSINESS CONDITIONS

INDUSTRIAL production during March was in about the same volume as in February and there was a seasonal increase in the distribution of commodities. Wholesale prices remained practically unchanged. During the past month there have been increases in bank credit in use and in member bank borrowing at the reserve banks, and open market money rates have shown further advances.

PRODUCTION—Production of manufactures was maintained during March at the high level reached in February, and the output of minerals also showed little change. Production of passenger automobiles and trucks during March totaled 413,000, the largest output recorded for any month since August, 1926, and production schedules in automobile plants continued large during April. Activity in the iron and steel industry was also maintained at a high level during March and April, and lumber production was in larger volume than a year ago. Cotton and wool consumption declined in March, but silk deliveries were the largest on record. There was some decline in meat packing and in the production of sole leather, and the output of boots and shoes in March showed less than the usual seasonal increase. Mining of bituminous coal decreased during March by less than the usual seasonal amount, but as the result of a strike in certain Middle Western mines, production in the early weeks of April was considerably curtailed. Building con-

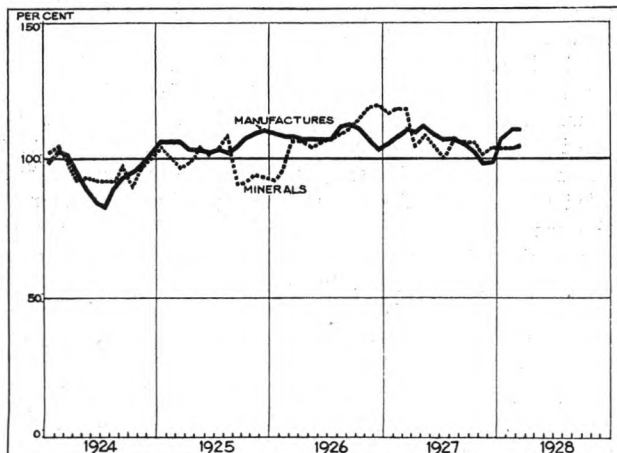
tracts awarded were smaller in March than a year ago, while those for the first three weeks in April were in about the same volume as in the corresponding period of last year. As a result of large contracts during the first two months of this year, total awards for the year to April 20 exceeded those for the same period of 1927. Contracts for residential buildings and for public works have been especially large.

TRADE—Sales of wholesale firms increased less than usual in March and were somewhat smaller than in the same month of last year. Sales of department stores, on the other hand, after allowance is made for customary seasonal changes and the early date of Easter, were about the same in March as in the preceding month and in March, 1927. Stocks of merchandise carried in March by wholesale firms were larger, while those of department stores were smaller than at this time last year.

The volume of freight carloadings showed more than the usual seasonal increase in March, but declined in the first two weeks of April. Loadings continued smaller than a year ago for all classes of commodities except grains and live stock.

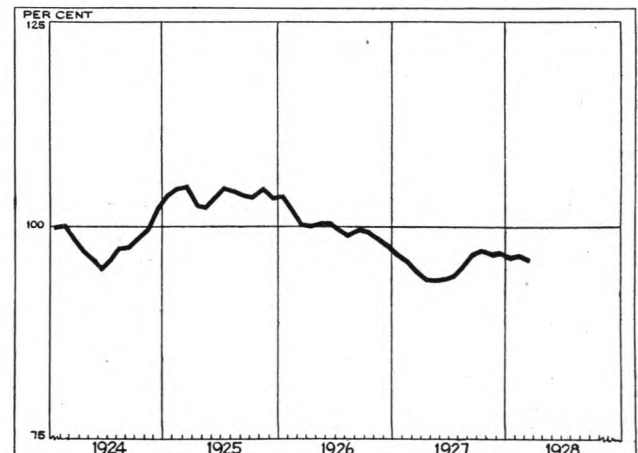
PRICES—The general level of wholesale commodity prices showed little change in March, the index of the Bureau of Labor Statistics declining slightly from 96.4 to 96.0 per cent of the 1926 average. There were decreases in the

PRODUCTION OF MANUFACTURES AND MINERALS



Index numbers of production of manufactures and minerals, adjusted for seasonal variations (1923-1925 average = 100). Latest figures, March, 1928: Manufactures, 111; Minerals, 104.

WHOLESALE PRICES



Index of U. S. Bureau of Labor Statistics (1926 = 100, base adopted by the Bureau). Latest figure, March, 1928: 96.0.

Compiled April 26, 1928

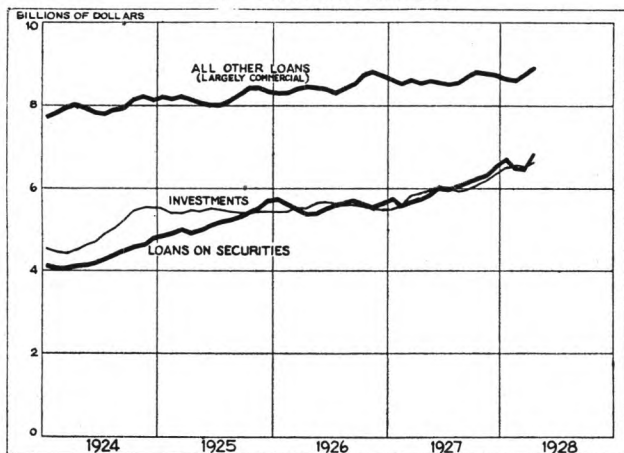
prices of live stock, railway products, meats, coal, and rubber; prices of grains, cattle feed, cotton, and steel, on the other hand, advanced. During the first three weeks in April, there were further substantial increases in prices of grains and more moderate advances in flour, hogs, cotton, and lumber, while prices of cattle and rubber declined.

BANK CREDIT—Between March 21 and April 18 total loans and investments of member banks in leading cities increased by about \$410,000,000, reaching the highest level on record. The advance was largely in loans on securities which showed an increase of nearly \$380,000,000, and in April were close to the high point of the first of the year. Loans for commercial purposes continued the increase which began in February, and notwithstanding a small decline during the last week of the period, were nearly \$350,000,000 larger on April 18 than at the end of January.

The volume of reserve bank credit in use increased by

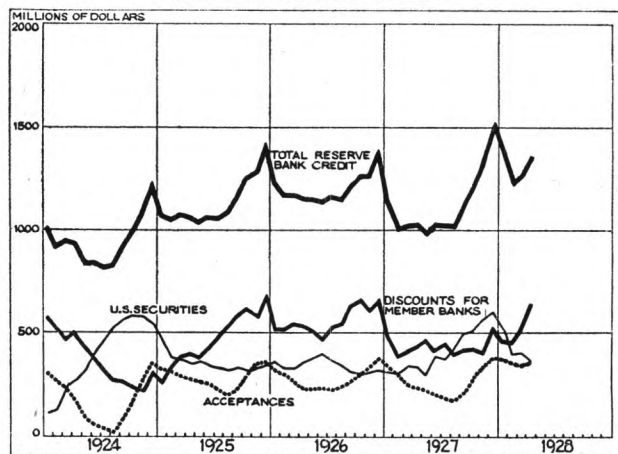
\$180,000,000 during the five weeks ending April 25, reflecting increased reserve requirements of member banks and a further net outflow of gold amounting to more than \$50,000,000. Reserve bank holdings of securities were reduced by about \$80,000,000 during the period, while discounts for member banks increased by \$230,000,000. Acceptance holdings also showed a small increase. A firmer tendency in the money market was evidenced at the end of March and during April by further increases in rates on call and time loans on securities, and by increases of from 4-4¼ per cent to 4½ per cent in the rates on commercial paper, and from 3½ per cent to 3¾ per cent in the rate on 90-day bankers' acceptances. Between April 20 and April 25 discount rates were raised from 4 to 4½ per cent at the Boston, Chicago, St. Louis, Richmond, and Minneapolis Federal Reserve banks.

MEMBER BANK CREDIT



Monthly averages of weekly figures for banks in 101 leading cities. Latest figures, averages for the first three weekly reporting dates in April, 1928: All Other Loans, 8,937 million; Loans on Securities, 6,833 million; and Investments, 6,602 million.

RESERVE BANK CREDIT



Monthly averages of daily figures for twelve Federal Reserve banks. Latest figures, averages for first 23 days in April, 1928: Total Reserve Bank Credit, 1,367 million; Discounts for Member Banks, 641 million; U. S. Securities, 369 million; and Acceptances, 357 million.

BUSINESS CONDITIONS IN THE SEVENTH RESERVE DISTRICT

Industrial and trade conditions of the Seventh district have continued to display increased activity in recent weeks. Production of passenger automobiles, and of agricultural machinery and equipment have been larger, and exceed the same period of 1927. Pig iron and steel ingot output in the district likewise have gained over the preceding month, and March production of the former was higher than for any March on record. The tonnage of iron and steel castings produced and shipped in March exceeded that of the preceding month or March last year. Activity in building materials shows a seasonal expansion, but does not equal the level of a year ago. March production at shoe and furniture factories of the district was less in both the month-to-month and yearly comparisons, although shipments in each industry registered seasonal gains. Employment statistics confirm these trends, the metals, vehicles, and building materials groups reporting increases in the period from February 15 to March 15, and the furniture and leather industries indicating declines.

Wholesale trade in the Seventh district gained over February, while half the lines reporting to this bank showed recessions in March from a year ago and half increases. Department store sales were considerably larger than in the preceding month, and also totaled more than in March last year, and chain store sales increased in both comparisons. Retail furniture and shoe trade expanded in March, with the former also better than in the corresponding month of 1927. Distribution of automobiles continues to

gain, and retail sales are larger than a year ago.

In the agricultural situation and the production of food-stuffs may be noted a slight retarding in farm work during early April, because of weather conditions, which followed a good start in March; evidence of heavy abandonment of winter wheat acreage; a continued strengthening in grain prices with the March movement heavier than a month or a year previous; and a smaller marketing of live stock than in February with that of all except hogs below last March. Production at slaughtering establishments declined in March from the preceding month but increased over a year ago, and meat packing sales were also below February and above last year. Butter production in the district gained over February, but was less than in March, 1927, and sales followed the same trend. The volume of flour milled increased in the monthly and yearly comparisons.

Recent financial developments include: a firming tendency in the Chicago money market; increased commercial paper sales but with the volume under a year ago; a similar trend in sales of bankers' acceptances; a large seasonal gain in volume of check payment over February and a smaller increase over March, 1927; monthly and yearly gains in savings deposits for the district; and good demand for the better class of bonds, with a tendency toward lower yields.

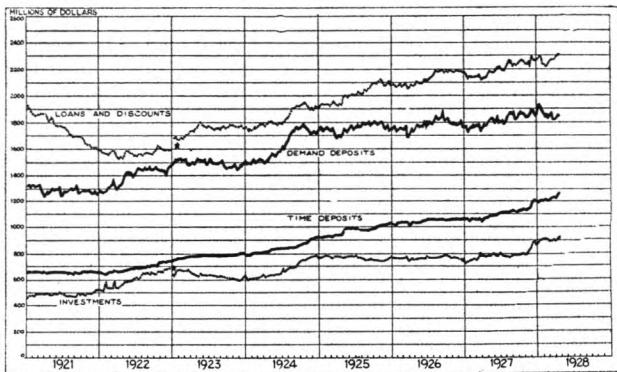
CREDIT CONDITIONS AND MONEY RATES

There has been a noticeable firming tendency in the Chi-

Chicago money market during the past ten days or two weeks. Demand for commercial purposes, after showing a decline the latter half of March, has increased thus far in April, and the demand for funds to finance stock exchange operations has been a contributory factor to the market's activity during the month. Rates have moved up about one-fourth per cent, and at present are $4\frac{1}{2}$ to 5 per cent for collateral loans, 4 to $4\frac{1}{2}$ for commercial paper, and $4\frac{3}{4}$ to 5 for customers' over-the-counter loans, with some banks placing $5\frac{1}{2}$ per cent as the high of the range. The average rate earned on loans and discounts by ten of the large loop banks during the calendar month of March was 4.84 per cent, compared with 4.80 per cent in February and 4.95 per cent in March a year ago. Seasonally increased demand is reported from some sections of the district, while other areas report no marked expansion over the earlier months of the year, the current volume approximating a year ago. The average rate earned on loans and discounts by five large banks in Detroit during the calendar month of March was 5.37 per cent, as against 5.40 the preceding month and 5.41 per cent in March, 1927; the prevailing rate on commercial loans for the week ended April 15 was $4\frac{1}{2}$ -6 per cent.

The volume of reserve bank credit in use has been on a higher level since the middle of March than at any time since the early weeks of the year; total bills and securities on April 4 were \$192,570,000, dropping during the two following weeks to \$166,981,000 April 18. On March 14 this item stood at \$154,081,000. Loans to member banks amounted to \$89,118,000 April 4, moving downward the subsequent week to \$71,043,000. On April 18 the item rose to \$74,298,000 compared with \$51,058,000 March 14. Federal Reserve notes in circulation have moved steadily upward, though the weekly changes have been small; \$248,381,000 on April 18 compared with \$246,152,000 April 11, and with \$235,178,000 March 14.

POSITION REPORTING MEMBER BANKS—7TH DISTRICT



*Break in curve indicates data not comparable with preceding. Based on weekly reports to this bank by approximately 49 member banks in Chicago, 13 in Detroit, and 44 in other selected cities. Latest figures, April 18, 1928, in thousands of dollars: Loans and Discounts, 2,308,895; Demand Deposits, 1,851,390; Time Deposits, 1,264,418; Investments, 924,384.

Loans and discounts of reporting member banks in the Seventh district on April 11 showed the largest aggregate thus far in 1928, on that date amounting to \$2,313,959,000, compared with \$2,299,371,000 the preceding week and \$2,277,222,000 March 14; the gains took place for the most part in Chicago and Detroit, and represented a heavier volume of loans for commercial purposes, as well as of loans secured by stocks and bonds, in these two centers; other selected cities showed practically no change in the amount of loans secured by collateral, while commercial loans changed little in volume. On April 18, a small drop took place, total loans and discounts of reporting member banks amounting to \$2,308,895,000. Investments of report-

ing member banks have moved upward, with the exception of a decline on March 28 from the prior week, since the middle of March; on April 18 this item for the entire district stood at \$924,384,000, compared with \$913,262,000 the preceding week. Investments of Chicago reporting members are in the main responsible for this trend. Net demand deposits of reporting member banks in Chicago during the past month have been in lesser volume than in the preceding month, but since March 21 have shown a steady gain each week; for the entire district net demand deposits of \$1,859,456,000 on April 11 compared with \$1,837,670,000 April 4, and \$1,874,351,000 March 14. A decline of about 8 million from the prior week took place April 18. Time deposits continue to increase; for the reporting member banks in the district, the item totaled \$1,264,418,000 April 18, a rise of about $1\frac{1}{2}$ million from the preceding week; on March 14 the corresponding total was \$1,227,562,000; reporting member banks in Chicago were responsible for the greater part of these increases.

March sales of commercial paper were 11.4 per cent greater than those of the preceding month, but 3.6 per cent below the corresponding period of last year, according to a compilation for eleven dealers. Individually, however, seven of the concerns showed recessions from February, and four experienced gains over a year ago. The supply of paper was reported as small to moderate, with demand for bills indicated between limited and fair. Selling rates trended slightly upward in March and ranged from $4\frac{1}{4}$ - $4\frac{1}{2}$ for high (mostly at $4\frac{1}{2}$) to 4 per cent for low, the customary figure being $4\frac{1}{4}$ - $4\frac{1}{2}$ per cent. During the first two weeks of April, quotations averaged $4\frac{1}{4}$ - $4\frac{1}{2}$ for high and 4 per cent for low, with the customary figure around $4\frac{1}{4}$ per cent. Outstandings of five dealers showed an aggregate increase on March 31 of 1.3 per cent over February, but were 4.7 per cent less than a year ago; for twenty-five dealers located throughout the United States, outstandings amounted to \$569,000,000.

Average weekly purchases in the Chicago open bill market were 0.8 per cent smaller and sales were 61.1 per cent larger from March 15 to April 18 than from February 16 to March 14, and showed respective gains of 31.8 per cent and 74.9 per cent over a year ago, according to a compilation for six dealers. Receipts from other offices averaged 20.1 per cent above the weekly basis for February 16 to March 14, and totaled 39.3 per cent greater than last year, while forwardings to other offices decreased 94.9 per cent and 93.8 per cent in these comparisons. Bills were drawn principally against packing-house products, grain, cotton, dry goods, flour, crude rubber, hides, sugar, canned goods, dollar exchange, raw silk, wool, sausage casings, coffee, lumber, woolen yarn, butter, eggs, poultry, tobacco, copper, soft lead, walnuts, and rags. The supply of paper was limited to fair, with the demand for bills also about fair. Sixty-day, 90-day, and longer maturities were indicated as in best demand. Rates firmed, April 18 offerings ranging from $3\frac{5}{8}$ for 30 days to 4 per cent for 180 days. Holdings showed a recession of 49.1 per cent from March 14.

Sixteen banks in the Seventh district accepted an 11.6 per cent greater quantity of bills during March than in the preceding month, and the volume was 38.9 per cent larger than a year ago. Purchases increased 97.6 per cent and 5.4 per cent in the respective comparisons, while sales gained 32.7 per cent over February and totaled 4.0 per cent below the corresponding period last year. Individually, however, most of the banks reported smaller purchases than in March, 1927, and half showed a decrease in acceptances and sales from February. Bills accepted during the first two weeks of April by three local banks

totalled in excess of the corresponding period of March, and were drawn principally against lard and meat, crude rubber, dry goods, cotton, coffee, grain, electrical machinery, raw silk, burlap, brushes, sausage casings, rattan, shoes, and feathers. Liability of the banks for outstanding acceptances increased 1.8 per cent on March 31 over the close of February, and was 31.5 per cent larger than a year ago. Holdings decreased 10.5 per cent from February 29, but totalled 121.1 per cent more than on the corresponding date of 1927; bills still retained in portfolios of the originating bank declined 0.3 per cent and increased 97.6 per cent in these comparisons. The Federal Reserve Bank of Chicago bought \$39,458,552 of bankers' acceptances during March and held \$43,808,197 in this class of bills at the close of the month.

Volume of Payment by Check—A gain of 22 per cent over February was shown in the volume of payment by check reported by thirty-seven clearing house cities in the Seventh district. The aggregate in March was \$6,972,688,000 as against \$5,713,472,000 in February, the difference being largely seasonal in nature and also in part the result of the greater number of days in March. As compared with March, 1927, the gain this year was 12.1 per cent. The four larger cities, Chicago, Detroit, Milwaukee, and Indianapolis, expanded in the aggregate volume of check payment 22.6 per cent over February, and 14.6 over March a year ago. Thirty-three smaller cities increased 18.6 per cent in the monthly comparison, but dropped 0.5 per cent below the corresponding month in 1927. Chicago alone

with \$4,393,474,000 gained 24.0 per cent over February and 13.3 per cent over March a year ago.

Savings—Seventh district savings figures for March 31 totalled 0.5 per cent greater in volume of deposits, 0.2 per cent larger in number of depositors, and 0.3 per cent higher in average accounts than at the beginning of the month, and increased 3.9, 1.1, and 2.7 per cent, respectively, over April 1, 1927, according to a compilation for 207 reporting banks. The decline from March 1 in average and total deposits in Iowa, and in number of accounts in Wisconsin and Illinois, together with a decrease from last year in number of accounts in Wisconsin, marked the only instances in which the state totals failed to follow the general trend of the district. One-third of the banks, however, indicated a lowering in deposits from a month previous, while one-fourth of the individual reports showed recessions in the year-to-year comparison.

Bonds—Good bonds continue in excellent demand, the volume of sales being in the main dependent only on the amount available. There has been a heavy demand from institutions during recent weeks; foreign issues continue to meet with favor, and public utilities are readily absorbed by investors. The price trend has been upward. Owing to the high prices commanded by the better grade of utility bonds, there is a considerable movement toward diversification. The demand for sound first mortgage real estate bonds continues active, and their supply is rather low. The heavy pressure of funds seeking investment outlet is resulting in the issuance of lower rate securities.

AGRICULTURAL PRODUCTION AND FOODSTUFFS

On the basis of April 1 condition, a reliable crop statistician has estimated the 1928 crop of winter wheat for the five states including the Seventh district as 65,050,000 bushels compared with 87,524,000 bushels harvested last autumn. The commercial estimates for the United States crop of winter wheat range between 520,000,000 and 556,000,000 bushels and average around 540,000,000 bushels, compared with the 1927 harvest of 552,384,000 bushels. Figures released for April 1 by the United States Department of Agriculture show the condition of winter grain and pastures less favorable than a year ago. Unusually heavy abandonment of winter wheat (especially the late seedings) in Illinois and Indiana is indicated for this spring. Farm work made satisfactory progress in the district during March; more or less delay was experienced during the early part of April because of snowfall, rain, and freezing temperatures. The U. S. Bureau of Agricultural Economics estimates that the number of cattle on feed for market declined 17 per cent in Wisconsin, 15 per cent in Indiana, 25 per cent in Illinois, 18 per cent in Michigan, and 14 per cent in Iowa on April 1 in comparison with the corresponding date of 1927.

Grain Marketing—Larger quantities of wheat, corn, and oats were handled at interior primary markets in the United States during March than in the preceding month, a year ago, or the five-year average for the period, although corn receipts declined from February and the movement of oats was below the 1923-27 March average. Visible supplies of wheat, corn, and oats decreased, and those of rye and barley increased in the United States on April 14 in comparison with the corresponding Saturday of March. Stocks of wheat and barley exceeded those of last year; holdings of other grain declined. The volume of trading in grain futures by members of the Chicago Board of Trade increased 40.7 per cent in March over February, and was 19.9 per cent greater than a year ago; commitments for wheat and rye, however, were less than in March, 1927. Prices con-

tinued to strengthen during March and early April.

FLOUR PRODUCTION IN THE SEVENTH DISTRICT

Changes in March, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	FEBRUARY 1928	MARCH 1927	
Production (bbls.)	+ 2.7	+ 9.1	31
Stocks of flour at end of month (bbls.)	+18.4	+ 7.5	27
Stocks of wheat at end of month (bu.)	-14.9	-15.6	27
Sales (volume)	- 3.8	-15.5	12
Sales (value)	- 7.0	-13.7	12

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

Movement of Live Stock—Marketing of live stock in March decreased in volume from February, with receipts of hogs at public stock yards in the United States remaining considerably in excess of a year ago and the 1923-27 average, and with the supply of cattle and calves continuing to show a marked recession from last year and the five-year average for March. Lamb receipts declined in comparison with the corresponding month of 1927.

LIVE STOCK SLAUGHTER

	CATTLE	HOGS	LAMBS AND SHEEP	CALVES
Yards in Seventh District, March, 1928	193,360	995,209	217,096	142,200
Federally Inspected Slaughter U. S.				
March, 1928	664,948	5,139,754	1,015,861	407,200
February, 1928	666,079	5,779,821	1,048,419	373,789
March, 1927	761,299	3,837,278	1,026,736	456,599

March reshipments to feed lots showed a decline from February, and were below a year ago.

AVERAGE PRICES OF LIVE STOCK

(Per hundred pounds at Chicago)

	WEEK ENDED		MONTHS OF	
	APRIL 14 1928	MARCH 1928	FEB. 1928	MARCH 1927
Native Beef Steers (average)	\$13.20	\$12.85	\$13.25	\$10.50
Fat Cows and Heifers	9.85	9.45	9.15	6.75
Hogs (bulk of sales)	8.80	8.10	8.10	11.80
Yearling Sheep	13.00	13.75	13.85	11.20
Lambs	16.65	16.15	15.40	13.00

Meat Packing—Production at slaughtering establishments in the United States decreased in March from the preceding month and increased over a year ago. Employment for the last payroll of the month showed recessions of 7.1 per

cent in number of employes, 7.8 per cent in hours worked, and 6.1 per cent in value compared with corresponding data for February. Domestic trade averaged good for fresh pork, fairly good for lard, and rather draggy for beef; the demand for lamb, smoked meat, and dry salt pork remained seasonally quiet during the first two weeks of the period, but showed considerable improvement with the approach of Easter. Sales billed to domestic and foreign customers by fifty-nine meat packing companies in the United States aggregated 3.8 per cent smaller than in February but were 0.8 per cent greater than in March, 1927. Demand in domestic markets averaged fair to good at the beginning of April. Pork prices at Chicago showed little change in March from the preceding month except for a slight easing in quotations for hams, picnics, pickled bellies, smoked meats, and heavy fat backs, and somewhat firmer levels for lard, pork loins, dry salt bellies, and light fat backs. Beef and veal quotations averaged a little lower than in February, while the price of lamb advanced. April 1 inventories at packing plants and cold-storage warehouses in the United States totaled in excess of those for March 1 and the 1923-27 April 1 average, and were considerably above a year ago; beef holdings declined in all three comparisons, and lamb stocks decreased from last month and the five-year average. Shipments for export showed some expansion in March over February. Foreign demand improved for oleo oil and neutral lard, but continued practically unchanged for most other products. April 1 inventories already abroad and in transit to European countries were reported as slightly heavier than at the beginning of March. Prices on the Continent remained close to Chicago parity;

those in the United Kingdom continued somewhat below the United States basis.

Dairy Products—Butter production in the district increased 11.2 per cent in March over the preceding month and decreased 3.2 per cent in comparison with last year, according to a compilation of the reports sent direct to this bank by sixty-eight creameries. Statistics released by the American Association of Creamery Butter Manufacturers indicate somewhat similar trends for the United States. Seventy companies in the Seventh district billed a 7.5 per cent larger tonnage of creamery butter to customers during the month than in February, although the volume was 3.8 per cent less than in March, 1927. Receipts of American cheese at Wisconsin primary markets from factories within the state gained 9.5 per cent during the four weeks ended March 31 over the preceding period, and were 4.2 per cent in excess of a year ago; redistribution from these centers increased 3.5 and 7.1 per cent in these comparisons. April 1 inventories of butter and cheese at cold-storage warehouses and packing plants in the United States were seasonally less than a month previous; egg stocks made a customary gain over March 1. Holdings of eggs and cheese decreased in comparison with last year, but exceeded the 1923-27 April 1 average; butter inventories showed an opposite trend. Chicago receipts of dairy products increased over February, with the volume of butter greater than a year ago and the tonnage of cheese and eggs smaller. Butter prices advanced in March, while quotations for cheese and eggs declined. Prices tended to ease during the early part of April.

INDUSTRIAL EMPLOYMENT CONDITIONS

With losses and gains evenly distributed among the reporting industrial groups, aggregate employment at manufacturing plants of the Chicago Federal Reserve district registered a gain of 1.2 per cent in men and 0.8 per cent in amount of payrolls during the period February 15 to March 15. The groups registering gains were the metals, vehicles, stone, clay and glass products, lumber, and chemicals, although in this latter the increase in employment was accompanied by a decline in payrolls. Metals and vehicles, as well as a seasonal increase in the demand for building materials, may be said to be sustaining the industrial market for labor. Even in these lines conditions were not uniformly good. The non-ferrous metals, cooking and heating apparatus, watches and jewelry registered declines. In the lumber group, box factories, panel and veneer mills, and the manufacturers of sash, door, and interior trim, showed increasing activity, but furniture factories reported

a recession. Other important industries in which the trend in employment was downward were hosiery and clothing, tanning, meat packing, paper and printing.

Employment at Detroit, as reported by the Employers' Association of that city, has continued to expand, the volume on April 10 exceeding that of March 13 by 2.6 per cent and showing a gain of 10.1 per cent over the corresponding date a year ago. Records at the free employment offices of states in this district also indicated some improvement in the unemployment situation, the ratio of applicants to available positions registering a lower percentage than the preceding month. In Illinois the ratio changed from 204 per cent to 173; in Iowa from 345 to 336; while in Indiana the average for March was 159 as compared with 171 during February. An increasing demand for labor in the building industry was largely responsible for the decline in the unemployment ratios.

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
	MARCH 15, 1928	FEBRUARY 15, 1928		MARCH 15, 1928	FEBRUARY 15, 1928	
All groups (10).....	340,277	336,393	+ 1.2	\$9,269,821	\$9,196,583	+ 0.8
Metals and metal products (other than vehicles).....	133,399	129,832	+ 2.7	3,613,032	3,533,544	+ 2.2
Vehicles.....	29,751	28,623	+ 3.9	935,623	891,710	+ 4.9
Textiles and textile products.....	27,485	27,899	- 1.5	652,391	688,798	- 5.3
Food and related products.....	47,908	48,209	- 0.6	1,305,510	1,327,080	- 1.6
Stone, clay, and glass products.....	13,010	12,027	+ 8.2	382,172	336,724	+13.5
Lumber and its products.....	28,216	27,950	+ 1.0	698,446	690,097	+ 1.2
Chemical products.....	10,496	10,323	+ 1.7	280,963	282,040	- 0.4
Leather products.....	14,935	15,183	- 1.6	322,249	339,777	- 5.2
Rubber products.....	3,919	4,006	- 2.2	98,405	88,149	+11.6
Paper and printing.....	31,158	32,341	- 3.7	981,030	1,018,664	- 3.7

MANUFACTURING ACTIVITIES AND OUTPUT

Automobile Production and Distribution—First-quarter production of passenger automobiles in the United States exceeded that of the corresponding period of 1927 by 7.2 per cent, while truck output showed an aggregate decline

of 21.9 per cent. March production of passenger cars for the country totaled 371,408, a gain of 27.7 per cent over the preceding month and of 7.4 per cent over March last year. Truck output in March aggregated 41,417, or 26.7

per cent more than in February and 14.7 per cent under a year ago.

Continued expansion in automobile distribution was shown during March in the Middle West. Sales of new cars, at wholesale and retail, and those of used cars increased over February. The aggregate of cars sold at retail was also larger than in March last year, but wholesale distribution and used car sales declined in this comparison. Stocks of new cars have increased, while those of used cars showed a decline from the end of February and were less in number than on March 31, 1927, but increased in value. Twenty-nine dealers reported that deferred payment sales averaged 39.7 per cent of their total retail sales in March, which compares with a ratio of 46.9 in February and of 44.5 in March last year.

MIDWEST DISTRIBUTION OF AUTOMOBILES

Changes in March, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	FEBRUARY 1928	MARCH 1927	
New cars			
Wholesale—			
Number sold	+ 4.2	-26.5	34
Value	+ 9.1	-31.7	34
Retail—			
Number sold	+86.1	+11.5	83
Value	+65.3	+ 9.8	83
On hand March 31—			
Number	+15.5	+25.4	53
Value	+10.0	+15.3	53
Used cars—			
Number sold	+40.2	- 2.9	83
Salable on hand—			
Number	- 1.9	-13.9	51
Value	- 2.4	+ 8.5	51

Agricultural Machinery and Equipment—March sales of agricultural machinery and equipment billed to domestic and foreign customers by seventy-eight manufacturers in the United States showed a seasonal expansion over February of 35.9 per cent in the tractor, thresher, combination harvester-thresher group, of 20.5 per cent in "all other" (exclusive of barn supplies), and of 8.6 per cent in barn equipment. Business in the heavy line was 15.4 per cent greater than in March, 1927, sales of light machinery increased 13.4 per cent, while those in the barn equipment group decreased 22.2 per cent.

PRODUCTION AND SALES OF FARM EQUIPMENT IN THE UNITED STATES

Changes in March, 1928, from previous months

	PER CENT CHANGE FROM		COMPANIES INCLUDED
	FEBRUARY 1928	MARCH 1927	
Domestic sales billed.....	+35.8	+15.5	78
Sales billed for export.....	- 5.8	+ 5.3	42
Total sales billed.....	+27.1	+13.8	78
Production	+ 5.7	+22.5	75

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

Iron and Steel Products—March continued the improvement evidenced in the steel industry of the Chicago district for several months previous, and first-quarter business is reported as having been somewhat larger than for the corresponding period of 1927. The volume of operations in March was large and showed an increase over the preceding month. March pig iron output in the Indiana and Illinois district also increased over February and was larger than for any March on record (1919). For the country as a whole production of pig iron, though heavier in the month-to-month comparison, was below the corresponding month in several previous years. Steel ingot output in the United States likewise gained over February, but was below March of last year. A drop was shown on March 31 from February 29 in unfilled orders of the United States Steel Corporation, the total of 4,335,206 tons on the former date comparing with 4,398,189 the latter; the aggregate on hand March 31, 1927, was 3,553,140 tons.

Little change took place in the *Iron Trade Review* composite price of leading iron and steel products following the drop shown March 21 to \$35.70, the average on April

11 standing at \$35.77, but on April 18 it again declined to \$35.56. Scrap metal prices have remained fairly stationary at the lower levels quoted after the middle of March.

Both steel and malleable casting foundries reported a gain in March shipments over February, that for malleable castings being much larger than for steel; in the comparison with the corresponding month last year, an increase in tonnage was shown by steel castings but a decline in value, while malleable castings gained in both tonnage and value shipped. Production increased in the monthly and yearly comparisons. Orders booked by malleable casting foundries were larger than in February or a year ago, while those by steel casting foundries gained over the preceding month but declined from March, 1927. Shipments by stove and furnace manufacturers of the district increased in March over February and a year ago; orders booked declined in the former and increased in the latter comparison; production was below February and last year.

Shoe Manufacturing, Tanning, and Hides—March shipments from shoe factories in the Seventh district showed a seasonal gain over the preceding month, and totaled 10.2 per cent larger than current production which remained about on a level with February. Twenty-five companies reported stock shoes on hand at the end of the month equivalent in the aggregate to 77.3 per cent of the volume of their March shipments. Approximately four and one-half weeks' operation at the current rate of distribution was indicated by the unfilled orders on the books of twenty-three firms.

CHANGES IN THE SHOE MANUFACTURING INDUSTRY IN MARCH, 1928, FROM PREVIOUS MONTHS

	PER CENT CHANGE FROM		COMPANIES INCLUDED	
	FEB. 1928	MAR. 1927	FEB. 1928	MAR. 1927
Production	- 0.6	-12.9	30	30
Shipments	+11.2	-11.7	30	30
Stock shoes on hand.....	- 3.8	- 0.7	25	25
Unfilled orders	-12.0	-13.9	23	22

Leather production in the Seventh district continued at nearly the same rate in March as in the preceding month and remained below a year ago; sales decreased somewhat from February, but were ahead of the corresponding period of 1927, according to reports sent direct to this bank by representative tanners. Prices tended to firm.

March sales of packer green hides and calf skins at Chicago showed a large increase over the preceding month; shipments from the city and purchases by district tanneries also were reported as larger than in February. Chicago quotations remained easy until the middle of March and then trended upward.

Furniture—Activity in the furniture industry of this district continues, as for some time past, below the level of a year ago. Orders booked during March by twenty-six manufacturers totaled 7.1 per cent less than in March, 1927, although half the firms reported gains, and shipments were 8.2 per cent under a year ago, with more than two-thirds the companies indicating declines. The amount of unfilled orders on hand March 31 showed a decrease of 34.3 per cent from the corresponding date last year. In the comparison with the preceding month, orders booked during March increased 10.0 per cent and shipments 17.1 per cent, the larger volume of shipments reducing unfilled orders 16.3 per cent below those on hand February 29. The rate of March operations was lower than in February or March last year.

Raw Wool and Finished Woolens—The raw wool market continued to display strength in March, with prices firm and a good volume of wool moving into consumption, although activity was somewhat less than in February. Three-eighths and one-quarter blood wools were in best demand and the supply very scarce, so that prices advanced

on these grades. Foreign markets show continued activity and strength, and are still slightly above the parity of domestic markets. Prices at the close of the second series of London sales had advanced over the previous sale, and

stocks were well sold. The finished goods market for the fall season has been slow in developing, though production has increased with some firms; others report conditions unsatisfactory.

BUILDING MATERIAL AND CONSTRUCTION ACTIVITIES

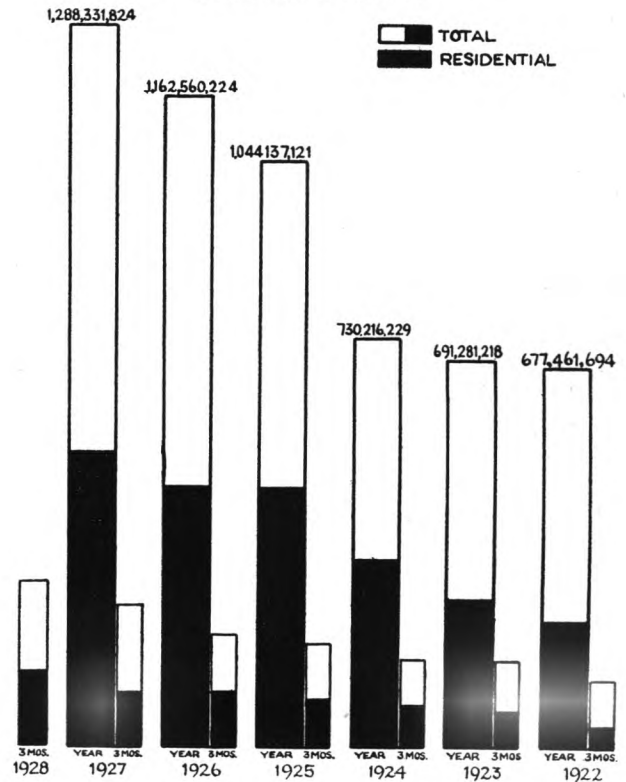
Retail yards and industrial consumers were in the market for an increasing volume of lumber during March, the sales by twenty-four wholesale concerns of the district showing gains of 27.2 per cent in dollars and 26.4 per cent in board feet over the preceding month. Buyers were still cautious, covering only their immediate requirements, and as a result price quotations were weak the greater part of the month, firming up, however, early in April. At 218 retail yards, sales reported in dollar units, were 44.0 per cent larger than in February but 14.2 per cent lower than a year ago. Wholesalers also reported a decline from a year ago, of 9.3 per cent in dollar sales and 10.8 per cent in board feet. Outstanding accounts at both wholesale and retail increased during the month, but their ratio to sales fell off, retail yards registering 329 per cent in comparison with 457, and wholesale firms 110 as compared with 127 the preceding month. The corresponding ratios a year ago were 297 and 112, respectively. Stocks were heavier than in February but approximately the same as last year.

In the cement industry, production and shipments reflected the usual seasonal expansion, with the latter slightly below production so that stocks remained high. Activity in this industry is considerably below that of a year ago, and as a result stocks held are much larger. Brick companies report a similar condition, shipments and production increasing during the month, though smaller in volume than a year ago. The slowing-down in this industry is attributed to delayed building activity.

Building Construction—Contracts awarded in the district during March amounted to \$108,092,764, slightly less than in February and 13.0 per cent less than in March, 1927. Awards so far this year, however, exceed those of the corresponding period a year ago by 16.6 per cent. Contracts for residential building were \$49,591,867, an increase of 13.9 per cent over February and of 16.1 over March, 1927. Permits issued in fifty cities of the district gained considerably over the preceding month, 66.6 per cent in number

and 68.2 per cent in estimated cost. The smaller cities shared with the larger in this advance. In comparison with March a year ago, the figures showed recessions of 23 per cent in number of permits and 16 per cent in their estimated cost, while for the first three months of this year total permits indicate losses of 14 and 11 per cent, respectively, in number and cost.

BUILDING CONTRACTS AWARDED IN THE SEVENTH DISTRICT



MERCHANDISING CONDITIONS

Wholesale Trade—Gains over February were shown during March in all six reporting lines of wholesale trade in this district, while in comparison with a year ago, half the groups indicated declines and half increases. For the first quarter of 1928, grocery, drug, and shoe firms reported aggregate gains over the corresponding period of 1.8, 3.9, and 5.6 per cent, respectively, and decreases of 4.5 per cent in hardware, 5.6 in dry goods, and 0.4 per cent in

electrical supplies were indicated. March collections were larger in all lines than in the preceding month, and in all except hardware and dry goods were above a year ago. Hardware firms in Iowa state that collections are not noticeably improving. As reported for February, prices are firm or stationary in all lines except shoes where the trend is upward, and in electrical supplies where some reports indicate a downward tendency.

WHOLESALE TRADE DURING THE MONTH OF MARCH, 1928

	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 CHANGE FROM PRECEDING MONTH LAST YEAR	PER CENT PRECEDING MONTH	CHANGE FROM SAME MONTH LAST YEAR	PER CENT CHANGE FROM PRECEDING 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	PER CENT CHANGE FROM PRECEDING MONTH LAST YEAR
Groceries	(38)+10.4	(38)-1.3	(25)+1.8	(25)-1.0	(35)+1.8	(34)-1.5	(35)	107.3	(28)+6.7	(28)+1.7		
Hardware	(17)+28.1	(17)-13.1	(11)-0.4	(11)+0.1	(17)+10.4	(17)+0.4	(17)	201.0	(15)+8.1	(15)-2.4		
Dry Goods	(13)+6.5	(13)-15.0	(10)-2.9	(10)+11.0	(13)+4.2	(11)-3.5	(13)	297.2	(9)+4.2	(9)-8.2		
Drugs	(14)+19.8	(14)+5.8	(12)-0.6	(12)+4.1	(12)+4.9	(12)-0.0	(12)	130.4	(8)+7.5	(6)+0.3		
Shoes	(8)+44.8	(8)+8.9	(6)+3.9	(5)+22.0	(7)+13.0	(6)+8.6	(7)	247.2	(6)+24.8	(5)+6.3		
Electrical Supplies	(37)+11.9	(41)+4.3	(28)+2.8	(32)+0.8	(36)+4.9	(40)-0.8	(40)	141.5	(25)+3.4	(28)+1.8		

Figures in parentheses indicate number of firms included.

Department Store Trade—An aggregate gain of 8.1 per cent was shown over a year ago in March sales of eighty-four department stores of the district. Sales by Chicago reporting stores indicated little change from last year, as

did those for fifty-nine firms in smaller cities, while Detroit, Indianapolis, and Milwaukee firms reported increases. First-quarter sales for the district totaled 6.8 per cent more than for the same period of 1927. In the comparison with

the preceding month, March sales increased seasonally 23.5 per cent. Stocks of sixty-one firms on March 31 averaged 6.4 per cent heavier than a month previous, and were 0.3 per cent less than a year ago. Stock turnover for March this year was 33.7 per cent, compared with 31.2 per cent last year; turnover for the first quarter of 1928 averaged 91.8 per cent, against 84.8 per cent for the corresponding period of 1927. Collections during March declined 4.4 per cent from February, but were 3.6 per cent larger than a year ago, while accounts outstanding March 31 were 1.5 and 6.1 per cent above a month and a year previous, respectively. The ratio of March, 1928, collections to accounts outstanding the end of February was 41.6, compared with 40.1 a year ago.

Retail Shoe Trade—Twenty-four retail dealers and the shoe sections of twenty department stores in the Seventh district reported an aggregate gain in March sales over February of 54.4 per cent, only two firms showing declines. As compared with March, 1927, sales were lower by 4.4 per cent, with about one-half the individual reports indicating a decline. Sales so far in 1928 have totaled 6.1 per

cent below the same period of last year. Stocks on March 31 increased 9.4 per cent over a month previous, and were 4.6 per cent smaller than a year ago. Collections during March, as reported by sixteen dealers, declined 7.6 per cent from the preceding month and 18.4 per cent from March, 1927. Accounts receivable March 31 increased 11.9 per cent in the month-to-month comparison and decreased 33.9 per cent in the yearly. The ratio of accounts receivable to sales during the month was 56.9 per cent for March, 73.1 in February, and 87.7 a year ago.

Chain Store Trade—March sales of twenty-six chains in the Seventh district operating 2,346 stores during the month, gained 12.9 per cent in the aggregate over February and were 19.6 per cent above a year ago. In the month-to-month comparison, only men's clothing and shoe chains showed a decline, while in the yearly, grocery, drug, five-and-ten-cent, shoe, and men's clothing chains reported increases, and cigars, musical instruments, furniture, and women's clothing indicated smaller sales. The number of stores in operation during March changed little from the preceding month, and was 19.8 per cent greater than in March, 1927.

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	Mar. 1928	Feb. 1928	Mar. 1927	Feb. 1927
Meat Packing—(U. S.)—					
Sales (in dollars).....	59	103.0	106.2	102.4	105.3
Casting Foundries—					
Shipments:					
Steel—In dollars	16	91.8	87.1	93.5	80.8
In tons	16	97.9	95.4	96.3	80.2
Malleable—In dollars	18	82.2	62.2	77.1	66.3
In tons	15	114.1	91.6	110.8	99.5
Stoves and Furnaces—					
Shipments (in dollars).....	12	96.5	82.7	87.7	73.1
Agricultural Machinery & Equipment—(U. S.)—					
Domestic Sales (in dollars).....	83	216.5	159.4	185.1	133.5
Exports (in dollars).....	56	207.9	218.2	199.8	176.2
Total Sales (in dollars).....	83	213.8	168.8	187.4	140.4
Production	82	144.6	136.5	119.1	121.4
Furniture—					
Orders (in dollars).....	27	102.4	93.1	107.7	107.9
Shipments (in dollars).....	27	115.6	98.8	125.5	107.8
Shoes—¹					
Production (in pairs).....	32	102.5	103.0	117.8	106.5
Shipments (in pairs).....	32	112.9	104.5	127.9	114.1
Electric Energy—					
Output of Plants (KWH).....	8	151.2	145.8	138.5	126.8
Industrial Sales (KWH).....	8	163.3	155.9	145.7	135.8
Flour—					
Production (in bbls.).....	32	108.1	105.3	99.1	84.0
Output of Butter by Creameries—					
Production	74	98.0	88.0	101.3	88.7
Sales	74	95.0	88.4	98.7	88.2
Automobiles—					
Distribution in Middle West:					
New cars—Wholesale—Number sold..	36	161.8	155.3	207.8	163.6
Value	36	133.2	122.1	176.3	133.8
New cars—Retail—Number sold..	89	117.1	62.9	104.7	78.1
Value	89	129.4	78.3	116.6	85.5
New cars—On hand—Number	53	165.0	142.9	131.8	132.7
Value	53	162.8	148.0	137.7	133.7
Used cars—Number sold..	83	155.1	115.3	159.7	114.3
Value	51	144.2	147.0	162.9	165.2
Used cars—On hand—Number	51	143.6	147.1	133.5	133.9
Value	51	126.2	98.8	117.5	89.8
Production (U. S.): Passenger cars.....	115.4	91.1	135.2	113.1	
Freight Carloadings—(U. S.)—					
Grain and Grain Products.....	102.2	106.9	84.2	98.1	
Live Stock	86.1	101.0	82.2	87.4	
Coal	93.9	102.5	117.8	128.5	
Coke	90.8	97.9	102.9	108.3	
Forest Products	95.8	99.2	98.8	100.5	
Ore	22.1	21.5	28.4	28.4	
Merchandise and Miscellaneous.....	106.8	100.9	108.4	103.0	
Total	99.1	98.1	104.0	103.7	
Iron and Steel—					
Pig Iron Production: ²					
Illinois and Indiana	133.1	127.3	123.1	110.1	
United States	105.1	101.8	114.4	106.9	
Steel Ingot Production—(U. S.)— ³	125.3	121.4	126.0	119.2	
Unfilled Orders U. S. Steel Corp.....	90.8	92.1	74.4	75.3	

	No. of Firms	Mar. 1928	Feb. 1928	Mar. 1927	Feb. 1927
Wholesale Trade—					
Net Sales (in dollars):					
Groceries	37	94.3	85.9	96.0	80.4
Hardware	17	88.7	69.2	102.1	68.5
Dry Goods	12	80.0	75.1	94.0	69.7
Drugs	10	109.9	90.9	104.9	88.4
Shoes	8	110.4	76.3	101.3	76.2
Retail Trade (Dept. Stores)—					
Net Sales (in dollars):					
Chicago	7	104.5	79.5	106.4	77.8
Detroit	4	143.1	131.5	127.7	108.8
Indianapolis	5	105.5	78.9	99.6	79.2
Milwaukee	5	106.9	82.7	96.3	90.1
Outside	60	102.0	76.4	101.9	81.7
Seventh District	81	115.4	94.1	108.5	90.4
Retail Trade—(U. S.)—					
Department Stores	565	103	85	100	83
Mail Order Houses	4	125	108	125	101
Chain Stores:					
Grocery	34	209	194	174	148
Drug	13	163	148	143	129
Shoe	7	117	86	96	84
Five and Ten Cent	14	133	115	116	104
Candy	4	119	106	115	103
Apparel	5	200	137	148	114
Cigar	4	107	96	111	99
Stamp Tax Collections—³					
Sales or Transfers of Capital Stock.....		226.1	148.4	118.2	89.2
Sales of Produce on Exchange—Futures.....		57.0	45.0	45.9	53.3
U. S. Primary Markets—⁴					
Grain Receipts:					
Oats		68.0	57.8	48.5	49.3
Corn		182.5	206.9	85.9	113.5
Wheat		75.1	65.4	53.9	60.5
Grain Shipments:					
Oats		61.5	42.5	55.2	39.3
Corn		112.1	101.1	46.4	38.1
Wheat		43.5	37.8	35.3	30.6
Building Construction—					
Contracts awarded (in dollars):					
Residential		168.9	148.3	145.5	100.6
Total		157.8	158.8	181.4	103.5
Permits:					
Chicago	Number	74.6	59.0	122.0	76.6
Cost.....		129.2	84.8	174.1	127.5
Indianapolis	Number	75.7	44.8	100.4	71.0
Cost.....		62.4	49.6	132.5	98.0
Des Moines	Number	67.0	33.0	56.7	35.1
Cost.....		43.2	179.0	36.4	30.5
Detroit	Number	78.5	36.3	87.6	48.5
Cost.....		143.1	55.9	94.7	108.5
Milwaukee	Number	73.8	66.1	98.9	61.4
Cost.....		93.2	55.6	130.7	73.3
Others (45).....	Number	87.8	43.9	115.5	50.9
Cost.....		101.8	63.0	140.2	67.4
Fifty Cities.....	Number	80.0	48.0	104.0	56.4
Cost.....		120.4	71.6	143.8	104.4

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