

UNITED STATES
DEPARTMENT OF COMMERCE
WASHINGTON

SURVEY OF
CURRENT BUSINESS

NOVEMBER, 1929

No. 99



ISSUED BY
BUREAU OF THE CENSUS

IMPORTANT NOTICE

In addition to figures given from Government sources, there are also incorporated for completeness of service figures from other sources generally accepted by the trades, the authority and responsibility for which are noted in the "Sources of Data" on pages 139-142 of the August, 1929, semiannual issue

INTRODUCTION

The SURVEY OF CURRENT BUSINESS is designed to present each month a picture of the business situation by setting forth the principal facts regarding the various lines of trade and industry. The figures reported are very largely those already in existence. The chief function of the department is to bring together these data which, if available at all, are scattered in hundreds of different publications. A portion of these data are collected by Government departments, other figures are compiled by technical journals, and still others are reported by trade associations.

At semiannual intervals detailed tables are published giving, for each item, monthly figures for the past two years and yearly comparisons, where available, back to 1913; also blank lines sufficient for six months have been left at the bottom of each table, enabling those who care to do so to enter new figures as soon as they appear (see August, 1929, issue). In the intervening months the more important comparisons only are given in the table entitled "Trend of business movements."

WEEKLY SUPPLEMENT

Realizing that current statistics are highly perishable and that to be of use they must reach the business man at the earliest possible moment, the department has arranged to distribute supplements every week to subscribers in the United States. The supplements are usually mailed on Saturdays and give such information as has been received during the week ending on the preceding Tuesday. The monthly information contained in these bulletins is republished in the SURVEY, and the supplements also contain charts and tables of weekly data.

RELATIVE AND INDEX NUMBERS

To facilitate comparison between different important items and to chart series expressed in different units, relative numbers (often called "index numbers," a term referring more particularly to a special kind of number described below) have been calculated. The monthly average for 1923-1925 has usually been used as a base equal to 100.

The relative numbers are computed by allowing the monthly average for the base year or period to equal 100. If the movement for a current month is greater than the base, the relative number will be greater than 100, and vice versa. The difference between 100 and the relative number will give at once the per cent increase or decrease compared with the base period. Thus a relative number of 115 means an increase of 15 per cent over the base period, while a relative number of 80 means a decrease of 20 per cent from the base.

Relative numbers may also be used to calculate the approximate percentage increase or decrease in a movement from one period to the next. Thus, if a relative number at one month is 120 and for a later month it is 144 there has been an increase of 20 per cent.

When two or more series of relative numbers are combined by a system of weightings, the resulting series is denominated an index number. The index number, by combining many relative numbers, is

designed to show the trend of an entire group of industries or for the country as a whole, instead of for the single commodity or industry which the relative number covers. Comparisons with the base year or with other periods are made in the same manner as in the case of relative numbers.

RATIO CHARTS

In most instances the charts used in the SURVEY OF CURRENT BUSINESS are of the type termed "Ratio Charts" (logarithmic scale), notably the Business Indicator charts on page 2. These charts show the percentage increase and allow direct comparisons between the slope of one curve and that of any other curve regardless of its location on the diagram; that is, a 10 per cent increase in an item is given the same vertical movement whether its curve is near the bottom or near the top of the chart. The difference between this and the ordinary arithmetic form of chart can be made clear by an example. If a certain item having a relative number of 400 in one month increases 10 per cent in the following month, its relative number will be 440, and on an ordinary chart would be plotted 40 equidistant scale points higher than the preceding months. Another movement with a relative number of, say, 50 also increases 10 per cent, making its relative number 55. On the ordinary (arithmetic) scale this item would rise only 5 equidistant points, whereas the previous item rose 40 points, yet each showed the same percentage increase. The ratio charts avoid difficulty and give to each of the two movements exactly the same vertical rise, and hence the slopes of the two lines are directly comparable. The ratio charts compare percentage changes, while the arithmetic charts compare absolute changes.

RECORD BOOK

As an aid to readers in comparing present data with monthly statistics in previous years, the department is compiling a RECORD BOOK OF BUSINESS STATISTICS, in which data now carried in the SURVEY OF CURRENT BUSINESS are shown by months as far back as 1909, if available. Full descriptions of the figures and reports of how the data are used in actual practice by business firms are contained in the RECORD Book. The sections covering textiles, metals, and fuels, automobiles, and rubber have already been issued and may be obtained for 10 cents per copy from the Superintendent of Documents, Government Printing Office, Washington, D. C. (Do not send stamps.) Notices of other sections will be given in the SURVEY as they are issued.

METHODS OF USE

Methods of using and interpreting current business statistics have been collected by the department from many business concerns and are described in a booklet entitled "How to Use Current Business Statistics," together with methods of collecting statistics. This booklet may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 15 cents per copy. (Do not send stamps.)

This issue presents practically complete data for the month of September and contains text covering the early weeks of October (page 1), for which the basic figures in table and chart form are presented regularly in the weekly supplements. As most data covering a particular month's business are not available until from 15 to 30 days after the close of the month, a complete picture of that month's operations can not be presented at an early date, but the weekly supplements give every week the latest data available.



SURVEY OF CURRENT BUSINESS

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UNITED STATES DEPARTMENT OF COMMERCE



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No. 99

WASHINGTON

November, 1929

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PRELIMINARY SUMMARY FOR OCTOBER

The volume of commercial transactions during the early weeks of October, as reflected by check payments, was considerably larger than in the corresponding period of 1928. Reports from Detroit indicate lower factory employment in the automotive industry than at this time a year ago. Operations in steel plants during October were lower than in either the preceding month or October of last year. The production of petroleum showed a rather marked decline from the preceding month but was still above the level which prevailed a year ago. The output of bituminous coal was greater than in either the preceding month or October of last year.

New building contracts awarded during the early weeks of the month showed a lower daily average than in either the previous month or the same month of 1928. Wholesale prices, as reflected by the general index, averaged lower than in either the preceding month or the corresponding period of last year, reaching the lowest level so far recorded during 1929.

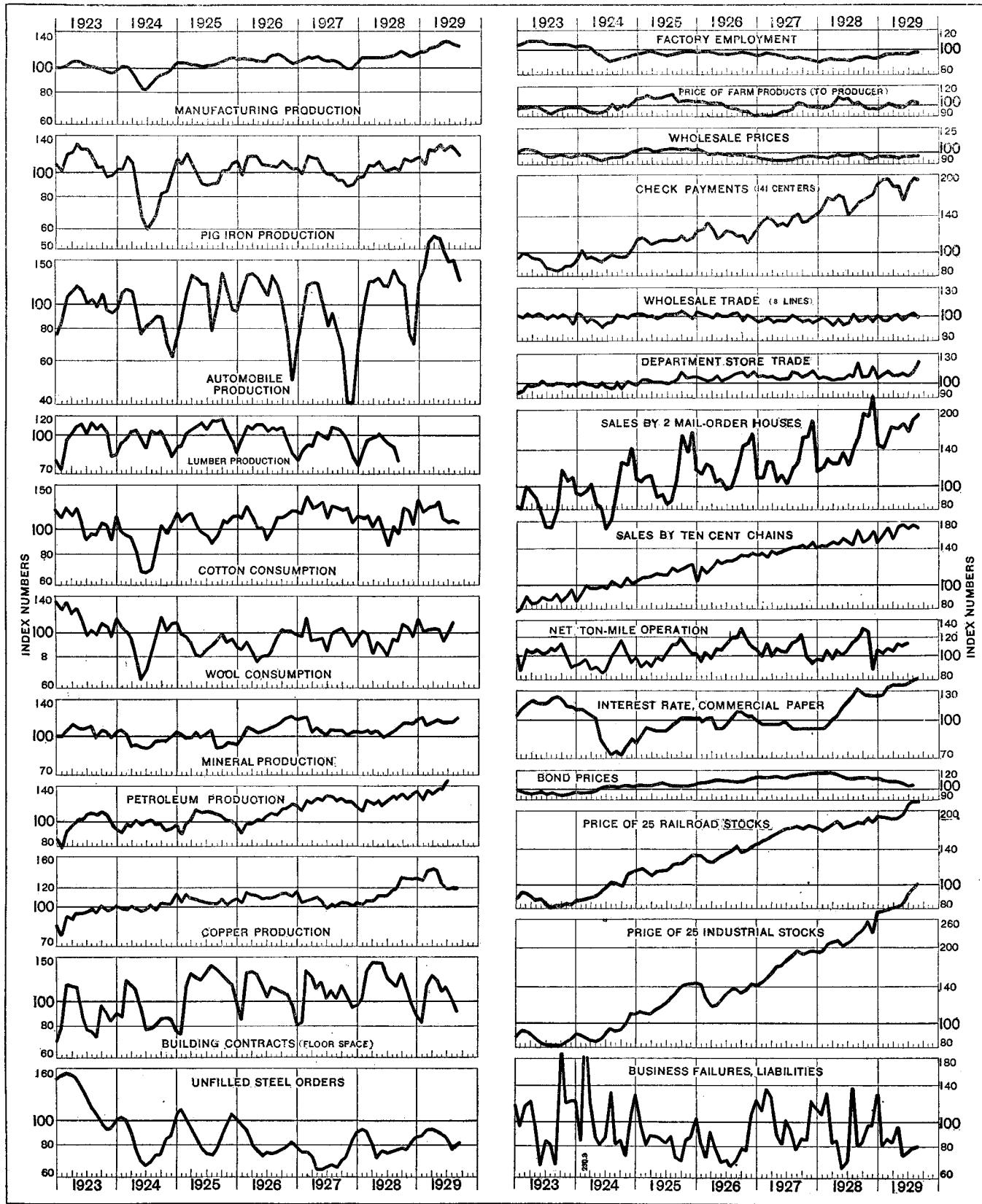
Loans and discounts of Federal reserve member banks continued to show expansion during October, both as compared with the previous months and the corresponding month of 1928. The Federal reserve ratio showed only slight change from the previous month but was higher than at this time last year.

Brokers' loans reached a new high point during October but receded rather sharply toward the close of the month. Stock prices averaged lower than in September but were still well above the level of last year. Interest rates on time funds averaged lower than in September but were higher than a year ago. Call money rates averaged lower than in either period. Bond prices during October showed the first upward movement of the year but were still below the levels of last year.

Business failures reported during the early weeks of the month were fewer in number than in the corresponding period of 1928.

MONTHLY BUSINESS INDICATORS, 1923-1929

[Ratio charts—see explanations on inside front cover. The curves on check payments, wholesale trade, sales of mail-order houses and 10-cent chains, and department stores have been adjusted for normal seasonal variations, and manufacturing production for the varying number of working days in the month as well]



MONTHLY BUSINESS INDICATORS

The principal business indicators are shown below, all calculated on a comparable basis, the average for the years 1923 to 1925 inclusive. Thus the table gives a bird's-eye view of the business situation in a concise form, so that trends of the principal indicators may be seen at a glance.

Certain indicators, in which there is a marked seasonal movement, are shown with the average seasonal variations eliminated, as noted below. In this manner a more understanding month-to-month comparison may be made.

ITEM	MONTHLY AVERAGE						1928					1929								
	1923	1924	1925	1926	1927	1928	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
	1923-1925 monthly average=100																			
Industrial production:																				
• Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	113.0	116.0	114.0	111.0	113.0	117.0	117.0	120.0	123.0	124.0	128.0	125.0	124.0	122.0
• Total minerals.....	105.0	96.0	99.0	107.0	107.0	106.0	105.0	108.0	114.0	113.0	112.0	117.0	120.0	107.0	115.0	116.0	112.0	114.0	115.0	119.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	105.0	102.5	112.9	110.5	112.8	115.2	107.3	124.3	122.6	130.5	124.4	126.7	125.7	116.0
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	120.9	120.0	134.5	123.2	116.3	129.9	125.1	146.3	142.8	152.5	141.2	139.9	142.5	130.5
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.9	139.5	125.6	120.2	77.8	70.8	121.3	141.1	177.0	187.9	182.7	164.9	151.3	150.7	125.6
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	150.9	143.9	141.1	124.5	98.1	79.5	68.6	80.2	110.6	129.9	135.2	139.0	149.6	138.6
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.8	102.6	95.9	120.6	119.0	104.1	130.2	116.5	123.3	123.1	130.2	111.1	106.5	108.7	106.3
Wool (consumption).....	112.8	94.6	92.6	86.7	97.0	94.7	95.2	91.8	108.6	105.7	96.8	114.0	101.3	102.7	103.8	102.9	93.0	99.8	111.1	105.0
Raw material output:																				
Animal products.....	100.0	104.0	98.0	96.0	97.0	99.0	97.0	92.0	102.0	93.0	92.0	96.0	80.0	88.0	99.7	108.9	111.8	116.0	100.0	97.5
Crops.....	92.0	104.0	104.0	109.0	113.0	119.0	115.0	178.3	252.1	179.7	152.2	112.5	81.9	72.6	57.4	51.1	55.7	90.4	135.0	181.4
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	90.0	78.0	84.0	84.0	78.0	82.0	74.0	86.0	90.2	98.6	89.9	88.3	91.8	83.5
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.2	126.8	124.5	129.5	123.8	120.4	133.5	123.3	134.4	130.5	137.5	135.9	148.8	150.3	142.2
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	95.9	96.3	117.5	107.4	101.2	118.1	108.5	90.3	84.7	92.2	87.4	93.3	100.7	102.1
Copper.....	93.4	100.2	106.4	110.2	104.9	114.9	116.7	118.8	131.1	129.5	129.8	130.9	128.5	142.1	143.9	141.6	124.9	120.1	119.6	119.3
Power and construction:																				
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	149.8	145.2	158.0	154.6	157.8	164.3	148.1	159.3	157.1	161.2	154.9	159.8	165.2	159.5
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	118.8	114.2	120.1	111.1	98.2	88.6	81.9	117.1	128.0	122.4	109.7	113.7	100.5	90.2
Unfilled orders:																				
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	74.7	74.7	71.5	72.7	71.0	76.8	79.5	85.5	93.1	88.4	83.4	82.1	76.0	76.1
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	75.9	77.4	78.6	76.9	83.3	86.1	86.8	92.4	92.7	90.1	89.2	85.6	76.6	81.7
Stocks:																				
General index.....	94.5	102.0	103.5	114.6	120.8	122.7	107.5	116.0	132.9	137.0	141.5	138.4	136.4	132.9	127.0	121.4	118.5	121.1	126.2	136.9
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	116.7	115.4	111.3	110.7	113.7	120.4	125.2	124.7	121.5	118.7	117.8	117.3	118.6	113.3	110.9
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.8	52.4	80.5	155.1	181.4	187.7	169.8	149.5	130.5	109.9	88.4	70.9	54.2	58.2	106.8
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	48.4	45.8	40.3	46.1	57.8	55.4	48.8	46.8	50.8	62.2	73.4	86.3	92.2	83.7
Employment:																				
Factories.....	106.6	96.2	97.2	97.9	94.4	91.9	91.7	93.0	93.9	93.4	93.5	93.2	95.4	96.6	97.1	97.2	96.8	96.2	96.6	97.3
Prices:																				
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	100.7	102.2	99.3	97.1	97.1	96.4	98.6	101.4	100.0	98.6	97.8	101.4	103.6	102.2
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	98.2	99.4	97.1	96.0	96.0	96.5	96.0	96.8	96.1	95.1	95.7	97.3	97.0	97.0
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	103.0	105.4	104.8	105.1	104.1	103.3	103.2	102.2	101.3	102.4	103.4	105.9	107.0	107.4
Cost of living (including food).....	98.2	99.4	102.4	100.0	98.7	98.2	99.4	99.4	99.4	98.8	98.2	98.2	97.6	97.0	97.0	97.6	98.8	99.4	99.4	99.4
Distribution, (values):																				
• Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	149.9	156.9	161.0	165.1	172.3	187.2	194.3	195.1	180.6	180.5	159.0	184.8	198.2	192.8
• Wholesale trade.....	101.0	98.0	102.0	101.0	97.0	96.0	100.6	96.4	97.4	99.0	94.9	101.1	96.3	97.0	100.0	102.0	97.0	101.0	103.0	99.0
• Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	105.0	119.0	105.0	106.0	116.0	105.0	110.0	113.0	105.0	107.0	112.0	106.0	112.0	123.0
Mail-order sales, 2 houses.....	80.2	98.1	112.7	120.2	126.2	147.6	140.6	155.4	194.4	188.4	227.4	144.9	141.8	163.3	170.0	168.2	176.4	163.0	183.7	192.8
* 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	147.0	165.0	148.0	151.0	163.6	145.8	156.9	167.4	153.0	172.0	174.0	162.0	174.0	168.0
Imports.....	97.8	93.1	109.1	114.3	108.0	105.5	107.3	99.0	110.0	101.1	105.0	114.2	114.4	118.8	127.1	123.9	109.4	109.6	114.4	109.3
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	100.1	111.1	145.1	143.5	125.3	128.5	116.4	129.0	112.2	101.4	103.6	106.2	100.4	116.4
Transportation:																				
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	113.6	117.3	129.2	124.6	88.4	104.8	102.2	107.8	102.7	112.6	109.1	112.5	120.4	
Finance:																				
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	125.6	127.8	128.3	129.8	135.4	128.7	130.6	132.4	131.3	129.3	135.1	136.2	135.3	139.1
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	124.8	130.6	127.6	124.8	124.8	127.6	136.4	139.2	139.2	139.2	139.2	142.2	145.0	
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	90.0	86.5	87.0	84.5	80.2	89.9	90.5	92.6	94.9	96.5	94.4	96.4	97.7	94.2
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	109.8	111.0	111.3	112.0	110.7	110.8	109.6	108.0	107.6	106.7	105.4	104.9	104.1	103.9
Price, railroad stocks.....	86.0	96.1	117.9	133.4	182.7	174.5	173.8	178.5	176.4	186.0	180.3	189.3	188.3	184.9	183.7	184.4	192.1	213.4	216.3	217.7
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	213.4	226.9	234.5	252.6	229.0	275.0	280.3	283.7	285.8	290.3	297.8	330.8	344.5	358.5
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	95.6	137.3	80.1	82.5	95.8	96.2	127.1	80.3	85.7	83.2	97.2	74.0	76.5	79.6	80.5

* Seasonal adjustments.

BUSINESS CONDITIONS IN SEPTEMBER

PRODUCTION

Industrial output in September as reflected by the general index of the Federal reserve board, after adjustments for seasonal conditions, showed a decline of almost 2 per cent from the previous month but was 6 per cent higher than in September, 1928. The decrease from the previous month in the index was entirely due to lower production of manufactured goods, since minerals, which are included in the index, showed a gain in output after seasonal adjustment over both the previous month and the corresponding period of last year.

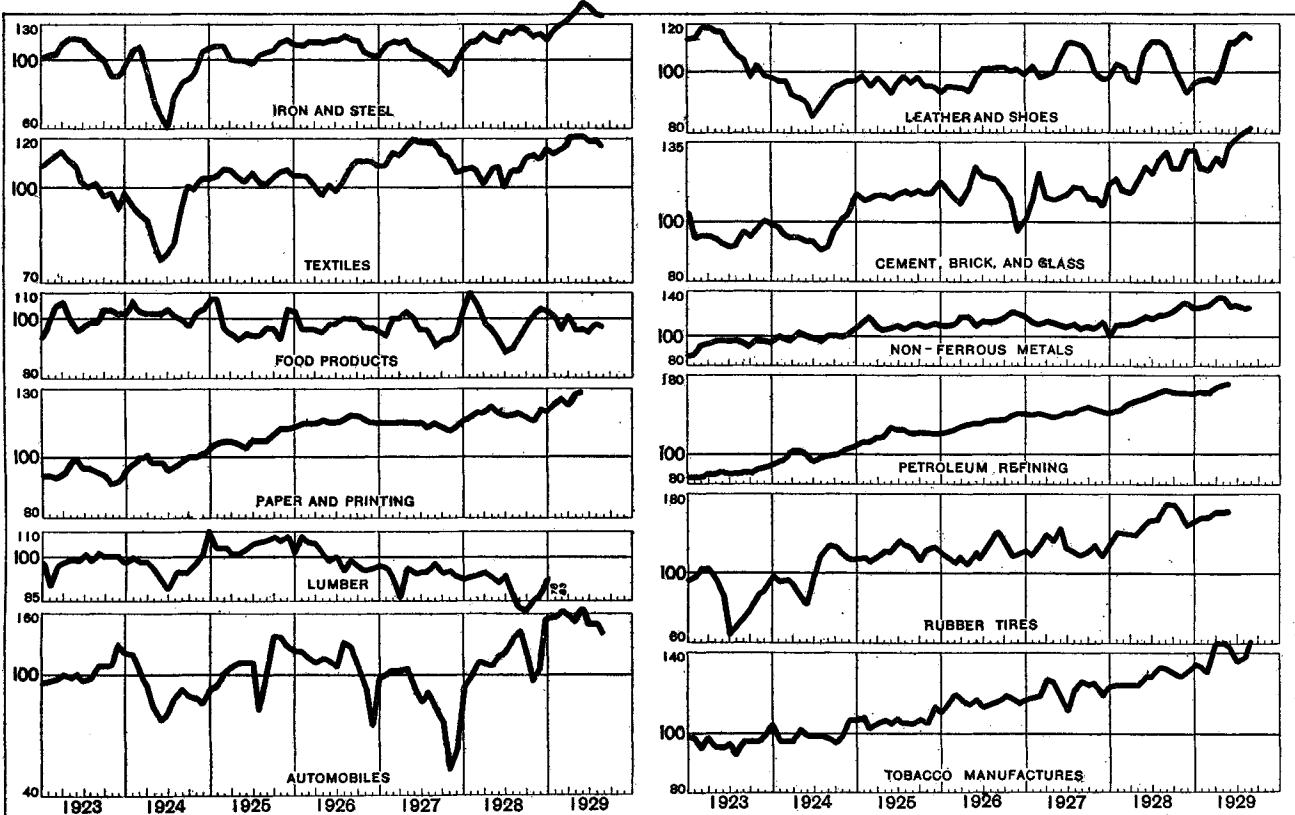
with last year all groups comprised within the general index showed larger forward business, except textiles and lumber, which declined.

Wholesale trade in September, after adjustments for seasonal conditions, showed a larger sales volume than in the same month of last year. Declines from the previous month, however, were general in most lines except meats, which increased over August, and furniture, which showed no change.

Sales by department stores showed a considerable change over the preceding month and were greater than a year ago. The value of merchandise stocks

MANUFACTURING PRODUCTION BY MAJOR GROUPS

[Relative numbers, monthly average 1923-1925 taken as 100, adjusted for seasonal variations]



COMMODITY STOCKS

Stocks of commodities held at the end of September showed a gain over a year ago, the principal increase over last year occurring in the holdings of raw materials. Stocks of manufactured goods, though increasing over last year, showed declines in certain important commodities, such as stone, clay and glass products, paper and leather.

SALES

The general index of unfilled orders for manufactured goods showed no change from the previous month but was higher than a year ago. As compared

held by department stores at the end of September showed a decline from a year ago. Sales by 10-cent chain store systems were lower than a year ago. Other chain stores, including groceries, drugs, and shoes, showed large gains in volume over September, 1928.

Sales of manufactured goods by manufacturers were generally smaller than in the preceding month. New orders for machine tools, structural steel, steel castings, and malleable castings were smaller than in August. New orders received for electric hoists and electric overhead cranes were likewise smaller than in the previous month. New orders for fabricated steel plate and steel boilers, on the other hand, were larger than in August.

PRICES

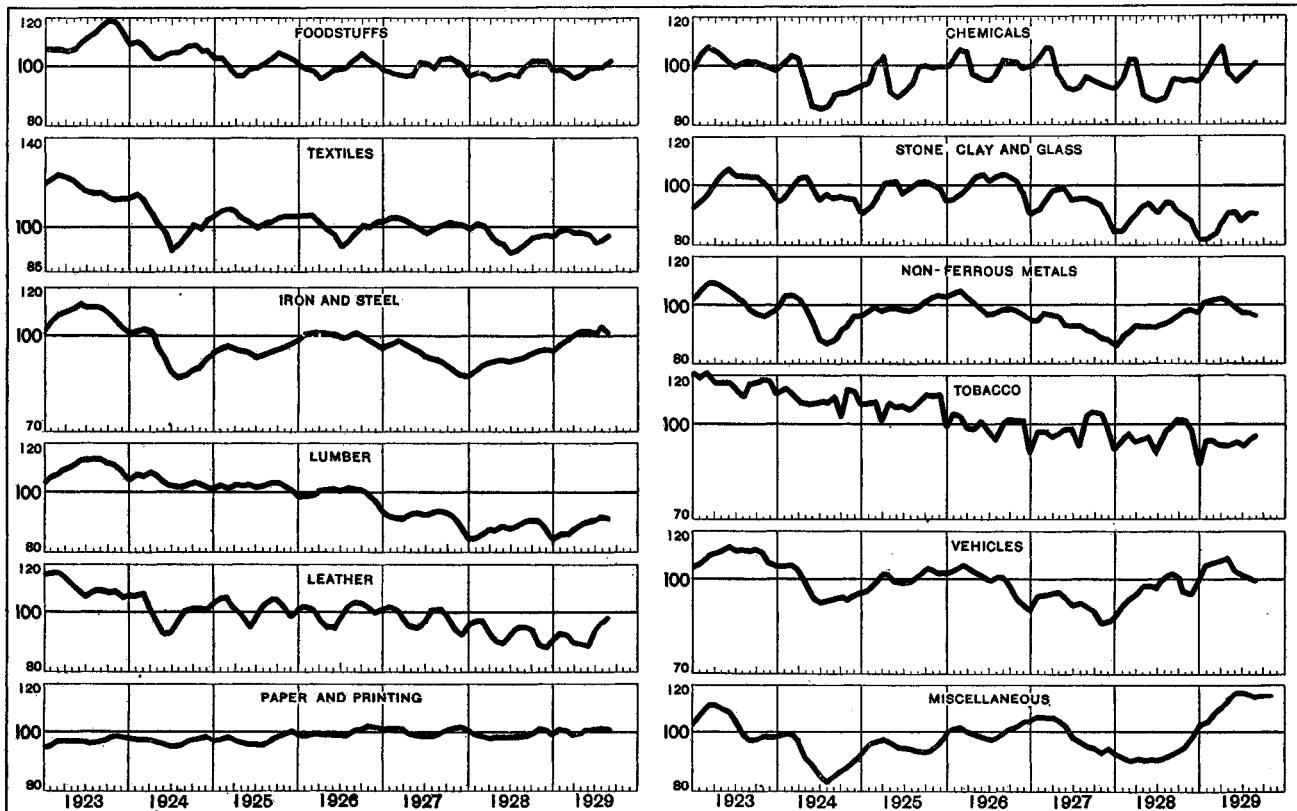
Wholesale prices were generally unchanged from the preceding month, but were 2 per cent lower than in the corresponding period of last year. Higher prices for hides and leather products, building materials, and certain miscellaneous items as compared with the preceding month were just sufficient to offset certain minor declines in other commodities. As compared with last year gains in the prices of metals and metal products, building materials, and certain miscellaneous goods were insufficient to offset declines in foods, farm products, hides and leather products, textiles and fuels. The principal decline from a year ago was registered in the price of hides and leather products, where the decrease amounted to more than 8 per cent.

with the preceding month increases in employment were recorded in factories producing food products, textiles, iron and steel, leather, paper and printing, chemicals, and tobacco products, but increased employment in these groups were balanced by declines in factories producing lumber, nonferrous metals and vehicles, principally automobiles. The greatest gain over the preceding month in employment was registered in chemical factories, where the increase was 4 per cent, while the declines in the enumerated groups were limited to 1 per cent.

As compared with a year ago all industrial groups showed larger employment except stone, clay and glass, tobacco products and vehicles, where declines were registered. The principal gain in employment over

FACTORY EMPLOYMENT, BY GROUPS

[1926 monthly average=100. September, 1929, is latest month plotted]



Classified by state of manufacture an increase over the preceding month was registered in the price index of semimanufactures amounting to 2 per cent, while nonagricultural commodities showed an advance of 1 per cent. Prices for raw materials and finished manufactured goods were unchanged from the previous month. As compared with last year semimanufactures were higher in price while the remaining groups showed a decline.

EMPLOYMENT

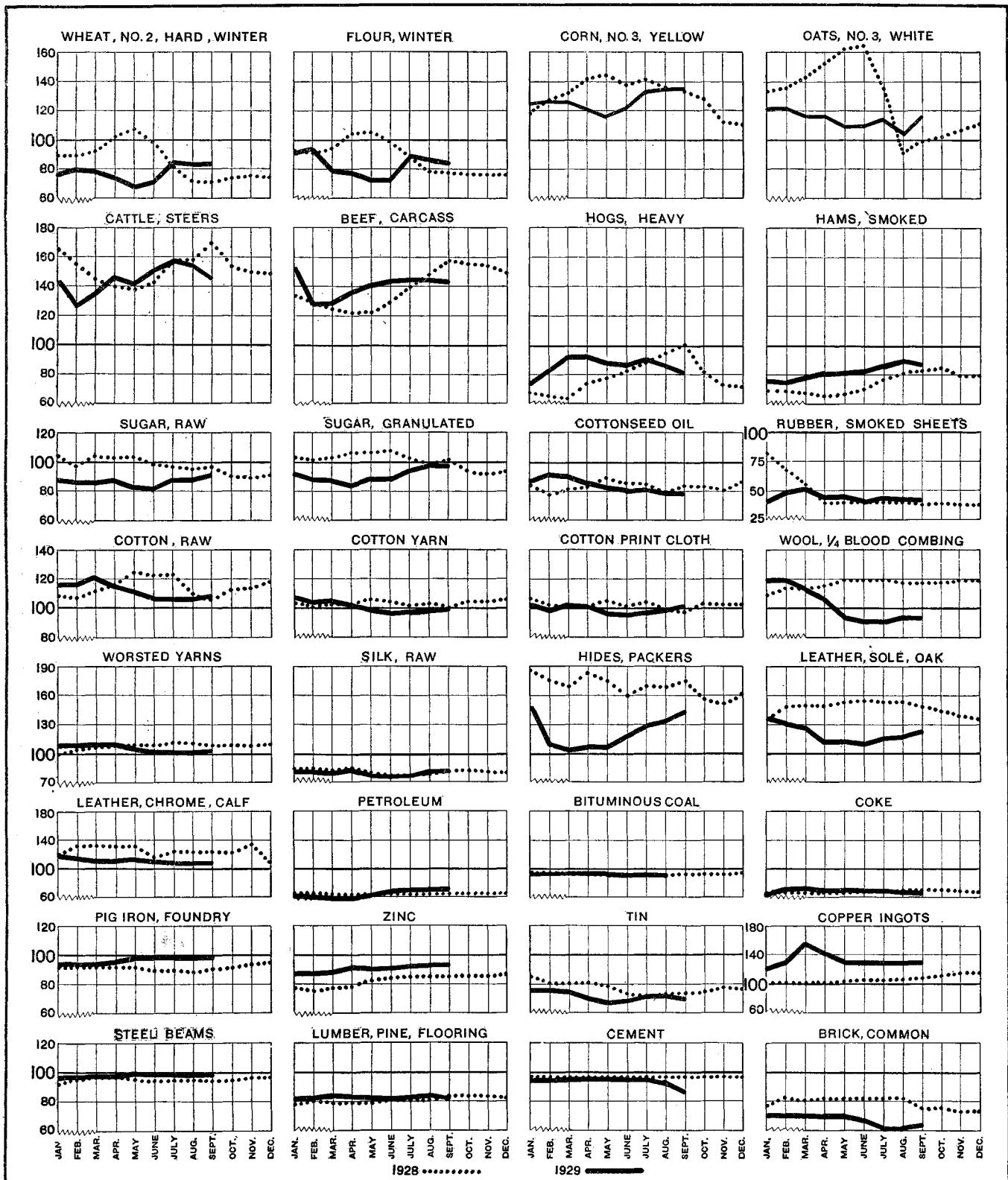
The general index of factory employment showed no change in September from the previous month but was 5 per cent higher than a year ago. As compared

last year was recorded in iron and steel factories, where the increase was almost 8 per cent.

Factory pay-roll payments in September were 1 per cent greater than in the previous month and 8 per cent larger than in September, 1928. Gains in pay-roll payments as compared with the preceding month were registered in factories producing foods, textiles, lumber, paper and printing, chemicals, stone, clay and glass, tobacco products, and certain miscellaneous items, while declines were reported in iron and steel, nonferrous metals and vehicles. As compared with last year all groups showed larger pay-roll payments except stone, clay and glass, which declined 2 per cent.

WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. September, 1929, is latest month plotted. Data from which these charts are drawn are given on the opposite page]



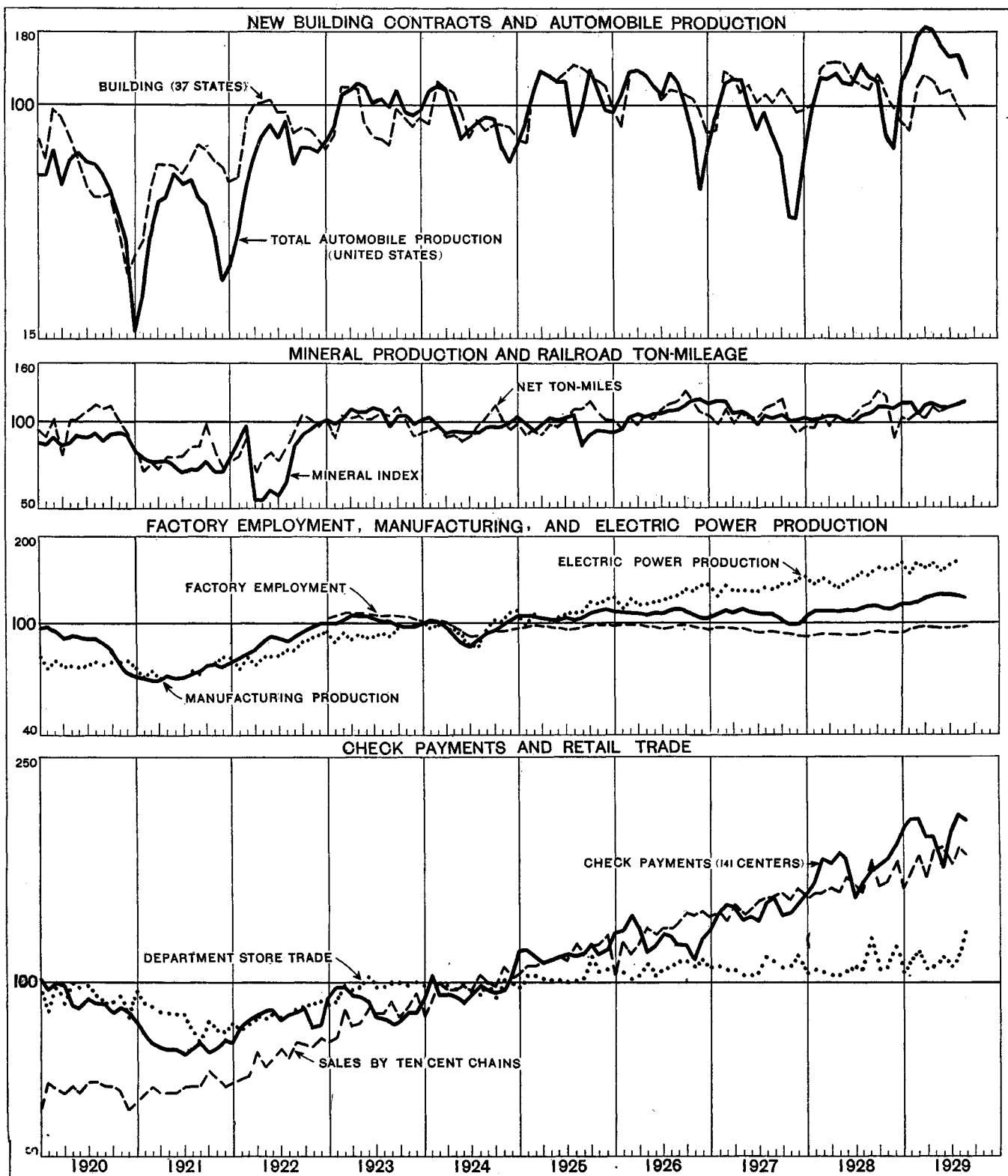
WHOLESALE PRICES FOR SPECIFIED COMMODITIES

NOTE.—Prices to producer on farm products and market price of wool are from U. S. Department of Agriculture, Bureau of Agriculture Economics, nonferrous metals from the Engineering and Mining Journal-Press, except tin, which is from the American Metal Market. All other prices are from U. S. Department of Labor, Bureau of Labor Statistics. So far as possible all quotations represent prices to producer or at mill.

COMMODITIES	Unit	ACTUAL PRICE (dollars)			RELATIVE PRICE				
					1926 average=100				
		August, 1929	Septem- ber, 1929	Septem- ber, 1928	July, 1929	August, 1929	Septem- ber, 1929	August, 1928	Septem- ber, 1928
FARM PRODUCTS—AVERAGE PRICE TO PRODUCER									
Wheat	Bushel	1.107	1.121	.994	76	82	83	71	70
Corn	Bushel	.959	.972	.951	131	137	139	141	136
Potatoes	Bushel	1.386	1.355	.648	47	75	73	39	35
Cotton	Pound	.180	.182	.176	118	119	121	125	117
Cottonseed	Ton	32.69	31.03	30.98	128	120	114	136	114
Cattle, beef	Pound	.0962	.0922	.0996	152	149	143	147	154
Hogs	Pound	.1028	.0953	.1117	88	87	81	85	95
Lambs	Pound	.1139	.1108	.1197	103	98	96	103	103
FARM PRODUCTS—MARKET PRICE									
Wheat, No. 1, northern spring (Minneapolis)	Bushel	1.35	1.35	1.19	91	85	85	75	75
Wheat, No. 2, red, winter (St. Louis)	Bushel	1.32	1.35	1.45	90	85	87	89	94
Wheat, No. 2, hard, winter (Kansas City)	Bushel	1.23	1.24	1.07	84	83	83	71	72
Corn, No. 3, yellow (Chicago)	Bushel	1.01	1.01	1.00	132	135	135	136	133
Oats, No. 3, white (Chicago)	Bushel	.43	.48	.41	115	105	117	93	100
Barley, No. 2, (Minneapolis)	Bushel	.61	.60	.63	108	95	94	102	98
Rye, No. 2, (Minneapolis)	Bushel	.98	.97	.94	116	107	105	102	102
Cotton, middling upland (New York)	Pound	.187	.189	.185	106	106	108	110	105
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston)	Pound	.43	.43	.54	91	93	93	117	117
Cattle, steers, good to choice, corn fed (Chicago)	Cwt	14.688	13.800	16.188	157	154	145	159	170
Hogs, heavy (Chicago)	Cwt	10.663	9.955	12.431	91	86	81	95	101
Sheep, ewes (Chicago)	Cwt	5.156	4.675	5.500	84	78	71	87	83
Sheep, lambs (Chicago)	Cwt	12.875	12.550	14.156	101	94	92	105	103
FOOD									
Flour, standard patents (Minneapolis)	Barrel	7.306	7.169	6.588	91	87	85	79	78
Flour, winter straight (Kansas City)	Barrel	6.235	6.100	5.650	87	86	84	78	78
Sugar, 96° centrifugal (New York)	Pound	.038	.040	.042	88	88	92	95	97
Sugar, granulated, in barrels (New York)	Pound	.064	.053	.056	94	98	97	100	102
Cotto need oil, prime yellow (New York)	Pound	.094	.093	.099	81	79	78	80	84
Beef, fresh, carcass, good native steers (Chicago)	Pound	.238	.236	.259	145	145	144	149	153
Beef, fresh, carcass, steers (New York)	Pound	.251	.250	.284	149	147	147	152	166
Port, smoked hams (Chicago)	Pound	.275	.267	.254	87	89	87	81	83
Butter, creamery, 92 score (New York)	Pound	.43	.46	.49	93	96	102	104	109
Oleomargarine, standard, uncolored (Chicago)	Pound	.235	.235	.220	103	103	103	94	96
TEXTILES									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston)	Pound	.349	.357	.358	97	97	100	103	100
Cotton-print cloth 64 x 60-38 $\frac{1}{2}$ "-5.35 yards to pound	Yard	.075	.076	.074	97	100	101	99	98
Cotton sheeting, brown 4/4 Trion (New York)	Yard	.086	.086	.089	89	90	93	98	96
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston)	Pound	1.450	1.475	1.575	101	101	103	112	110
Women's dress goods, French, 39 inches, at mills, serge	Yard	.975	.975	.988	94	94	94	99	96
Suitings, unfinished worsted—13-ounce, mill	Yard	1.901	1.901	2.008	100	95	95	100	100
Suitings, serge, 11-ounce, 56-58 inch	Yard	1.959	1.959	1.998	90	90	90	92	92
Silk, Japan, 13-15	Pound	5.073	5.122	5.096	79	82	83	78	82
Hosiery, women's pure silk, mill	Dozen pair	9.250	9.250	9.500	80	80	80	82	85
LEATHER									
Hides, green salted, packers' heavy native steers (Chicago)	Pound	.188	.196	.246	129	134	140	168	175
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago)	Pound	.198	.204	.275	115	114	118	159	159
Leather, chrome calf, dull or bright "B" grades (Boston)	Square foot	.490	.490	.565	108	108	108	125	125
Leather, sole, oak, scoured backs, heavy (Boston)	Pound	.520	.535	.650	115	119	122	153	143
Boots and shoes, men's black calf, blucher (Massachusetts)	Pair	6.750	6.750	6.750	106	106	106	106	106
Boots and shoes, men's dress welt tan calf oxford (St. Louis)	Pair	4.850	4.850	5.000	100	100	100	103	102
FUEL									
Coal, bituminous, mine-run (composite price)	Net ton	3.913	3.930	4.019	91	91	91	93	93
Coal, bituminous, prepared sizes (composite price)	Net ton	4.327	4.437	4.495	89	90	93	92	94
Coal, anthracite, chestnut (composite price)	Long ton	12.848	12.924	13.040	93	93	94	93	95
Coke, Connellsburg (range of prompt and future), furnace—at ovens	Short ton	2.763	2.700	2.875	68	67	66	70	70
Petroleum, crude, Kansas-Oklahoma—at wells	Barrel	1.300	1.300	1.210	69	69	69	64	64
METALS									
Pig iron, foundry No. 2, northern (Pittsburgh)	Long ton	20.260	20.260	18.635	98	98	98	89	90
Pig iron, basic, valley furnace	Long ton	18.500	18.500	16.188	100	100	100	86	87
Steel billets, Bessemer (Pittsburgh)	Long ton	35.000	35.000	32.000	100	100	100	91	91
Copper ingots, electrolytic, early delivery (New York)	Pound	.1778	.1778	.1472	129	129	129	105	107
Brass, sheets, mill	Pound	.233	.233	.194	122	122	122	101	102
Lead, pig, desilverized, for early delivery (New York)	Pound	.0675	.0689	.0645	81	80	82	74	77
Tin, straits (New York)	Pound	.4665	.4538	.4807	71	71	69	74	74
Zinc, slab, western (St. Louis)	Pound	.0680	.0680	.0625	92	93	93	85	85
BUILDING MATERIAL AND MISCELLANEOUS									
Lumber, pine, southern, yellow flooring, mill	M feet	37.430	36.760	37.730	83	83	82	81	84
Brick, common red, domestic building (New York)	Thousands	10.125	10.500	12.500	62	62	64	82	76
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district)	Barrel	1.604	1.500	1.650	95	92	86	97	97
Steel beams, mill (Pittsburgh)	Cwt	1.950	1.950	1.850	100	100	100	95	95
Rubber, smoked sheets (New York)	Pound	.208	.205	.184	44	43	42	40	38
Sulphuric acid, 66° (New York)	Ton	15.500	15.500	15.500	107	107	107	107	107
Wood pulp, sulphite, domestic, unbleached, news grade (New York)	Cwt	2.600	2.600	2.525	91	91	91	88	88
Newsprint, rolls, contract, mill	Cwt	3.250	3.250	3.250	94	94	94	94	94

MEASURES OF INDUSTRIAL AND COMMERCIAL ACTIVITY

[Relative numbers, monthly average 1923-1925, taken as 100]



REVIEW OF PRINCIPAL BRANCHES OF INDUSTRY AND COMMERCE

TEXTILES

Wool imports in September showed gains over both the previous month and the same month of last year. The consumption of wool showed a decline from the previous month but was more than 14 per cent greater than a year ago. For the first nine months of the year wool consumption showed a gain of 13 per cent over the corresponding period of 1928.

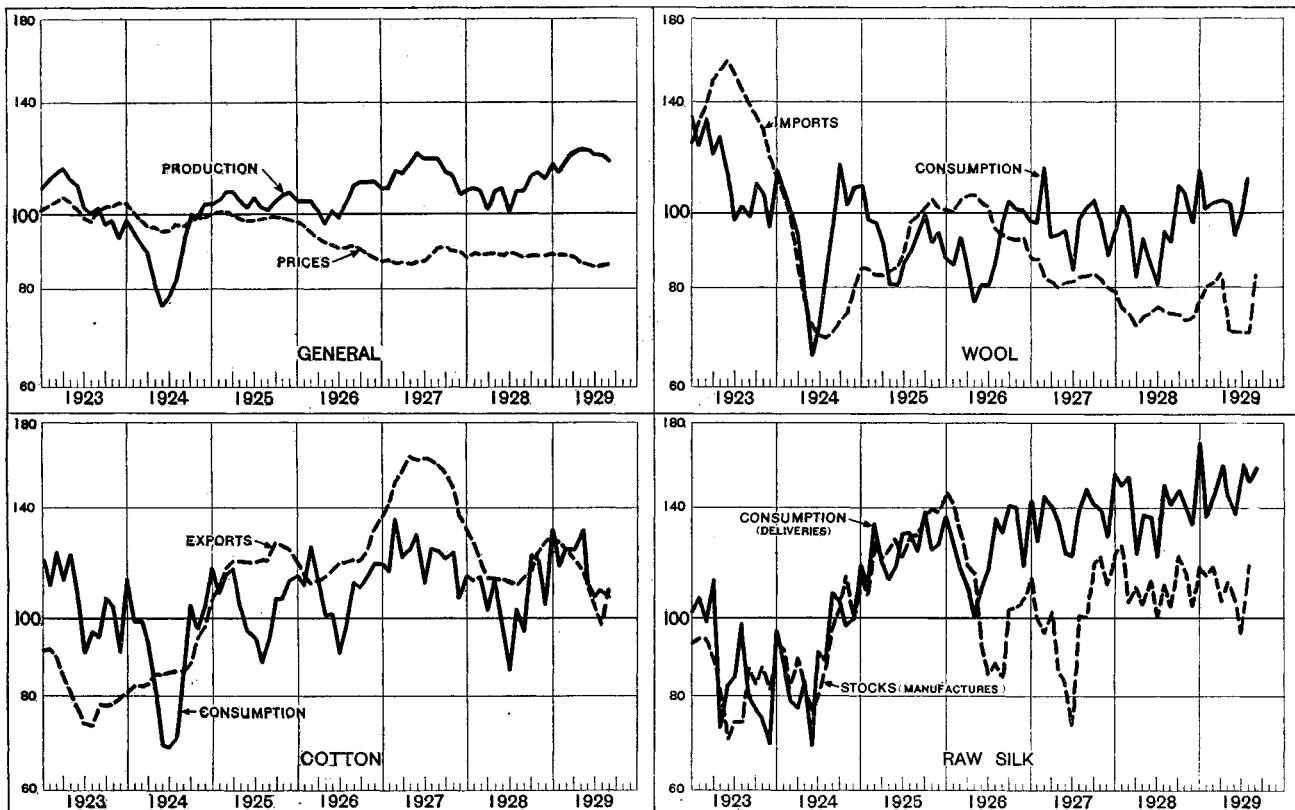
Receipts of cotton into sight for the year to date were 12 per cent larger than in the same period of last year. Cotton exports in September showed a decline of 10 per cent from last year. Cotton consumption by domestic mills showed a gain of 11 per cent over

Silk machinery was generally much more active in September than in the corresponding month of last year. Silk prices averaged higher than in either the preceding month or the same month of 1928. Imports of rayon were greater than in either the preceding month or September a year ago, while for the first nine months of the year, rayon imports showed a gain of 40 per cent over the same period of last year. Rayon prices showed no change from the previous month but were substantially lower than a year ago.

The output of pyroxylin-spread textiles showed a decline in September from both the preceding month

THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. September, 1929, is latest month plotted. Curves covering imports of wools and exports of cotton are plotted from 12 months' moving monthly average plotted on the end month]



last year, while for the year to date an increase was registered amounting to 13 per cent over the past year. Stocks of cotton held by mills and in public storage at the end of the month were 20 per cent larger than a year ago.

Imports of silk were considerably larger than a year ago. For the year to date silk imports showed an increase of 11 per cent over the corresponding nine months of 1928. Indicated consumption of silk, based upon deliveries to manufacturing establishments, were 12 per cent larger than in September of last year, while for the first nine months the gain amounted to almost 10 per cent over the same period of last year. Silk stocks in warehouses at the end of September were 9 per cent larger than a year ago.

and the same month of last year. For the first nine months of the year, textiles spread with pyroxylin showed a gain of about 1½ per cent over the same period of last year. Unfilled orders for pyroxylin-coated textiles at the end of September were considerably lower than a year ago.

Imports of burlap were lower than in either the preceding month or September a year ago, but for the year to date showed a gain of 11 per cent over the corresponding nine months of last year. Imports of unmanufactured fibers were lower than in August but greater than a year ago, while for the first nine months of the year showed a gain of about 2 per cent over the same period of last year.

METALS

The output of pig iron in September showed a decline from the previous month but was 13 per cent greater than a year ago. For the first nine months of the year pig-iron production showed a gain of almost 18 per cent over the same period of 1928. Wholesale prices for pig iron showed only slight change from the previous month but were about 5 per cent higher than a year ago.

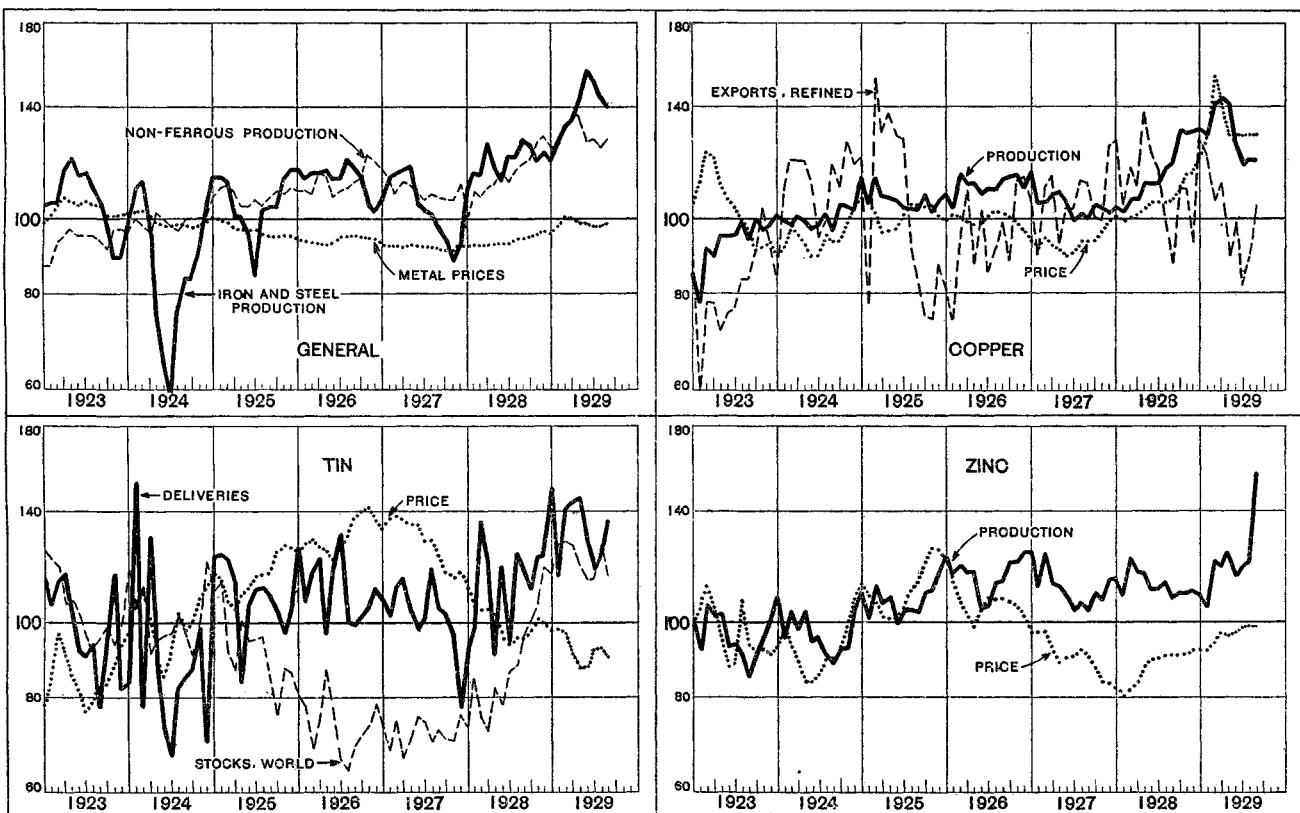
The output of steel ingots also declined from the previous month but was 9 per cent greater than in September, 1928. For the first nine months of the year steel-ingot production showed a gain of 17 per

of the year new orders for structural steel showed a gain of 16 per cent over the same period of last year.

New orders for fabricated steel plate were larger than in either prior comparative periods, while the total for the first nine months also showed a gain over the corresponding period of 1928. The output of track work was smaller than in the previous month but greater than a year ago. New orders for steel boilers in September were larger than in either the previous month or the corresponding period of last year. The production of malleable castings was smaller than in either prior comparative period, with new orders making similar comparisons.

THE METAL INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. September, 1929, is latest month plotted]



cent over the same period of last year. Unfilled steel orders at the end of September were greater than at the end of either the previous month or September of last year.

Steel-sheet production by independent steel manufacturers declined from both the previous month and the same month of last year. Steel-sheet output for the first nine months of the year was 9 per cent larger than in the same period of 1928. Steel prices showed a fractional decline from the preceding month but were higher than a year ago.

New orders and production of steel castings were lower than in August but greater than a year ago. Bookings for fabricated structural steel showed declines from both periods. For the first nine months

New orders for machine tools showed a decline from the previous month and from September of last year. New orders for electric hoists and electric overhead cranes also declined from both periods. Domestic shipments of electric industrial trucks and tractors showed gains over both periods, while shipments of motorized fire-extinguishing equipment showed a gain over the previous month and a loss from a year ago.

The output of copper by domestic smelters was greater than in the previous month or September of last year. For the first nine months of the year smelter output was 19 per cent greater than in the same period of last year. Wholesale prices for copper showed no change from the previous month but were higher than a year ago.

FUELS

Bituminous-coal output was greater than in either the preceding month or September of last year. Prices for bituminous also averaged higher than in either period.

The output of anthracite was greater than in either the preceding month or September, 1928. Anthracite prices were somewhat lower than a year ago. The production of coke was lower than in the preceding month but considerably larger than a year ago.

The output of crude petroleum showed only slight change from the previous month but was greater than a year ago, while the price for petroleum showed no

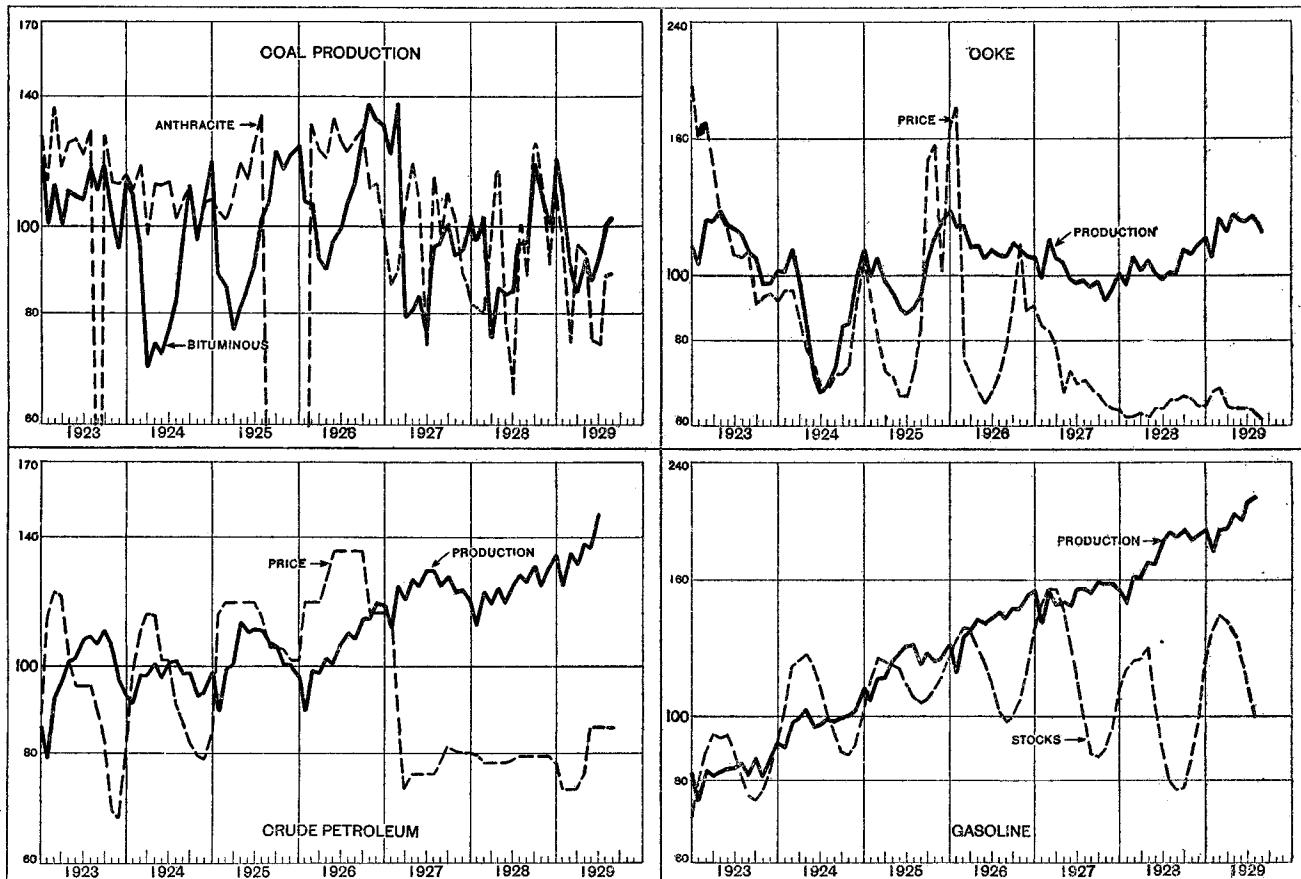
HIDES AND LEATHER

Imports of hides were larger than in either the previous month or September of last year, but the total movement for the first nine months of the year showed a decline of about 10 per cent from the same period of last year. More animals were slaughtered under Federal inspection than a year ago, but for the first nine months of the year a decline was registered in the slaughtering of animals, except for sheep, which showed a gain over the same period of last year.

The production of sole leather was smaller than in either the previous month or September a year ago, and for the first nine months of the year showed a

THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. September, 1929, is latest month plotted where data were available]



change from the previous month and a gain over last year.

AUTOMOBILES AND RUBBER

The domestic output of automobiles was smaller than in the previous month and showed practically no change from a year ago. For the first nine months of the year, automobile production showed a gain of 34 per cent over the same period of 1928.

Imports of rubber were lower than in August and showed a decline from a year ago also. For the first nine months of the year rubber imports showed an increase of 40 per cent over the same period last year. The output of pneumatic tires in September was greater than a year ago.

decline of about 12 per cent from the same period of last year. Stocks of sole and belting leather at the end of August were smaller than a year ago. Exports in September showed decline from both the previous month and the same month of last year. Sole leather prices averaged higher than in August but declined from a year ago.

The production of shoes showed a decline from the previous month but was considerably higher than a year ago. For the first nine months of the year shoe production was about 4 per cent greater than in the corresponding period of 1928. Prices for shoes showed practically no change from either the preceding month or the same month of 1928.

BUILDING AND CONSTRUCTION

The volume of new building contracts awarded during September, measured both in floor space and in value, showed a decline from both the previous month and from September of last year. For the calendar year to date building contracts showed a decrease of almost 12 per cent in value from the same period of last year. The decrease from a year ago was almost entirely due to lower awards for residential construction, where the decline amounted to almost \$600,000,000.

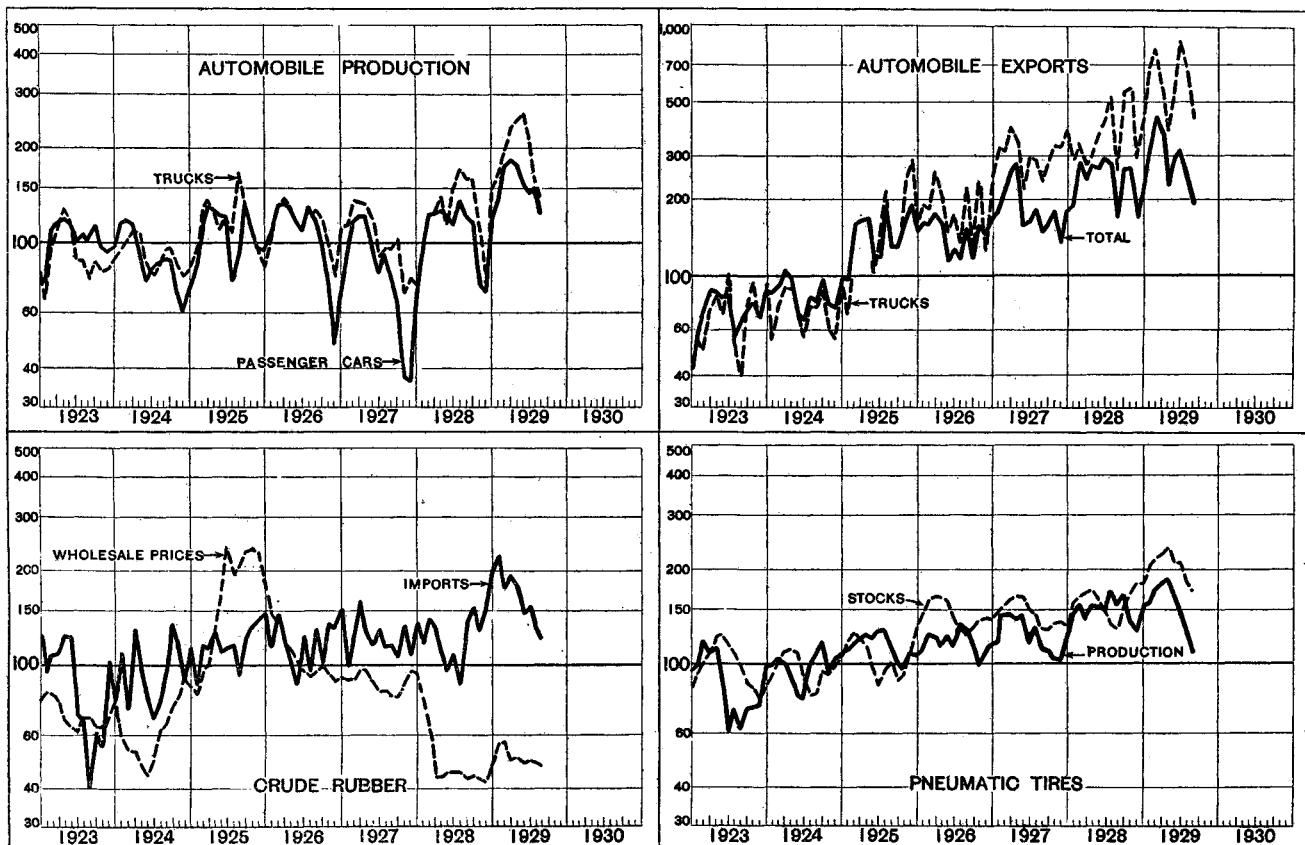
from the same period of last year. Portland cement stocks at the end of the month were 3 per cent larger than a year ago. Wholesale prices for cement averaged lower in September than in either the preceding month or the corresponding month of last year.

New contracts let for concrete pavements showed declines from both the previous month and September of 1928. For the calendar year to date new concrete paving contracts were about 9 per cent smaller than in the same period of the preceding year. At the end of September Federal-aid highways under construction meas-

THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100.

Where available, September, 1929, is latest month plotted]



LUMBER AND LUMBER PRODUCTS

The output of the principal types of lumber showed declines from both the preceding month and the corresponding month of last year. The production of maple flooring showed a gain over the previous month but declined from a year ago. Oak flooring output showed a decline from both the preceding month and from September of last year. For the year to date the output of lumber and flooring showed sizeable declines from the corresponding period of last year.

STONE, CLAY, AND GLASS

The production of Portland cement showed a decline from both the preceding month and September of last year. For the first nine months of the year cement output showed a decline of about 2 per cent

ured in mileage, showed a decline from both the previous month and the corresponding month of last year.

The shipments of porcelain plumbing fixtures during September were lower than in either the previous month or the same month of last year. For the calendar year to date porcelain plumbing fixtures showed a decline of 34 per cent in shipments from the corresponding period of 1928. Shipments of vitreous china plumbing fixtures also declined from August but were larger than a year ago, while for the first nine months of the year a decline was registered from the same period of last year amounting to more than 4 per cent. New orders for terra cotta showed declines from both the preceding month and the same month of last year. Illuminating glassware was produced in larger volume than in either the previous month or the same month of last year.

FOODSTUFFS AND TOBACCO

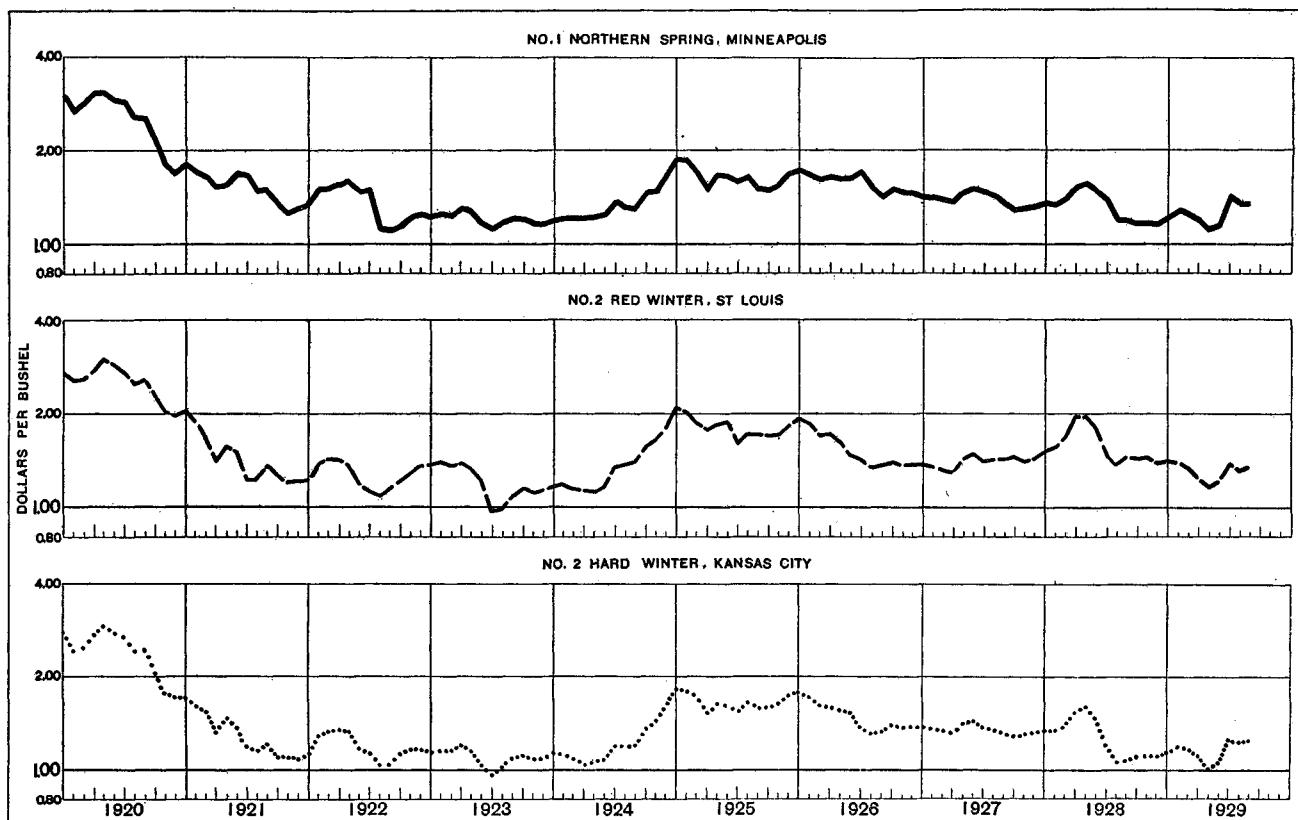
The visible supply of wheat in the United States and Canada at the end of September was considerably greater than a year ago. Receipts and shipments of wheat at the principal domestic markets were lower than a year ago. Wheat exports also declined from last year but for the first nine months of the year showed a gain of 15 per cent over the same period of last year.

The visible supply of corn at the end of September was 35 per cent smaller than a year ago. Receipts and shipments of corn at principal primary markets were

Receipts and shipments of hogs at primary markets were larger in September than a year ago. The output of pork products under Federal inspection showed a decline from the previous month but was substantially greater than a year ago. Exports of pork products, though declining from the preceding month, were 29 per cent greater than a year ago, while the total for the first nine months showed a gain of 8 per cent over the same period of last year. Cold-storage holdings of pork products at the end of the month were smaller than than a year ago. Prices for hogs were generally lower in either the previous month or September of last year.

MOVEMENT OF WHEAT PRICES

[Weighted price per bushel. September, 1929, is latest month plotted]



likewise smaller than a year ago. Prices for corn averaged higher than in either the previous month or September of last year.

Receipts and shipments of cattle at primary markets were lower than a year ago. The output of beef products under Federal inspection showed smaller gains in September as compared with the previous month and September of last year. Beef exports, though declining from the previous month, were almost twice as large as a year ago. Cold-storage holdings of beef at the end of the month were 52 per cent larger than a year ago. Prices for cattle and beef averaged lower than in either the preceding month or September of last year.

The receipts of butter at primary markets were lower than in either the preceding month or September of last year, but for the first nine months of the year butter receipts showed a gain of about 4 per cent over the same period of last year. Storage holdings of butter at the end of the month were substantially larger than a year ago. Butter prices averaged higher than in the previous month but were lower than last year. The receipts of cheese were lower than in either the previous month or September a year ago. For the first nine months of the year cheese receipts showed a decline of 7 per cent from the same period of last year. The wholesale price of cheese averaged higher than in August but was lower than a year ago.

TRANSPORTATION

The movement of goods by rail, as reflected by data on car loadings, showed a decline from the preceding month and an increase over September of last year. For the year to date freight-car loadings were 4 per cent larger than in the corresponding period of 1928. Shipments of locomotives by manufacturers were almost twice as large as in September of last year.

DISTRIBUTION MOVEMENT

Sales by mail-order houses were larger than in either the previous month or the corresponding month of last year. For the first nine months of the year mail-order systems showed a gain of 30 per cent and

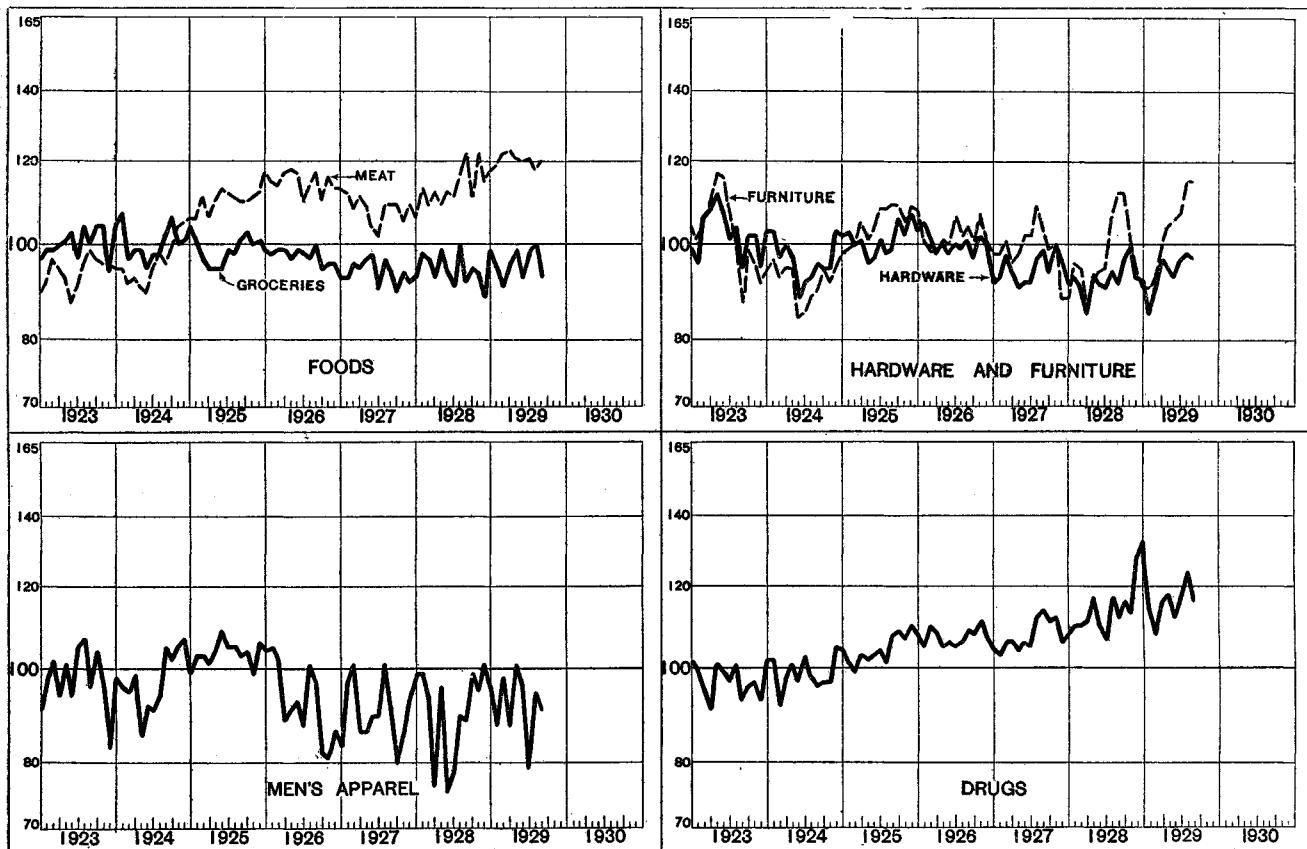
New sales of ordinary life insurance showed a substantial gain over last year. Prices for stocks averaged higher than in either the preceding month or September a year ago. Bond prices averaged lower than in either period. Business failures were fewer in number than in either the preceding month or the same period of last year. Defaulted liabilities of failing business firms during the first nine months of the year showed a decline of 11 per cent from the same period of last year.

GOLD, SILVER, AND FOREIGN EXCHANGE

The receipts of gold at the mint were lower than in either the previous month or September a year ago.

WHOLESALE TRADE

[Relative numbers, monthly average 1923-1925 taken as 100. September, 1929, is latest month plotted. Curves are adjusted for seasonal variation]



chain 10-cent stores 8 per cent over the corresponding period of 1928.

BANKING AND FINANCE

Bills discounted by Federal reserve banks showed a further decline from the preceding month and were lower also than a year ago. Loans and discounts of Federal reserve member banks showed gains over both periods. Check payments showed substantial gains over last year. Brokers' loans reached another new high level during the month. Interest rates on time funds showed practically no change from the previous month but were higher than a year ago.

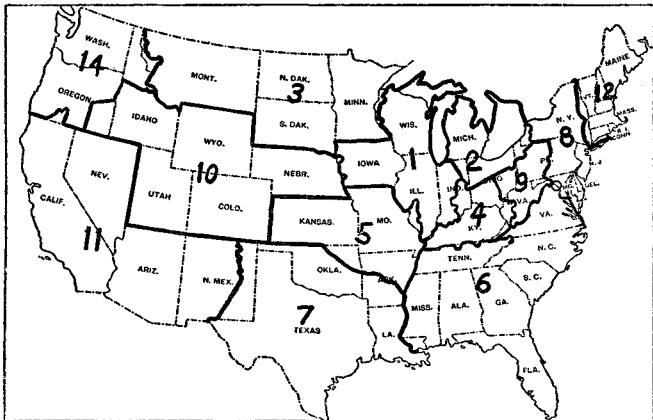
Gold imports continued to exceed the export movement. The output of silver was larger than a year ago but showed a decline from the previous month. Silver prices were lower than in either period.

Exchange upon the principal foreign currencies showed only slight changes from either the preceding month or September a year ago. As compared with August, increases were registered in the Swiss franc and Japanese yen, while declines were registered in the Canadian dollar and the Argentine peso. Contrasted with a year ago, an increase was registered in September in the Japanese yen, while declines were reported in the Indian rupee, the Canadian dollar, and the Argentine peso.

PROSPECTIVE CARLOADINGS FOR THE FOURTH QUARTER OF 1929

The regional advisory boards set up by the American Railway Association estimate freight-car loadings for

REGIONAL ADVISORY BOARD DISTRICTS



the last quarter of 1929 at somewhat more than 2 per cent larger than actual loadings reported for the corresponding period of 1928.

Estimated loadings of all commodities will be greater than a year ago except grains, hay, citrus fruits, other fresh fruits, potatoes, fresh vegetables, livestock, poultry and dairy products, stone, sand and gravel, salt, lumber and fertilizers, which, it is estimated, will show declines.

The anticipated loadings in all districts are expected to be higher than a year ago except in the Great Lakes, Northwestern, and the Pacific northwest districts, where declines are expected. Of the anticipated increases, the largest gains are estimated for the New England and Allegheny and Ohio Valley districts, where increases of 5 per cent or more are expected.

The expected increases in the New England district are general in all types of commodities, while for the Allegheny district all important commodity classes showed gains except citrus and other fresh fruits, which declined. For the Ohio Valley district, expected gains are general, except for livestock, lumber and forest products, where declines are anticipated.

PROSPECTIVE CAR LOADINGS, FOURTH QUARTER OF 1929

COMPARED WITH ACTUAL LOADINGS, SAME QUARTER OF 1928

[As reported by commodity committees, of the regional shippers' advisory boards, and compiled by The American Railway Association]

Item No.	Commodity Groups	Number of cars		Per cent inc. (+) or dec. (-)	Number of cars		Per cent inc. (+) or dec. (-)	Number of cars		Per cent inc. (+) or dec. (-)	Number of cars		Per cent inc. (+) or dec. (-)		
		Actual 1928	Esti- mated 1929		Actual 1928	Esti- mated 1929		Actual 1928	Esti- mated 1929		Actual 1928	Esti- mated 1929			
		ALL DISTRICTS				District No. 12 NEW ENGLAND				District No. 8 ATLANTIC STATES				District No. 9 ALLEGHENY	
1	Grain, all...	492,802	424,725	-13.8	3,067	3,067	-	8,664	9,097	+5.0	471	509	+8.0		
2	Flour, meal, and other mill products...	245,791	256,780	+4.5	4,068	4,068	-	14,013	14,713	+5.0	1,045	1,129	+8.0		
3	Hay, straw, and alfalfa...	84,122	83,911	-0.3	1,321	1,321	-	11,427	11,998	+5.0	1,408	1,408	-		
4	Cotton...	181,067	188,685	+4.2	1,509	1,509	-								
5	Cottonseed and products, except oil...	108,238	121,815	+12.5	16	16	-								
6	Citrus fruits...	32,163	30,485	-5.2	117	117	-	18,849	14,137	-25.0	4,119	3,295	-20.0		
7	Other fresh fruits...	132,378	118,400	-10.6	3,567	3,600	+0.9	10,799	9,179	-15.0	262	210	-19.8		
8	Potatoes...	71,106	65,522	-7.9	12,749	14,024	+10.0	11,320	10,754	-5.0	128	128	-		
9	Other fresh vegetables...	56,730	55,275	-2.6	507	507	-				1,890	1,890	-		
10	Livestock...	434,730	415,729	-4.4	1,489	1,489	-								
11	Poultry and dairy products...	35,539	34,901	-1.8	99	99	-	1,778	1,867	+5.0					
12	Coal and coke...	2,902,992	3,079,509	+6.1	26,094	27,399	+5.0	412,773	431,347	+4.5	682,594	728,328	+6.7		
13	Ore and concentrates...	457,741	472,053	+3.1	60	60	-	24,273	24,273	-					
14	Gravel, sand, and stone...	754,907	744,402	-1.4	13,757	13,757	-	78,221	76,657	-2.0	56,013	57,133	+2.0		
15	Salt...	30,327	29,528	-2.6	58	58	-	7,078	6,009	-15.1					
16	Lumber and forest products...	877,358	866,869	-1.2	28,982	29,851	+3.0	31,613	30,033	-5.0	17,562	18,300	+4.2		
17	Petroleum and petroleum products...	553,011	580,623	+5.0	24,922	27,414	+10.0	61,191	67,310	+10.0	25,457	26,246	+3.1		
18	Sugar, sirup, and molasses...	56,613	55,516	-1.9	2,094	2,094	-	11,552	13,573	+17.5					
19	Iron and steel...	496,038	522,943	+5.4	7,527	7,903	+5.0	81,825	85,916	+5.0	222,976	236,355	+6.0		
20	Machinery and boilers...	51,485	54,391	+5.6	5,794	6,084	+5.0	12,778	13,161	+3.0	7,441	8,207	+10.3		
21	Cement...	187,607	196,352	+4.7	*3,840	*5,376	+40.0	56,389	59,208	+5.0	8,312	9,708	+16.8		
22	Brick and clay products...	164,784	160,265	+3.5	3,918	4,114	+5.0	11,672	12,139	+4.0	44,095	45,727	+3.7		
23	Lime and plaster...	53,277	54,214	+1.8	3,164	3,480	+10.0	11,792	11,792	-	3,333	3,563	+6.9		
24	Agricultural implements and vehicles, other than automobiles...	18,885	19,592	+3.7	146	146	-				73	86	+17.8		
25	Automobiles, trucks, and parts...	195,669	227,593	+16.3	1,416	1,416	-	6,821	8,185	+20.0					
26	Fertilizers, all kinds...	67,477	65,707	-2.6	2,639	2,639	-	7,186	6,036	-16.0	4,826	4,918	+1.9		
27	Paper, paper board, and prepared roofing...	103,107	110,907	+6.9	20,770	21,809	+5.0	20,843	22,823	+9.5	5,057	5,821	+15.1		
28	Chemicals and explosives...	30,370	32,272	+6.3	661	667	+1.0	8,982	9,481	+5.6	7,308	7,352	+0.6		
29	Canned goods ¹ ...	57,718	62,059	+7.5	2,319	2,481	+7.0	13,779	16,535	+20.0	1,222	1,242	+1.6		
	Total, all commodities listed...	8,924,632	9,134,023	+2.3	176,670	186,565	+5.6	935,618	966,223	+3.3	1,095,592	1,161,555	+6.0		

¹ All canned food products, including catsups, jams, jellies, olives, pickles, preserves, etc.

* Includes only loading within territory comprising New England Shippers' Advisory Board.

PROSPECTIVE CAR LOADINGS, FOURTH QUARTER OF 1929—Continued

COMPARED WITH ACTUAL LOADINGS, SAME QUARTER OF 1928

[As reported by commodity committees, regional shippers' advisory boards, and compiled by American Railway Association]

Item No.	Commodity Groups	Number of cars		Per cent inc.		Number of cars		Per cent inc.		Number of cars		Per cent inc.		Number of cars		Per cent inc.						
		Actual 1928	Estimated 1929	(+) or dec. (-)	Actual 1928	Estimated 1929	(+) or dec. (-)	Actual 1928	Estimated 1929	(+) or dec. (-)	Actual 1928	Estimated 1929	(+) or dec. (-)	Actual 1928	Estimated 1929	(+) or dec. (-)	Actual 1928	Estimated 1929	(+) or dec. (-)			
		District No. 2 GREAT LAKES				District No. 6 SOUTHEAST				District No. 4 OHIO VALLEY				District No. 1 MID-WEST				District No. 3 NORTHWEST				
1	Grain, all.....	46,832	41,000	-12.2	4,849	5,091	+5.0	47,099	49,200	+4.5	94,898	87,261	-8.0	120,570	82,000	-36.7						
2	Flour, meal, and other mill products.....	33,922	40,000	+2.8	16,443	17,265	+5.0	32,120	33,726	+5.0	32,120	33,726	+5.0	40,983	42,400	+3.5						
3	Hay, straw, and alfalfa.....	9,751	8,776	-10.0	2,734	2,597	-5.0	3,321	3,460	+4.2	8,990	10,783	+20.0	5,115	4,500	-12.0						
4	Cotton.....				72,775	87,330	+20.0															
5	Cottonseed and products, except oil.....				56,283	64,725	+15.0															
6	Citrus fruits.....				17,401	15,000	-13.8															
7	Other fresh fruits.....	6,228	4,700	-24.5	12,475	9,980	-20.0															
8	Potatoes.....	4,855	2,500	-48.5	1,059	985	-7.0															
9	Other fresh vegetables.....	3,258	3,750	+15.1	2,550	2,984	+17.0															
10	Livestock.....	13,678	15,250	+11.5	15,257	14,494	-5.0	26,592	24,306	-8.6	110,898	105,353	-5.0	61,977	62,000							
11	Poultry and dairy products.....				862	862																
12	Coal and coke.....	19,943	20,000	+0.3	127,538	133,915	+5.0	862,802	927,562	+7.5	13,793	12,690	-8.0	5,858	5,800	-1.0						
13	Ore and concentrates.....	122,210	115,750	-5.4	13,562	14,918	+10.0				520,000	551,200	+6.0	36,104	36,826	+2.0						
14	Gravel, sand, and stone.....	87,518	83,057	-5.1	109,327	103,861	-5.0	92,170	96,962	+5.2	55,416	55,416		173,196	190,000	+8.7						
15	Salt.....	10,473	10,600	+1.2	197	197					137,986	117,300	-15.0	7,445	6,701	-10.0						
16	Lumber and forest products.....	13,794	13,800		303,013	289,981	-4.3	3,410	3,240	-5.0	73,014	75,058	+2.8	20,810	19,950	-4.1						
17	Petroleum and petroleum products.....	18,773	19,400	+3.3	53,594	56,274	+5.0				37,150	40,865	+10.0	3,142	3,142							
18	Sugar, sirup, and molasses.....	2,612	1,900	-27.3	7,222	7,294	+1.0				6,678	6,678		2,106	2,200	+4.5						
19	Iron and steel.....	54,043	56,000	+3.6	24,681	28,630	+16.0	20,140	22,154	+10.0	63,711	64,412	+1.1	3,437	3,000	-12.7						
20	Machinery and boilers.....	9,357	9,400	+0.5	1,987	2,305	+16.0				10,253	11,278	+10.0	870	870							
21	Cement.....	10,433	10,500	+0.6	18,879	19,917	+5.5	19,978	21,176	+6.0	20,137	21,000	+4.3	2,981	2,800	-6.1						
22	Brick and clay products.....	9,329	9,100	-2.5	22,071	22,071		12,420	12,618	+1.6	25,119	26,626	+6.0	2,144	1,887	-12.0						
23	Lime and plaster.....	13,337	13,350		5,120	5,120					6,834	6,834		590	500	-15.3						
24	Agricultural implements and vehicles, other than automobiles.....		912	950	+4.2	761	837	+10.0				13,917	14,613	+5.0	1,396	1,288	-7.7					
25	Automobiles, trucks, and parts.....	129,074	134,444	+4.2	3,791	4,170	+10.0	21,652	27,757	+28.2	18,753	28,000	+49.3	2,024	2,700	+33.4						
26	Fertilizers, all kinds.....	1,875	1,950	+4.0	33,147	33,147		7,026	7,264	+3.4	5,017	4,014	-20.0	681	650	-4.6						
27	Paper, paper board, and prepared roofing.....	12,833	13,474	+5.0	5,802	6,440	+11.0	10,497	11,336	+8.0	17,185	17,700	+3.0	3,289	3,100	-5.7						
28	Chemicals and explosives.....		4,142	4,200	+1.4	3,917	4,896	+25.0	2,351	2,351		5,072	5,326	+5.0	113	113						
29	Canned goods.....										14,378	16,100	+12.0	1,525	1,450	-4.9						
	Total, all commodities listed.....	644,032	633,851	-1.6	939,648	957,637	+1.9	1,127,107	1,207,035	+7.1	1,308,725	1,325,727	+1.3	520,651	486,360	-6.6						
	Commodity Groups	District No. 5 TRANS-MISSOURI-KANSAS				District No. 7 SOUTHWEST				District No. 10 CENTRAL-WESTERN				District No. 11 PACIFIC COAST				District No. 14 PACIFIC NORTH-WEST				
1	Grain, all.....	60,728	60,000	-1.2	36,122	32,510	-10.0	44,634	40,180	-10.0	4,924	4,930	+0.1	11,094	9,880	-10.9						
2	Flour, meal, and other mill products.....	51,435	53,390	+3.8	18,641	22,369	+20.0	12,926	13,400	+3.7	8,143	8,145		7,052	6,175	-12.4						
3	Hay, straw, and alfalfa.....	13,009	12,684	-2.5	4,615	4,384	-5.0	10,012	10,300	+2.9	6,619	6,400	-3.3	5,800	5,300	-8.6						
4	Cotton.....				102,440	92,196	-10.0				4,343	7,650	+76.1									
5	Cottonseed and products, except oil.....				50,485	54,524	+8.0				1,454	2,550	+75.4									
6	Citrus fruit.....				429	643	+50.0				14,216	14,725	+3.6									
7	Other fresh fruits.....	2,282	2,000	-12.4	2,227	2,784	+25.0	8,810	10,000	+13.5	35,801	38,200	+6.7	31,913	26,572	-16.7						
8	Potatoes.....	1,390	556	-60.0	474	427	-10.0	17,088	18,000	+5.3	2,546	2,800	+10.0	3,056	3,065	+0.3						
9	Other fresh vegetables.....	674	625	-7.3	925	1,017	+10.0				25,883	24,800	-4.2	2,196	2,118	-3.5						
10	Livestock.....	63,141	52,407	-17.0	41,390	41,390		74,376	72,400	-2.7	20,253	21,000	+3.7	3,789	3,750	-1.0						
11	Poultry and dairy products.....	5,497	5,335	-2.9	2,239	2,575	+15.0	3,472	3,700	+6.6	681	690	+1.3	1,260	1,283	+1.8						
12	Coal and coke.....	61,119	67,509	+10.5	25,273	25,273		107,977	109,600	+1.5	7,915	7,150	-9.7	12,860	13,400	+4.2						
13	Ore and concentrates.....	8,464	7,300	-13.8	685	719	+5.0	16,436	17,360	+5.6	37,537	39,800	+6.0	5,902	6,457	+9.4						
14	Gravel, sand, and stone.....	50,799	58,419	+15.0	56,624	59,455	+5.0	14,708	20,000	+36.0	45,938	46,600	+1.4	4,401	4,500	+2.2						
15	Salt.....	5,809	6,075	+4.6	5,528	5,528		707	584	-17.4												
16	Lumber and forest products.....	35,238	32,261	-8.4	88,449	91,102	+3.0	5,803	5,800		56,163	58,970	+5.0	199,507	198,523	-0.5						
17	Petroleum and petroleum products.....	57,022	58,732	+3.0	190,532	198,153	+4.0	27,225	25,870	-5.0	41,470	43,500	+4.9	12,533	13,717	+9.4						
18	Sugar, sirup, and molasses.....	1,687	1,771	+5.0	6,779	7,457	+10.0	8,060	7,600	-5.7	7,781	7,900	+1.5	42	49	+16.7						
19	Iron and steel.....	5,432	5,535	+1.9	4,405	4,626	+5.0	2,037	1,900	-6.7	5,120	5,800	+13.3	704	713	+1.3						
20	Machinery and boilers.....		1,217	1,193	-2.0	918	1,010	+10.0	310	310					560	573	+2.3					
21	Cement.....	16,331	16,658	+2.0	8,121	8,527	+5.0	4,190	4,400	+5.0	14,598	14,000	-4.1	3,418	3,082	-9.8						
22	Brick and clay products.....	9,369	11,055	+18.0	8,989	9,438	+5.0	999	1,040	+4.1	3,523	3,500	-0.7	1,136	950	-16.4						
23	Lime and plaster.....	3,748	3,700	-1.3	5,132	5,645	+10.0				2,151	2,200	+2.3	2,762	3,686	+33.5						
24	Agricultural implements and vehicles, other than automobiles.....		642	625	-2.6	287	287		670	670		2,592	2,560	-1.2	220	297	+35.0					
25	Automobiles, trucks, and parts.....	6,746	14,403	+113.5	1,500	1,875	+25.0	910	910		2,060	2,675	+29.7	920	1,058	+15.0						
26	Fertilizers, all kinds.....				4,424	4,424								656	665	+1.4						
27	Paper, paper board, and prepared roofing.....				2,518	2,518								2,151	2,200	+2.3	2,762	3,686	+33.5			

INDEXES OF BUSINESS

The index numbers presented in this table are designed to show the trend in production, prices, trade, etc., by commodities or groups. They consist in general of weighted combinations of series of individual relative numbers; often the individual relative numbers are also given. The function of index and relative numbers is explained on the inside front cover. All of the index numbers, except where noted, are based on the average of the years 1923 to 1925, while maxima and minima are given only since 1923, thus eliminating the abnormal period prior to 1923. Complete descriptions and figures for earlier years may be found in the following issues of the Survey (later data being available in the latest semiannual issues): Production in the July, 1928, issue (No. 83), pages 18 to 22; stocks in the August, 1928, issue (No. 84), pages 20 to 22; new orders in the September, 1928, issue (No. 85), page 19; unfilled orders in the January, 1928, issue (No. 77), pages 22 and 23; wholesale trade in the January, 1928, issue (No. 77), page 21; mail-order and chain stores in the May, 1928, issue (No. 81), pages 20 and 21; department stores in the April, 1928, issue (No. 80), pages 20 and 21; employment, based on 1923 as 100, in the August, 1928, issue (No. 84), page 108; farm prices in the August, 1928, issue (No. 84), page 27; wholesale prices (Department of Labor) in the November, 1927, issue (No. 75), page 24, and the June, 1928, issue (No. 82), page 23; wholesale prices, commercial, in the August, 1928, issue (No. 84), page 26; cost of living in the August, 1928, issue (No. 84), page 27, and the June, 1926, issue (No. 58), page 24.

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)											
			July	August	September	July	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928										
PRODUCTION																				
TOTAL INDUSTRIAL																				
Unadjusted, except for working days-----	125	81	105	110	115	119	121	124	+2.5	+7.8										
Adjusted for seasonal variations-----	123	83	110	112	114	123	123	121	-1.6	+6.1										
MANUFACTURING																				
Total (adjusted for working days only)-----	127	79	106	110	115	119	121	124	+2.5	+7.8										
Total (adjusted for seasonal variations)-----	128	82	111	113	115	125	124	122	-1.6	+6.1										
Iron and steel-----	155	59	124	121	128	151	143	139	-2.8	+8.6										
Textiles-----	121	77	100	107	107	117	120	117	-2.5	+10.5										
Food products-----	110	90	89	90	95	96	97	97	0.0	+2.1										
Paper and printing-----	127	91	117	117	118	123	125	125	0.0	0.0										
Lumber-----	110	78	94	87	82	87	88	88	0.0	0.0										
Automobiles-----	166	47	119	133	139	146	146	136	-6.8	+2.2										
Leather and shoes-----	134	86	112	112	110	113	116	114	-1.7	+3.6										
Cement, brick, and glass-----	140	92	119	126	130	138	142	143	+0.7	+10.0										
Nonferrous metals-----	137	87	113	117	117	128	123	124	+0.8	+6.0										
Petroleum refining-----	176	84	156	160	162	171	176	176	0.0	0.0										
Rubber tires-----	166	66	149	151	169	141	114	117	+2.6	-30.8										
Tobacco manufactures-----	143	93	125	129	128	131	133	143	+7.5	+11.7										
MINERALS																				
Total (adjusted for working days only)-----	128	84	103	110	115	118	121	128	+5.8	+11.3										
Total (adjusted for seasonal variations)-----	120	90	100	105	107	114	115	119	+3.5	+11.2										
Bituminous coal-----	125	77	93	91	94	101	97	101	+4.1	+7.4										
Anthracite coal-----	133	1	67	94	95	72	81	106	+30.9	+11.6										
Crude petroleum-----	147	88	119	123	124	144	146	144	-1.4	+16.1										
Iron-ore shipments-----	143	0	104	104	110	119	121	121	0.0	+10.0										
Copper-----	139	82	113	116	123	122	119	124	+4.2	+0.8										
Zinc-----	127	93	117	120	114	125	127	124	-2.4	+8.8										
Lead-----	125	75	97	107	115	120	108	108	0.0	0.0										
Silver-----	123	85	76	87	79	88	106	80	-24.5	+1.3										
ANIMAL PRODUCTS (Marketings)																				
Total-----	124	79	108	97	92	116	100	98	-2.0	+6.5										
Wool-----	421	14	387	195	54	404	268	128	-52.2	+137.0										
Livestock-----	131	76	78	79	92	83	77	96	+24.7	+4.3										
Poultry and eggs-----	148	67	92	80	76	96	89	83	-6.7	+9.2										
Dairy products-----	160	64	138	117	95	144	116	94	-19.0	-1.1										
Fish-----	279	44	154	170	137	243	247	283	+14.6	+106.6										
CROPS (Marketings)																				
Total-----	251	45	87	115	178	90	135	181	+34.1	+1.7										
Grains *-----	218	38	147	186	165	179	214	91	-57.5	-44.8										
Vegetables *-----	199	60	107	83	133	169	88	145	+64.8	+9.0										
Fruits *-----	266	43	164	165	206	106	130	173	+33.1	-16.0										
Cotton products *-----	353	11	28	45	184	11	72	218	+202.8	+18.5										
Miscellaneous crops *-----	266	18	22	116	206	18	102	217	+112.7	-5.3										

* Fluctuations between maximum and minimum due largely to seasonal conditions: Minerals and Manufacturing are adjusted for seasonal variations except where noted.

INDEXES OF BUSINESS—Continued

Relative to 1923-1925 monthly average as 100	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			PER CENT INCREASE (+) OR DECREASE (-)			
			July	August	September	July	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928		
PRODUCTION—Continued												
FOREST PRODUCTS												
Total	112	74	87	89	77	88	92	84	-8.7	+9.1		
Lumber	112	71	88	88	77	86	91	83	-8.8	+7.8		
Pulpwood	151	54	64	82	68	81	77	76	-1.3	+11.8		
Gum (rosin and turpentine)*	204	18	170	161	128	204	189	157	-16.9	+22.7		
Distilled wood	148	65	80	78	70	97	100	90	-10.0	+28.6		
NEW ORDERS												
Total	138	73	95	98	95	90	92					
Textiles	179	70	77	92	99	81	91					
Iron and steel	143	71	116	118	125	134	127					
Lumber	141	67	100	100	92	83	83					
Paper and printing	118	85	101	108	109	111	115					
Stone and clay products	129	75	97	97	93	90	85					
STOCKS												
Grand total	138	82	105	107	116	121	126	137	+8.7	+18.1		
Total manufactured goods	125	88	118	115	111	119	113	111	-1.8	0.0		
Foodstuffs	129	79	126	117	105	132	125	117	-6.4	+11.4		
Textiles	138	78	129	125	118	125	122	118	-3.3	0.0		
Iron and steel	157	78	133	131	130	139	128	135	+5.4	+3.8		
Nonferrous metals	135	74	119	121	125	120	125	135	+8.0	+8.0		
Lumber	125	78	104	105	104	101	103	104	+1.0	0.0		
Stone, clay, etc.	192	64	149	140	130	154	132	115	-12.9	-11.5		
Leather	123	66	71	72	73	71	70	71	+1.4	-2.7		
Rubber	199	77	145	134	130	188	156	143	-8.3	+10.0		
Paper	155	46	155	156	137	90	98	101	+3.1	-26.3		
Chemicals and oils	125	84	90	91	97	104	101	107	+5.9	+10.3		
Total raw materials	157	69	96	101	119	123	136	156	+14.7	+31.1		
Foodstuffs	218	68	123	136	145	188	212	218	+2.8	+50.3		
Textiles	202	43	67	65	95	64	71	112	+57.7	+17.9		
Metals	136	54	87	92	116	96	105	111	+5.7	-4.3		
Chemicals and oils	153	73	91	93	108	94	97	115	+18.6	+6.5		
UNFILLED ORDERS												
Total	167	67	77	75	75	82	76	76	0.0	+1.3		
Textiles	154	62	68	66	69	70	67	64	-6.0	-7.2		
Iron and steel	157	66	75	75	75	84	76	79	+3.9	+5.3		
Transportation equipment	204	49	68	60	60	73	79	80	+1.3	+33.3		
Lumber	142	56	91	88	84	97	86	84	-2.3	0.0		
WHOLESALE TRADE												
Grand total, all classes	124	82	90	110	111	96	113	114	+0.9	+2.7		
Groceries	119	83	92	101	100	99	101	102	+1.0	+2.0		
Meats	130	87	113	118	130	123	120	128	+6.7	-1.5		
Dry goods	128	70	74	110	105	74	111	109	-1.8	+3.8		
Men's clothing	167	43	68	148	137	69	156	139	-10.9	+1.5		
Boots and shoes	130	68	98	119	110	110	130	129	-0.8	+17.3		
Hardware	118	76	90	95	100	95	99	105	+6.1	+5.0		
Drugs	131	88	102	115	119	111	121	124	+2.5	+4.2		
Furniture	131	72	78	108	126	87	117	130	+11.1	+3.2		
RETAIL TRADE												
Mail order houses (2 houses)	193	68	123	141	155	163	184	193	+4.9	+24.5		
CHAIN STORES:												
Ten-cent	305	62	128	136	144	146	161	147	-8.7	+2.1		
Grocery	237	77	197	204	202	227	233	216	-7.3	+6.9		
Drug	224	82	163	169	164	204	214	200	-6.5	+22.0		
Shoe	184	55	116	110	131	120	134					
DEPARTMENT STORES:												
Sales	187	71	78	85	107	80	90	109	+21.1	+1.9		
Stocks	117	83	93	97	103	92	96	103	+7.3	0.0		

* Fluctuations between maximum and minimum due largely to seasonal conditions.

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)			
			July	August	September	July	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928		
EMPLOYMENT												
(Relative to 1926 monthly average as 100)												
Number employed, by industries:												
Total, all classes	111	92	92	94	95	98	99	99	0.0	+4.2		
Food products	119	95	97	97	100	100	99	102	+3.0	+2.0		
Textiles	122	91	91	92	94	94	95	97	+2.1	+3.2		
Iron and steel	113	86	91	92	93	101	100	101	+1.0	+8.6		
Lumber	113	85	87	89	90	90	92	91	-1.1	+1.1		
Leather	117	88	93	95	95	94	97	98	+1.0	+3.2		
Paper and printing	103	94	98	98	98	101	101	103	+2.0	+5.1		
Chemicals	108	85	87	88	95	96	98	102	+4.1	+7.4		
Stone, clay, and glass	106	82	91	94	93	88	91	91	0.0	-2.2		
Metal products other than iron and steel	109	86	92	93	94	97	97	96	-1.0	+2.1		
Tobacco products	120	86	90	97	99	93	95	96	+1.1	-3.0		
Vehicles	113	84	97	100	102	102	101	100	-1.0	-2.0		
Miscellaneous	116	83	90	90	92	116	115	115	0.0	+25.0		
Amount of pay roll, by industries:												
Total, all classes	109	84	91	94	95	98	102	103	+1.0	+8.4		
Food products	114	93	100	98	101	103	102	105	+2.9	+4.0		
Textiles	124	87	87	90	93	91	95	98	+3.2	+5.4		
Iron and steel	111	75	89	93	93	102	105	104	-1.0	+11.8		
Lumber	108	82	87	90	92	90	93	95	+2.2	+3.3		
Leather	123	79	91	97	96	94	101	101	0.0	+5.2		
Paper and printing	106	86	99	99	101	103	104	108	+3.8	+6.9		
Chemicals	108	86	92	93	97	100	102	105	+2.9	+8.2		
Stone, clay, and glass	106	78	88	94	92	84	89	90	+1.1	-2.2		
Metal products other than iron and steel	112	81	90	97	98	100	102	101	-1.0	+3.1		
Tobacco products	119	81	90	94	98	93	96	99	+3.1	+1.0		
Vehicles	120	84	96	102	101	98	109	105	-3.7	+4.0		
Miscellaneous	119	81	89	89	92	116	113	115	+1.8	+25.0		
PRICE INDEX NUMBERS												
FARM PRICES												
(Relative to 1909-1914 average as 100)												
All groups	152	125	145	139	141	140	143	141	-1.4	0.0		
Grains	178	108	142	120	117	122	129	131	+1.6	+12.0		
Fruits and vegetables	253	108	156	137	127	136	160	160	0.0	+26.0		
Meat animals	167	98	157	162	174	167	165	156	-5.5	-10.3		
Dairy and poultry	166	122	134	136	145	137	141	146	+3.5	+0.7		
Cotton and cottonseed	252	81	170	153	142	145	146	146	0.0	+2.8		
Unclassified	108	79	88	87	85	85	86	85	-1.2	0.0		
WHOLESALE PRICES												
Department of Labor Indexes												
(Relative to 1926 monthly average as 100)												
All commodities	105	94	98	99	100	98	98	98	0.0	-2.0		
Farm products	114	94	107	107	109	108	107	107	0.0	-1.8		
Food, etc.	107	85	102	104	107	103	103	103	0.0	-3.7		
Hides and leather products	127	98	124	121	121	109	110	111	+0.9	-8.3		
Textile products	114	93	97	96	96	93	93	93	0.0	-3.1		
Fuel and lighting	112	81	83	85	85	82	81	81	0.0	-4.7		
Metals and metal products	113	97	99	100	101	105	104	104	0.0	+3.0		
Building materials	116	90	94	95	95	97	97	98	+1.0	+3.2		
Chemicals	104	93	95	95	95	93	94	94	0.0	-1.1		
House-furnishing goods	111	97	97	97	97	97	97	97	0.0	0.0		
Miscellaneous	127	79	81	79	80	81	81	82	+1.2	+2.5		
Classified by state of manufacture:												
Semimanufactured articles	128	94	98	97	97	96	96	98	+2.1	+1.0		
Finished products	103	93	98	99	101	98	97	97	0.0	-4.0		
Raw materials	109	93	100	99	101	99	99	99	0.0	-2.0		
Nonagricultural commodities	106	93	96	97	98	96	94	95	+1.1	-3.1		
Commercial Indexes												
(Relative to 1926 monthly average as 100)												
Dun's	106	85	103	103	103	102	102	102	0.0	-1.0		
Bradstreet's	112	95	102	103	102	98	98	98	0.0	-3.9		

INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			Per cent increase (+) or decrease (-)			
			July	August	September	July	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928		
PRICE INDEX NUMBERS—Contd.												
COST OF LIVING												
National Industrial Conference Board Indexes												
(Relative to July, 1914)												
All items weighted-----	172	158	161	161	163	162	163	163	0.0	0.0		
Food (Department of Labor)-----	167	141	153	154	158	159	160	161	+0.6	+1.9		
Shelter-----	186	159	161	161	161	159	159	160	+0.6	-0.6		
Clothing-----	177	160	174	173	174	166	169	168	-0.6	-3.4		
Fuel and light (combined)-----	179	156	158	159	160	157	158	159	+0.6	-0.6		
Fuel-----	208	174	177	178	180	176	177	180	+1.7	0.0		
Light-----	123	118	121	121	121	120	120	120	0.0	-0.8		
Sundries-----	176	168	171	171	171	169	169	160	-5.3	-6.4		

LUMBER PRODUCTION¹

STATE	NUMBER OF MILLS		LUMBER CUT M. FEET B. M.		Per cent of increase (+) or decrease (-)	STATE	NUMBER OF MILLS		LUMBER CUT M. FEET B. M.		Per cent of increase (+) or decrease (-)
	1928	1927	1928	1927			1928	1927	1928	1927	
United States-----	13,268	13,756	34,142,123	34,532,420	-1.1	Montana-----	119	126	387,879	396,267	-2.1
Alabama-----	1,502	1,647	1,980,082	2,171,687	-8.8	New Hampshire-----	279	252	239,261	215,912	+10.8
Arizona-----	25	26	158,047	169,085	-6.5	New Jersey-----	22	24	3,220	5,044	-36.2
Arkansas-----	423	460	1,129,731	1,229,481	-8.1	New Mexico-----	77	73	162,030	172,517	-6.1
California and Nevada-----	165	154	1,952,659	2,070,811	-5.7	New York-----	364	399	130,106	142,505	-8.7
Colorado-----	140	116	72,257	67,321	+7.3	North Carolina-----	1,105	1,142	1,020,893	1,055,222	-3.3
Connecticut-----	139	144	35,356	55,919	-36.8	Ohio-----	332	379	112,229	127,880	-12.2
Delaware-----	35	45	13,161	16,824	-21.8	Oklahoma-----	96	74	193,793	169,943	+14.0
Florida-----	203	183	995,072	907,123	+9.7	Oregon-----	440	369	4,371,924	3,992,852	+9.5
Georgia-----	982	1,133	1,039,475	1,201,008	-13.4	Pennsylvania-----	506	589	238,615	277,722	-14.1
Idaho-----	144	145	977,468	923,986	+5.8	Rhode Island-----	15	16	4,622	6,815	-32.2
Illinois-----	52	50	29,623	28,663	+3.3	South Carolina-----	372	370	821,900	817,016	+0.6
Indiana-----	219	256	126,790	148,492	-14.6	South Dakota-----	52	48	53,967	46,909	+15.0
Iowa and Kansas-----	25	27	13,908	16,982	-18.1	Tennessee-----	505	566	530,306	595,297	-10.9
Kentucky-----	331	375	174,340	197,618	-11.8	Texas-----	215	194	1,446,686	1,446,460	+0.1
Louisiana-----	226	237	2,278,422	2,385,724	-4.5	Utah-----	59	49	7,623	6,152	+23.9
Maine-----	411	400	266,523	263,818	+1.0	Vermont-----	244	252	107,358	90,880	+18.1
Maryland-----	226	258	59,729	67,541	-11.6	Virginia-----	703	688	547,706	535,616	+2.3
Massachusetts-----	169	175	112,299	88,298	+27.2	Washington-----	433	400	7,305,277	7,325,862	-0.3
Michigan-----	141	143	572,059	578,254	-1.1	West Virginia-----	225	223	547,823	541,870	+1.1
Minnesota-----	136	123	412,343	396,891	+3.9	Wisconsin-----	191	197	818,850	819,507	-0.1
Mississippi-----	825	837	2,524,319	2,556,612	-1.3	Wyoming-----	49	38	24,402	12,863	+89.7
Missouri-----	346	356	141,900	189,136	-24.9						

¹ Compiled by the U. S. Department of Commerce, Bureau of the Census, according to data collected in the annual census of forest products for 1928. The figures for 1928 are preliminary and subject to such correction as may be found necessary.

SHIPMENTS OF PREPARED ROOFING¹

1928	Total	Smooth roll	Grit roll	Strip shingles, patented, hexagon (all kinds)	Individual and single thickness shingles (all kinds)	1929		Total	Smooth roll	Grit roll	Strip shingles, patented, hexagon (all kinds)	Individual and single thickness shingles (all kinds)
						Total	Smooth roll					
January-----	2,121,250	1,194,663	499,453	344,216	82,918	January-----	2,406,198	1,318,593	476,604	515,024	95,977	
February-----	1,821,526	934,940	457,886	348,167	80,533	February-----	3,356,998	1,796,208	702,910	744,722	113,158	
March-----	4,219,494	1,792,632	1,186,863	1,061,594	178,405	March-----	4,191,576	2,078,580	998,272	947,723	167,001	
April-----	3,613,707	1,501,189	960,851	954,297	197,370	April-----	4,517,761	2,056,597	1,063,330	1,163,201	234,633	
May-----	3,578,215	1,396,420	934,482	1,020,189	227,114	May-----	4,511,359	1,910,726	1,065,624	1,291,546	243,463	
June-----	4,132,513	1,719,172	1,101,863	1,089,562	221,916	June-----	3,692,297	1,446,927	933,042	1,103,479	208,849	
July-----	2,833,951	1,187,823	778,576	716,021	151,531	July-----	3,250,647	1,329,277	921,540	797,971	201,889	
August-----	3,007,534	1,248,008	802,145	781,499	175,882	August-----	2,885,539	1,067,389	775,935	808,670	183,545	
September-----	3,137,255	1,382,165	805,117	782,731	167,242	September-----	2,968,522	1,225,067	788,207	780,100	175,148	
October-----	3,406,900	1,593,921	790,063	850,096	172,820	October-----						
November-----	2,442,050	1,203,376	507,315	619,059	112,300	November-----						
December-----	1,664,280	838,528	325,729	416,610	83,413	December-----						
Total-----	35,978,675	15,992,847	9,150,343	8,984,041	1,851,444	Total-----						

¹ Compiled by the Department of Commerce, Bureau of the Census, from reports of 39 manufacturers whose output constitute a large percentage of the total for the industry.

MOVEMENT OF GRAIN PRICES¹

Dollars per bushel

MONTH	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Wheat No. 1 Northern Spring, Minneapolis																				
January.....	1.14	1.06	1.06	0.89	0.87	1.38	1.29	1.93	2.17	2.21	3.01	1.79	1.34	1.23	1.19	1.89	1.73	1.43	1.35	1.21
February.....	1.14	1.02	1.06	.87	.93	1.52	1.26	1.86	2.17	2.24	2.67	1.72	1.51	1.26	1.21	1.87	1.67	1.42	1.34	1.28
March.....	1.15	.98	1.08	.85	.92	1.49	1.14	2.03	2.17	2.36	2.84	1.66	1.51	1.24	1.21	1.71	1.61	1.39	1.39	1.25
April.....	1.11	.96	1.10	.88	.91	1.58	1.22	2.38	2.17	2.56	3.06	1.53	1.53	1.30	1.21	1.50	1.64	1.38	1.53	1.20
May.....	1.10	.99	1.16	.91	.94	1.58	1.22	2.96	2.17	2.59	3.09	1.57	1.61	1.28	1.22	1.67	1.62	1.47	1.57	1.11
June.....	1.09	.97	1.13	.92	.92	1.35	1.11	2.73	2.17	2.48	2.93	1.69	1.49	1.17	1.25	1.64	1.63	1.49	1.48	1.15
July.....	1.21	.99	1.09	.91	.92	1.44	1.21	2.66	2.17	2.66	2.88	1.67	1.49	1.12	1.37	1.59	1.72	1.47	1.38	1.43
August.....	1.13	1.05	.98	.88	1.10	1.18	1.64	2.47	2.23	2.50	2.56	1.48	1.11	1.18	1.31	1.64	1.49	1.43	1.19	1.35
September.....	1.09	1.09	.89	.87	1.12	.97	1.64	2.17	2.23	2.56	2.54	1.51	1.10	1.21	1.30	1.50	1.43	1.34	1.19	1.35
October.....	1.08	1.10	.90	.84	1.11	1.02	1.79	2.17	2.19	2.67	2.16	1.34	1.15	1.20	1.46	1.49	1.49	1.29	1.16	-----
November.....	1.04	1.05	.84	.85	1.18	1.02	1.95	2.17	2.22	2.85	1.79	1.25	1.23	1.14	1.48	1.55	1.46	1.30	1.16	-----
December.....	1.03	1.02	.82	.86	1.20	1.14	1.79	2.17	2.22	3.07	1.66	1.31	1.25	1.16	1.66	1.69	1.46	1.32	1.15	-----
Monthly average.....	1.11	1.02	1.01	.88	1.01	1.31	1.44	2.31	2.19	2.57	2.60	1.54	1.36	1.21	1.32	1.65	1.58	1.39	1.32	-----
Wheat No. 2 Red Winter, St. Louis																				
January.....	1.30	1.03	1.02	1.11	0.96	1.40	1.34	1.96	2.15	2.41	2.70	2.02	1.22	1.37	1.16	2.10	1.94	1.38	1.51	1.42
February.....	1.27	.96	1.01	1.09	.95	1.57	1.30	1.88	2.15	2.38	2.55	1.90	1.38	1.39	1.18	2.02	1.85	1.35	1.56	1.40
March.....	1.23	.93	1.04	1.08	.95	1.50	1.17	2.05	2.15	2.55	2.58	1.66	1.42	1.36	1.14	1.86	1.70	1.30	1.69	1.35
April.....	1.12	.90	1.13	1.09	.94	1.54	1.22	2.66	2.15	2.71	2.76	1.41	1.41	1.39	1.13	1.77	1.71	1.29	1.96	1.25
May.....	1.16	.94	1.21	1.04	.96	1.50	1.20	3.04	2.15	2.60	2.99	1.58	1.38	1.33	1.12	1.86	1.62	1.42	1.96	1.17
June.....	1.02	.88	1.11	.99	.84	1.19	1.10	2.65	2.15	2.41	2.89	1.50	1.18	1.23	1.16	1.89	1.47	1.50	1.79	1.21
July.....	1.07	.84	1.03	.85	.87	1.17	1.25	2.36	2.21	2.22	2.73	1.23	1.12	.97	1.35	1.59	1.42	1.41	1.47	1.39
August.....	1.02	.88	1.04	.88	.93	1.14	1.45	2.32	2.21	2.20	2.51	1.23	1.09	.99	1.38	1.72	1.34	1.42	1.38	1.32
September.....	1.02	.94	1.03	.94	1.10	1.14	1.60	2.15	2.19	2.21	2.58	1.36	1.14	1.09	1.40	1.71	1.36	1.42	1.45	1.35
October.....	1.00	1.09	.93	1.10	1.21	1.73	2.15	2.22	2.24	2.26	2.26	1.26	1.23	1.16	1.56	1.70	1.40	1.45	1.44	-----
November.....	.96	.96	1.04	.94	1.11	1.16	1.87	2.15	2.22	2.29	2.02	1.20	1.29	1.12	1.63	1.71	1.36	1.41	1.45	-----
December.....	.98	.97	1.07	.95	1.18	1.23	1.83	2.15	2.32	2.48	1.99	1.21	1.36	1.14	1.79	1.84	1.37	1.44	1.39	-----
Monthly average.....	1.10	.94	1.07	.99	.99	1.31	1.42	2.29	2.19	2.39	2.55	1.46	1.27	1.21	1.33	1.81	1.55	1.40	1.59	-----
Wheat No. 2, Hard Winter, Kansas City																				
January.....	1.11	0.95	1.05	0.87	0.85	1.34	1.20	1.89	2.12	2.31	2.82	1.72	1.13	1.14	1.13	1.82	1.78	1.37	1.33	1.14
February.....	1.11	.90	1.03	.86	.86	1.54	1.20	1.82	2.12	2.26	2.42	1.62	1.29	1.15	1.11	1.81	1.71	1.35	1.33	1.18
March.....	1.10	.88	1.05	.86	.88	1.49	1.05	1.97	2.12	2.39	2.49	1.55	1.34	1.16	1.09	1.71	1.61	1.33	1.38	1.16
April.....	1.08	.88	1.09	.88	.87	1.54	1.12	2.43	2.12	2.62	2.75	1.33	1.35	1.20	1.04	1.51	1.59	1.31	1.52	1.10
May.....	1.07	.90	1.11	.87	.90	1.50	1.10	3.01	2.12	2.60	2.93	1.47	1.34	1.16	1.06	1.63	1.55	1.42	1.60	1.01
June.....	1.08	.88	1.09	.88	.85	1.21	1.00	2.74	2.12	2.47	2.76	1.38	1.17	1.04	1.08	1.60	1.52	1.44	1.47	1.05
July.....	1.04	.87	.92	.82	.78	1.36	1.14	2.68	2.20	2.25	2.68	1.18	1.13	.96	1.20	1.54	1.37	1.36	1.20	1.25
August.....	1.00	.93	.89	.83	.91	1.26	1.41	2.61	2.16	2.18	2.45	1.15	1.04	1.01	1.19	1.64	1.31	1.35	1.06	1.23
September.....	.99	.95	.88	.87	1.04	1.07	1.57	2.12	2.16	2.24	2.44	1.22	1.04	1.09	1.20	1.58	1.32	1.31	1.07	1.24
October.....	.95	1.04	.88	.84	1.02	1.07	1.67	2.12	2.16	2.30	2.07	1.10	1.13	1.12	1.37	1.58	1.39	1.28	1.10	-----
November.....	.91	1.00	.83	.83	1.08	1.03	1.85	2.12	2.15	2.46	1.76	1.09	1.17	1.09	1.43	1.63	1.37	1.31	1.12	-----
December.....	.93	1.00	.84	.84	1.13	1.12	1.72	2.12	2.24	2.63	1.69	1.09	1.17	1.09	1.62	1.72	1.38	1.32	1.11	-----
Monthly average.....	1.03	.93	1.07	.85	.93	1.29	1.34	2.30	2.15	2.39	2.44	1.33	1.19	1.10	1.21	1.65	1.49	1.35	1.27	-----
Corn No. 3 Yellow, Chicago																				
January.....	0.64	0.45	0.62	0.46	0.62	0.71	0.74	0.98	1.77	1.43	1.51	0.65	0.48	0.70	0.76	1.24	0.79	0.74	0.89	0.93
February.....	.63	.45	.64	.48	.62	.74	.74	1.00	1.81	1.27	1.46	.63	.55	.72	.78	1.22	.75	.73	.95	.94
March.....	.61	.45	.68	.49	.64	.72	.73	1.09	1.70	1.53	1.58	.62	.57	.73	.77	1.17	.72	.68	.99	.94
April.....	.57	.50	.78	.55	.67	.75	.76	1.40	1.65	1.62	1.69	.57	.58	.79	.77	1.05	.71	.71	1.06	.90
May.....	.60	.54	.79	.57	.70	.77	.75	1.59	1.60	1.74	2.02	.60	.62	.82	.77	1.15	.71	.87	1.08	.87
June.....	.59	.55	.75	.56	.60	.72	.74	1.74	1.70	1.62	1.78	.89	.63	.84	.82	1.13	.70	.99	1.03	.91
July.....	.62	.63	.68	.62	.71	.78	.81	1.99	1.70	1.92	1.58	.60	.64	.88	.89	1.08	.78	1.02	1.06	.99
August.....	.64	.65	.79	.74	.82	.81	.85	2.06	1.72	1.95	1.58	.56	.62	.88	.88	1.17	1.02	.80	1.09	1.01
September.....	.58	.67	.74	.75	.79	.74	.86	2.10	1.58	1.55	1.31	.53	.64	.89	.89	1.14	.91	.79	.97	1.00
October.....	.50	.73	.65	.70	.73	.65	.96	2.03	1.41	1.41	.91	.45	.69	.89	1.04	1.10	.82	.77	.84	.96
November.....	.49	.68	.62	.52	.67	.63	.98	2.21	1.33	1.46	.77	.47	.71	.82	1.11	.83	.71	.84	.84	-----
December.....	.45	.61	.66	.66	.69	.92	.77	1.45	1.47	.74	.74	.47	.73	.71	.76	.75	.86	.75	.83	-----
Monthly average.....	.58	.58	.68	.61	.69	.73	.82	1.66	1.61	1.59	1.42	.57	.62	.82	.96	1.03	.75	.86	.98	-----
Corn No. 3 Yellow, Kansas City																				
January.....	0.65	0.44	0.66	0.47	0.65	0.73	0.70	0.95	1.65	1.42	1.49	0.60	0.45	0.70	0.73	1.21	0.75	0.74	0.81	0.87
February.....	.61	.42	.65	.47</																

MOVEMENT OF GRAIN PRICES¹—Continued

Dollars per bushel

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Corn No. 3, white, Chicago																				
January											1.48	0.65	0.48	0.70	0.78	1.22	0.79	0.76	0.88	0.95
February											1.48	.63	.54	.72	.78	1.19	.74	.72	.94	.95
March											1.58	.62	.58	.73	.77	1.15	.72	.69	.97	.94
April											1.70	.57	.58	.79	.77	1.04	.72	.71	1.04	.91
May											2.02	.60	.62	.81	.77	1.14	.72	.85	1.06	.89
June											1.93	.62	.61	.83	.82	1.12	.70	.99	1.03	.94
July											1.54	.61	.64	.86	1.09	1.05	.81	1.01	1.06	1.00
August											1.57	.56	.62	.87	1.17	1.01	.80	1.09	1.02	1.01
September											1.28	.54	.63	.89	1.14	.90	.79	.97	1.00	1.02
October											.91	.45	.69	1.03	1.10	.82	.77	.83	.98	
November											.73	.46	.71	.81	1.10	.82	.71	.84	.84	
December											.71	.47	.73	.71	1.21	.76	.75	.88	.83	
Monthly average																				
Oats No. 3, white, Chicago																				
January	0.48	0.33	0.50	0.33	0.39	0.53	0.48	0.57	0.82	0.65	0.86	0.44	0.34	0.43	0.46	0.58	0.42	0.46	0.55	0.50
February	.47	.31	.52	.33	.39	.58	.45	.56	.89	.58	.86	.42	.36	.44	.48	.53	.41	.43	.56	.50
March	.44	.31	.53	.32	.39	.57	.42	.61	.93	.63	.93	.42	.36	.45	.47	.48	.40	.44	.59	.48
April	.42	.32	.57	.35	.39	.57	.44	.69	.89	.70	1.01	.36	.38	.46	.48	.42	.42	.45	.63	.48
May	.40	.34	.55	.38	.40	.54	.43	.70	.77	.69	1.09	.39	.38	.45	.48	.45	.41	.50	.67	.45
June	.38	.39	.53	.40	.40	.49	.39	.67	.77	.70	1.13	.37	.37	.43	.51	.49	.40	.49	.68	.45
July	.41	.44	.49	.40	.37	.53	.41	.78	.77	.78	.91	.34	.36	.40	.54	.44	.42	.45	.56	.47
August	.35	.41	.33	.42	.42	.41	.44	.61	.70	.73	.70	.32	.32	.38	.50	.41	.38	.47	.58	.43
September	.34	.45	.33	.43	.48	.34	.46	.60	.72	.68	.62	.35	.38	.40	.48	.39	.38	.47	.41	.48
October	.32	.47	.33	.40	.46	.36	.49	.60	.69	.70	.54	.31	.42	.43	.50	.39	.44	.48	.42	
November	.32	.48	.32	.40	.48	.36	.55	.65	.72	.73	.51	.33	.43	.43	.50	.40	.42	.49	.44	
December	.32	.47	.33	.40	.49	.42	.53	.77	.72	.82	.48	.34	.44	.58	.42	.54	.46			
Monthly average	.39	.39	.44	.38	.42	.48	.46	.65	.78	.70	.80	.37	.38	.43	.50	.45	.41	.47	.53	
Barley No. 2, Minneapolis																				
January	0.61	0.77	1.05	0.49	0.52	0.68	0.70	1.17	1.56	0.90	1.52	0.69	0.51	0.57	0.62	0.93	0.65	0.69	0.84	0.66
February	.60	.74	1.00	.48	.50	.75	.66	1.17	1.88	.87	1.37	.65	.56	.60	.68	.94	.62	.71	.87	.70
March	.58	.81	.95	.46	.48	.70	.65	1.21	2.12	.93	1.51	.67	.58	.59	.70	.88	.62	.72	.90	.67
April	.54	.88	1.01	.46	.47	.70	.68	1.36	1.82	1.09	1.60	.61	.61	.64	.75	.81	.63	.77	.92	.65
May	.54	.75	.99	.50	.48	.70	.70	1.48	1.46	1.13	1.74	.59	.62	.61	.70	.84	.65	.88	.93	.60
June	.53	.77	.76	.52	.47	.66	.68	1.38	1.23	1.12	1.49	.57	.56	.58	.73	.84	.64	.88	.94	.60
July	.60	.87	.60	.48	.45	.63	.69	1.49	1.18	1.21	1.16	.62	.56	.59	.76	.84	.67	.81	.85	.69
August	.61	.85	.46	.58	.59	.59	.81	1.31	1.02	1.33	1.02	.58	.49	.56	.80	.72	.63	.77	.65	.61
September	.63	.94	.49	.61	.58	.48	.81	1.33	.95	1.27	.99	.55	.54	.58	.81	.66	.62	.72	.63	.60
October	.63	.95	.50	.56	.55	.51	1.03	1.28	.91	1.29	.92	.50	.57	.60	.85	.65	.65	.73	.63	
November	.66	.98	.47	.53	.59	.56	1.11	1.27	.94	1.33	.82	.54	.60	.61	.81	.63	.64	.77	.62	
December	.70	.91	.45	.50	.57	.61	1.07	1.49	.92	1.52	.74	.47	.61	.62	.87	.65	.67	.83	.62	
Monthly average	.60	.85	.73	.51	.52	.64	.80	1.33	1.33	1.17	1.24	.59	.57	.60	.76	.78	.64	.77	.78	
Rye No. 2, Minneapolis																				
January	0.77	0.70	0.90	0.58	0.55	1.15	0.96	1.42	1.93	1.54	1.73	1.58	0.75	0.82	0.67	1.54	0.99	0.99	1.03	1.01
February	.76	.78	.88	.57	.56	1.24	.95	1.42	2.24	1.34	1.53	1.44	.95	.80	.66	1.54	.91	1.02	1.06	1.05
March	.74	.84	.89	.55	.56	1.12	.89	1.58	2.91	1.54	1.70	1.42	.97	.76	.63	1.30	.81	.99	1.14	1.00
April	.73	.88	.89	.57	.57	1.11	.93	1.80	2.74	1.71	1.95	1.28	.97	.81	.61	1.06	.85	.99	1.24	.89
May	.71	1.01	.87	.57	.60	1.16	.94	2.26	2.30	1.55	2.08	1.37	1.02	.76	.63	1.14	.83	1.09	1.28	.85
June	.69	.87	.79	.56	.59	1.12	.94	2.37	1.85	1.45	2.14	1.26	.86	.70	.70	1.11	.89	1.11	1.23	.84
July	.73	.79	.69	.57	.58	1.02	.93	2.20	1.84	1.54	2.09	1.15	.76	.61	.83	.95	1.02	1.04	1.11	.97
August	.73	.80	.64	.61	.80	.97	1.15	1.75	1.68	1.48	1.92	1.00	.69	.62	.86	1.00	.97	.92	.94	.98
September	.71	.85	.62	.61	.89	.90	1.20	1.84	1.60	1.39	1.85	.99	.66	.66	.95	.83	.93	.92	.94	.97
October	.72	.92	.63	.56	.87	.96	1.26	1.81	1.58	1.36	1.66	.80	.71	.66	1.21	.77	.95	.92	.94	
November	.74	.88	.58	.54	1.01	.93	1.44	1.77	1.62	1.38	1.48	.72	.81	.64	1.23	.81	.94	.99	.98	
December	.77	.87	.56	.55	1.06	.92	1.38	1.83	1.57	1.66	1.49	.78	.83	.65	1.33	.98	.94	1.02	.97	
Monthly average	.73	.86	.75	.57	.72	1.05	1.08	1.84	1.99	1.50	1.80	1.15	.83	.70	.86	1.09	.92	1.00	1.07	
Flaxseed No. 1, Minneapolis																				
January	2.18	2.60	2.15	1.29	1.49	1.83	2.31	2.89	3.60	3.41	5.12	1.96	2.13	2.80	2.50	3.15	2.50	2.23	2.24	2.45
February	2.18	2.68	2.06	1.34	1.53	1.86	2.32	2.81	3.74	3.45	5.09	1.82	2.46	3.04	2.58	3.12	2.43	2.25	2.27	2.55
March	2.25	2.60	2.06	1.26	1.58	1.91	2.27	2.90	4.08	3.75	5.02	1.78	2.57	3.07	2.49	2.97	2.32	2.22	2.33	2.49
April	2.38	2.56	2.15	1.29	1.54	1.93	2.13	3.18	4.09	3.88	4.68	1.58	2.70	3.40	2.47	2.79	2.34	2.24	2.36	2.45
May	2.22	2.47	2.23	1.30	1.56	1.95	1.96	3.33	3.93	4.12	4.53	1.84	2.80	2.94	2.46	2.80	2.30	2.24	2.34	2.45
June	2.04	2.24	2.25	1.31	1.59	1.76	1.80	3.11	3.86	4.86	3.92	1.86	2.50	2.80	2.44	2.68	2.33	2.25	2.38	2.48
July	2.34	2.10	1.97	1.38	1.68	1.67	1.96	3.01	4.40	5.94	3.48	1.89	2.59	2.70	2.47	2.49	2.44	2.23	2.21	2.76
August	2.47	2.34	1.86	1.47	1.64	1.67	2.15	3.46												

TREND OF BUSINESS MOVEMENTS

The following table contains a summary of the monthly figures, designed to show the trend in important industrial and commercial movements. These data represent continuations of the figures presented in the latest semiannual number (August, 1929), in which monthly figures for 1928 and 1929 may be found, together with explanations as to the sources and exact extent of the figures quoted. The figures given below should always be read in connection with those explanations. Data on stocks, unfilled orders, etc., are given as of the end of the month referred to. For explanations of relative numbers, including base periods, see introduction on inside front cover.

<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
TEXTILES												
Wool												
Receipts at Boston:												
Total	24,215	47,795	56,981	40,476	19,444	29,720	10,315	-52.0	+88.5	265,532	264,365	-0.4
Domestic	16,108	40,596	53,652	35,594	16,975	25,802	7,156	-52.3	+137.2	189,308	181,473	-4.1
Foreign	8,107	7,199	3,329	4,882	2,469	3,918	3,159	-49.4	-21.8	76,224	82,892	+8.7
Imports:												
In condition imported	19,786	16,592	18,815	17,068	18,158	14,472	14,510	+6.4	+25.1	187,988	221,248	+17.7
Grease equivalent	22,372	17,903	21,931	19,015	21,450	16,078	17,015	+12.8	+26.1	211,001	247,515	+17.3
Consumption by textile mills,												
grease equivalent	48,765	44,066	47,296	52,644	49,755	45,103	43,492	-5.5	+14.4	390,910	442,411	+13.2
Machinery, activity, hourly:												
Looms—												
Wide	67	65	62	60	64	55	59	+6.7	+8.5			
Narrow	61	61	60	62	63	48	53	+1.6	+18.9			
Carpet and rug	72	69	61	66	66	63	62	0.0	+6.5			
Sets of cards	86	85	80	80	83	77	85	+3.8	-2.4			
Combs	84	78	86	93	94	65	74	+1.1	+29.0			
Spinning spindles—												
Woolen	82	82	78	77	77	74	80	0.0	-3.7			
Worsted	66	65	62	69	70	58	62	+1.4	+12.9			
Prices:												
Raw, territory, fine, scoured... dolls. per lb.	1.00	.97	.93	.93	.92	1.14	1.14	-1.1	-19.3			
Raw, Ohio and Pa. fleeces,												
14 blood, combing, grease... dolls. per lb.	.43	.42	.42	.43	.43	.54	.54	0.0	-20.4			
Worsted yarn	1.50	1.45	1.45	1.45	1.48	1.60	1.58	+2.1	-6.3			
Women's dress goods, French												
serge, 39-in.	.98	.98	.98	.98	.98	1.03	.99	0.0	-1.0			
Suiting, 13-oz.	2.008	2.008	\$ 1.996	1.901	1.901	2.008	2.008	0.0	-5.3			
Cotton												
Production, crop estimate						2 14,825						
Ginnings						4 9,099						
Receipts into sight	5332	6,222	126	823	2,431	527	2,078	+195.4	+19.9	6,254	7,000	+11.9
Imports, unmanufactured	42,486	26,113	21,369	24,793	23,974	25,258	18,508	-3.3	+29.5	236,313	355,139	+50.3
Exports, unmanufactured												
(including linters)	328,068	308,947	246,983	235,914	731,613	259,489	814,569	+210.1	-10.2	4,940,209	4,338,874	-12.2
Consumption by textile mills	668,229	570,281	546,457	558,113	545,649	526,340	542,307	-2.2	+10.8	4,811,358	5,410,734	+12.6
Stocks, domestic, end of month:												
Totals, mills and w'houses	3,325	2,665	2,038	2,189	4,017	1,923	3,358	+83.3	+19.6			
Mills	1,477	1,289	1,052	802	792	782	720	-1.2	+10.0			
Warehouses	1,848	1,376	986	1,387	3,225	1,141	2,638	+132.5	+22.3			
Stocks, world visible, end of month:												
Total	5,268	4,476	3,651	3,458	4,381	3,480	4,114	+26.7	+6.5			
American	3,000	2,302	1,693	1,629	2,652	1,780	2,563	+62.8	+3.5			
Prices:												
To producer	.180	.179	.178	.180	.182	.188	.176	+1.1	+3.4			
In New York, middling	.195	.188	.186	.187	.189	.193	.185	+1.1	+2.2			
Cotton Yarn												
Machinery activity of spindles:												
Active spindles	30,910	30,628	30,396	30,237	30,038	28,217	28,269	-0.7	+6.5			
Total activity	9,165	8,155	7,744	8,130	7,881	7,431	6,961	-3.1	+13.2			
Activity per spindle	261	232	224	234	226	209	196	-3.4	+15.3			
Ratio to capacity	110.9	104.8	100.3	97.7	104.0	87.1	90.1	+6.4	+15.4			
Carded sales yarn:												
Production	17,941	20,272	13,211	19,639	17,122	14,046	18,839	-12.8	-9.1	158,091	166,856	+5.5
Stocks, end of month	8,760	8,785	8,901	8,185	7,423	11,574	10,248	-9.3	-27.6			
Unfilled orders, end of month	37,609	32,650	32,472	32,175	35,833	27,044	34,836	+11.4	+2.9			
Prices:												
22/1 cones, Boston	.353	.348	.348	.349	.357	.369	.358	+2.3	-0.3			
40/1s, southern spinning	.499	.499	.505	.510	.510	.514	.501	0.0	+1.8			
Cotton Goods												
Cotton textiles:												
Production	341,370	285,928	234,439	307,538	268,611	302,470	253,688	-12.7	+5.9	2,657,149	2,655,437	-0.1
New orders	278,355	228,244	262,889	312,635	371,485	340,810	387,151	+18.8	-4.0	2,587,684	2,672,228	+3.3
Shipments	326,121	252,008	252,779	326,398	287,628	324,073	278,110	-11.9	+3.4	2,576,405	2,702,137	+4.9
Stocks, end of month	367,340	401,260	382,920	364,060	345,043	441,667	417,245	-5.2	-17.3			
Unfilled orders, end of month	382,512	358,748	368,858	355,095	438,952	288,964	398,005	-23.6	+10.3			
Fine cotton goods, production	526,971	465,658	408,659	485,437	381,700	136,237	113,627	-21.4	+236.0	2,141,133	3,972,621	+85.5
Cotton cloth:												
Imports	6,527	4,880	5,175	3,927	3,972	3,753	3,139	+1.1	+26.5	47,388	45,646	-3.7
Exports	46,261	44,730	50,412	42,359	42,274	43,928	34,694	-0.2	+21.8	373,550	440,421	+17.9
Fabric for tire manufacture												
consumption	23,302	20,359	18,126	1,399	1,419	21,854	17,797	-4.0	-4.0	12,519	13,379	+13.0
Elastic webbing, shipments	1,725	1,473	1,357	1,399	1,419	1,399	1,473	+1.4	-4.0			

^a As of Oct. 1.^a Final estimate.^a As of Oct. 18.^a Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
TEXTILES—Continued												
Cotton Goods—Continued												
Prices:												
Print cloth, 64 x 60.....dollars per yd.	0.073	0.072	0.073	0.075	0.076	0.075	0.074	+1.3	+2.7			
Sheeting, brown.....dollars per yd.	.087	.084	.083	.086	.086	.091	.089	0.0	-3.4			
Cotton goods (Fairchild), rel. to 1911-1913	162	159	159	160	160	163	160	0.0	0.0			
Cotton Finishing												
White, dyed and printed (outside mills):												
Billings, finished goods.....thous. of yds.	88,707	78,964	75,582	75,845	74,392	70,748	69,805	-1.9	+6.6	655,447	751,786	+14.7
New orders, gray yardage.....thous. of yds.	79,228	65,462	69,475	69,168	68,627	71,743	74,483	-0.8	-7.9	647,337	712,063	+10.0
Shipments, finished goods.....cases	54,247	45,674	44,809	45,238	44,093	46,283	45,767	-2.5	-3.7	411,043	463,790	+12.8
Stocks, finished goods, end mo.....cases	35,618	35,487	37,299	36,320	35,538	35,819	33,410	-2.2	+6.4			
Operating activity.....per cent of capacity	71	60	57	60	61	54	61	+1.7	0.0			
Unfilled orders, end of month.....days	5.2	5.1	4.9	4.9	4.5	4.4	5.0	-8.2	-10.0			
Printed only (mills and outside):												
Production.....thous. of yds.	85,894	72,808	60,902	69,315	66,766	54,495	66,079	-3.7	+1.0	566,830	697,430	+23.0
Stocks, end of month.....thous. of yds.	78,184	78,492	87,397	87,918	88,864	74,682	75,161	+1.1	+18.2			
Silk												
Imports, raw.....thous. of lbs.	8,599	7,596	7,858	9,620	8,811	9,320	7,202	-8.4	+22.3	64,913	71,377	+10.5
Deliveries (consumption).....bales	49,121	46,504	51,624	59,704	53,274	50,821	47,797	-10.8	+11.5	428,335	467,537	+9.2
Stocks, end of month:												
At warehouses.....bales	39,898	47,425	42,596	48,408	55,104	50,975	50,464	+13.8	+9.2			
At manufacturing plants.....bales	24,623	23,162	20,985	25,854		24,429	22,786					
Silk machinery activity:												
Broad looms.....per cent of normal	101.0	100.7	99.7	101.9	100.7	89.8	92.7	-1.2	+8.6			
Narrow looms.....per cent of normal	74.2	67.8	65.1	65.5	63.1	54.1	54.0	-3.7	+16.9			
Spinning spindles.....per cent of normal	65.3	63.1	63.8	65.2	66.8	52.1	66.9	+2.5	-0.1			
Prices:												
Raw, Japanese, 13-15, N. Y....dollars per lb.	4.777	4.925	4.876	5.073	5.122	4.851	5.096	+1.0	+0.5			
Silk goods, composite.....dollars per yd.	1.18	1.19	1.18	1.18		1.16	1.16					
Rayon												
Imports.....thous. of lbs.	1,589	1,582	858	990	1,044	1,248	924	+5.5	+13.0	8,989	12,621	+40.4
Stocks, bonded, end of month.....thous. of lbs.	2,423	2,902	2,802	2,747		2,976	2,814					
Price, 150 denier, A grade, N. Y....dollars per lb..	1.30	1.23	1.15	1.15	1.15	1.50	1.50	0.0	-23.3			
Clothing												
Men's and boys' garments cut:												
Suits.....thous. of garments	1,987	2,198	2,202	2,132	1,797	2,315	1,876	-15.7	-4.2	19,444	19,486	+0.2
Separate trousers.....thous. of garments	2,412	2,221	2,307	2,353	2,156	2,222	2,173	-8.4	-0.8	18,883	20,270	+7.3
Overcoats.....thous. of garments	346	507	631	763	763	734	728	0.0	+4.8	4,061	4,444	+9.4
Overalls:												
Cut.....thous. of dozen garments	384	362	380	416	431	394	385	+3.6	+11.9	3,306	3,506	+6.0
Net shipments.....thous. of dozen garments	352	317	361	408	400	360	358	-2.0	+11.7	2,902	3,200	+10.3
Unfilled orders, end of mo.....thous. of dozen garments	194	161	220	144	173	159	161	+20.1	+7.5			
Hosiery												
Production.....thous. of dozen pairs	3,823	3,543	3,068	3,417	3,577	3,474	3,255	+4.7	+9.9	30,562	31,617	+3.5
Net shipments.....thous. of dozen pairs	3,658	3,567	3,075	3,485	4,039	3,735	3,755	+15.9	+7.6	30,488	31,345	+2.8
Stocks, end of month.....thous. of dozen pairs	8,394	8,413	7,943	8,139	7,887	8,656	8,128	-3.1	-3.0			
New orders.....thous. of dozen pairs	4,101	3,513	2,813	3,427	4,025	3,207	3,810	+17.4	+5.6	30,135	31,897	+5.8
Unfilled orders, end of month.....thous. of dozen pairs	5,071	4,841	4,437	4,234	4,139	4,079	3,957	-2.2	+4.6			
Knit Underwear												
Production.....thous. of dozen garments	1,316	1,187	1,091	1,152	1,100	1,098	1,016	-4.5	+8.3	9,776	10,497	+7.4
Net shipments.....thous. of dozen garments	1,168	1,126	1,064	1,382	1,532	1,306	1,402	+10.9	+9.3	9,785	10,493	+7.2
Stocks, end of mo.....thous. of dozen garments	1,679	1,735	1,797	1,689	1,422	1,570	1,370	-15.8	+3.8			
New orders.....thous. of dozen garments	1,088	1,157	891	1,149	1,461	1,236	1,213	+27.2	+20.4	9,699	10,950	+12.9
Unfilled orders, end of month.....thous. of dozen garments	2,349	2,293	2,103	1,870	1,786	1,896	1,696	-4.5	+5.3			
Burlaps and Fibers												
Imports:												
Burlaps.....thous. of lbs.	71,649	51,216	41,526	74,698	33,568	47,766	43,617	-55.1	-23.0	225,091	249,886	+11.0
Fibers (unmanufactured).....long tons	26,300	21,182	20,469	25,048	22,210	20,657	21,004	-11.3	+5.7	505,943	513,838	+1.6
Pyroxylin-Coated Textiles												
Pyroxylin spread.....thous. of lbs.	5,245	4,615	4,331	4,294	3,812	5,596	4,844	-11.2	-21.3	45,293	45,942	+1.4
Shipments billed.....thous. of linear yards	4,563	4,007	3,509	3,540	3,315	4,241	3,914	-6.4	-15.3	35,202	38,300	+8.8
Unfilled orders, end mo.....thous. of linear yards	3,531	2,910	2,805	2,468	2,599	3,853	4,561	+5.3	-43.0			
Cotton Mill Dividends (Quarterly)												
Fall River mills.....thous. of dollars	\$ 225				\$ 226					704	686	-2.6
New Bedford mills.....thous. of dollars	\$ 280				\$ 234					1,172	763	-34.9
Fur												
Sales by dealers.....thous. of dollars	12,522	8,546	8,135	11,335		12,110	10,244			6 97,755	6 99,105	+1.4
Buttons												
Fresh-water pearl buttons:												
Production.....ratio to capacity	51.6	50.1	40.9	45.5	46.6	44.5	547.5	+2.4	-1.9			
Stocks, end of month.....thous. of gross	11,226	11,351	11,170	10,951	10,836	10,667	10,593	-1.1	+2.3			

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
IRON AND STEEL												
Iron												
Manganese ore, imports—thous. of long tons..	29	51	48	33	13	26	15	-60.6	-13.3	147	259	+76.2
Iron ore:												
Imports—thous. of long tons..	276	244	301	298	247	226	211	-17.1	+17.1	1,855	2,315	+24.8
Shipments from mines—thous. of long tons..	9,549	10,174	10,671	10,807	9,547	9,243	8,748	-11.7	+9.1	41,266	53,264	+29.1
Receipts:												
Lake Erie ports and furnaces—thous. of long tons..	6,753	6,985	7,509	7,518	6,619	6,390	5,827	-12.0	+13.6	27,342	36,575	+33.8
Other ports—thous. of long tons..	2,527	2,805	3,127	3,284	2,710	2,819	2,710	-17.5	0.0	12,320	14,840	+20.5
Consumption—thous. of long tons..	5,980	5,677	5,808	5,779	5,362	4,761	4,608	-7.2	+16.4	41,904	49,502	+18.1
Stocks, end of month:												
Total—thous. of long tons..	19,146	23,701	28,697	33,831	38,125	31,754	35,808	+12.7	+6.5			
At furnaces—thous. of long tons..	15,275	19,619	24,245	28,720	32,360	26,036	29,708	+12.7	+8.9			
On Lake Erie docks—thous. of long tons..	3,871	4,082	4,482	5,111	5,765	5,718	6,100	+12.8	-5.5			
Pig-iron production:												
Total, United States—thous. of long tons..	3,898	3,717	3,785	3,756	3,467	3,137	3,062	-7.7	+13.2	27,792	32,648	+17.5
Merchant furnaces—thous. of long tons..	793	717	746	690	649	575	585	-5.9	+10.9	5,612	6,685	+19.1
Canada—thous. of long tons..	81	90	100	120	106	92	91	-11.7	+16.5	746	844	+13.1
Furnaces in blast, end of month:												
Furnaces—number..	219	218	216	210	205	183	197	-2.4	+4.1			
Capacity—long tons per day..	126,150	122,590	121,965	119,130	115,190	98,730	106,755	-3.3	+7.9			
Ohio gray-iron foundries:												
Meltings—												
Actual—long tons..	23,588	21,214	19,508	18,670	20,081	12,932	14,586	+7.6	+37.7	142,395	190,173	+33.6
Normal—long tons..	20,568	19,164	18,535	17,104	19,595	12,497	16,155	+14.6	+21.3	140,949	176,105	+24.9
Ratio to normal—per cent of normal..	114.6	110.6	105.3	109.1	102.5	103.4	90.2	-6.0	+13.6			
Stocks, end of month—per cent of normal..	118	131	131	120	130	129	131	+8.3	-0.8			
Receipts—per cent of normal..	112	105	99	113	100	99	90	-11.5	+11.1			
Malleable castings:												
Production—short tons..	81,704	72,232	70,625	68,651	57,380	68,606	62,665	-16.4	-8.4	586,435	664,772	+13.4
Operating activity—per ct. of capacity..	83.8	75.0	73.5	70.0	59.7	72.1	66.3	-14.7	-10.0			
Shipments—short tons..	80,534	72,378	69,665	69,240	61,492	66,962	61,736	-11.2	-0.4	574,010	663,695	+15.6
New orders—short tons..	76,927	65,247	61,401	61,982	50,464	66,128	61,163	-18.6	-17.5	572,264	638,336	+11.5
Wholesale prices:												
Foundry, No. 2,												
northern—dollars per long ton..	20.26	20.26	20.26	20.26	20.26	18.26	18.64	0.0	+8.7			
Basic (valley furnace)—dollars per long ton..	18.38	18.50	18.50	18.50	18.50	16.00	16.19	0.0	+14.3			
Composite pig iron—dollars per long ton..	19.27	19.35	18.31	19.18	19.00	17.78	18.04	-0.9	+5.3			
Cast-iron Boilers and Radiators												
Round boilers:												
Production—thous. of lbs..	11,212	10,578	5,8,997	5,12,189	11,602	12,881	13,655	-4.8	-15.0	113,904	100,746	-11.6
Shipments—thous. of lbs..	9,682	10,171	5,13,553	5,15,092	18,263	14,422	17,021	+21.0	+7.3	110,298	99,853	-9.5
New orders—thous. of lbs..	9,143	9,059	5,14,490	5,13,916	16,936	12,551	14,504	+21.7	+16.8	112,527	92,910	-17.4
Stocks, end of month—thous. of lbs..	89,104	89,437	5,84,027	5,81,162	74,254	86,141	82,931	-8.5	-10.5			
Square boilers:												
Production—thous. of lbs..	19,410	16,119	5,11,598	5,19,014	20,766	38,693	26,760	+9.2	-22.4	270,371	199,919	-26.1
Shipments—thous. of lbs..	14,946	17,458	5,22,927	5,23,757	34,671	36,212	41,989	+20.6	-17.4	221,533	174,656	-21.2
New orders—thous. of lbs..	15,034	18,421	5,26,039	5,27,242	36,481	31,809	36,527	+33.9	-0.1	220,584	177,654	-22.6
Stocks, end of month—thous. of lbs..	181,998	179,900	5,169,044	5,159,661	145,716	182,367	167,063	-8.7	-12.8			
Radiators:												
Production—thous. sq. ft. heating surface..	10,641	9,364	5,6,756	5,10,365	9,545	15,914	13,770	-7.9	-30.7	129,993	99,372	-23.6
Shipments—thous. sq. ft. heating surface..	7,900	9,226	5,11,729	5,13,665	14,980	16,951	18,092	+9.6	-17.2	105,276	86,782	-17.6
New orders—thous. sq. ft. heating surface..	8,178	9,603	5,13,621	5,14,267	15,680	15,753	16,533	+9.9	-5.2	112,945	91,962	-18.6
Stocks, end of month—thous. sq. ft. heating surface..	74,067	74,189	5,69,277	5,65,792	59,794	77,287	72,902	-9.1	-18.0			
Gas-fired boilers:												
Shipments—dollars..	190,295	285,223	315,696	486,659	549,424	288,954	395,265	+12.9	+39.0	1,908,511	2,575,156	+34.9
Shipments—thous. B. t. u..	149,555	213,780	254,856	365,280	459,124	239,048	322,000	+25.7	+42.6	1,547,525	2,005,352	+29.6
Production—thous. B. t. u..	298,794	271,330	248,993	235,877	306,158	168,547	169,376	+29.8	+80.8	1,440,404	2,277,781	+58.1
Stocks, end of month—thous. B. t. u..	939,481	1,197,768	1,115,865	951,598	886,625	778,337	622,687	-6.9	+42.2			
Crude Steel												
Steel ingots, production:												
United States, total—thous. of long tons..	5,273	4,881	4,838	4,927	4,511	4,179	4,148	-8.4	+8.8	36,930	43,242	+17.1
Ratio to capacity—per cent..	100	100	95	93	92	82	88	-1.1	+4.5			
Canada—thous. of long tons..	126	120	130	120	99	89	100	-17.5	-1.0	921	1,087	+18.0
U. S. Steel Corporation:												
Unfilled orders, end of month—thous. of long tons..	4,304	4,257	4,088	3,658	3,903	3,624	3,698	+6.7	+5.5			
Earnings—thous. of dollars..	5,25,065	24,029				18,597	17,418					
Steel castings:												
Production—												
Total—short tons..	127,189	116,221	117,187	5,120,800	101,800	87,742	75,761	-15.7	+34.4	769,416	1,011,282	+31.4
Ratio to capacity—per cent..	87	80	80	5,83	70	60	51	-15.7	+37.3			
Railroad specialties—short tons..	55,636	54,154	51,989	5,51,400	42,500	27,157	25,311	-17.3	+67.9	284,810	437,670	+53.7
Miscellaneous—short tons..	68,553	62,067	65,198	5,69,400	59,300	60,585	50,450	-14.6	+17.5	484,060	573,612	+18.4
New orders—												
Total—short tons..	113,329	95,201	102,443	5,100,500	83,200	81,286	82,762	-17.2	+0.5	740,308	1,010,077	+36.4
Ratio to capacity—per cent..	78	65	70	5,69	57	55	56	-17.4	+1.8			
Railroad specialties—short tons..	44,919	34,947	37,731	5,36,500	32,450	25,171	35,234	-11.1	-7.9	284,654	446,627	+56.9
Miscellaneous—short tons..	68,410	60,254	64,712	5,64,000	50,750	56,115	47,528	-20.7	+6.8	455,654	563,450	+23.7
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total—net tons..	393,430	337,841	323,905	366,734	302,490	329,396	318,907	-17.5	-5.1	2,918,126	3,181,730	+9.0
Ratio to capacity—per cent..	115.8	110.4	98.1	109.7	97.7	92.8	101.0	-10.9	-3.3			
Stocks end of month—												
Total—net tons..	167,869	163,607	154,854	143,323	154,928	154,461	146,832	+8.1	+5.5			
Unsold—net tons..	48,334	52,274	47,103	34,436	43,886	51,636	44,519	+27.4	-1.4			
Shipments—net tons..	392,336	347,989	344,676	365,649	301,330	324,691	322,876	-17.6	-6.7	2,820,694	3,180,979	+12.8
New orders—net tons..	279,783	307,911	337,222	282,107	274,568	254,397	370,936	-2.7	-26.0	2,780,550	3,171,980	+14.1
Unfilled orders, end of month—net tons..	713,568	676,568	658,155	570,613	522,803	498,023	539,960	-8.4	-3.2			

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>												
IRON AND STEEL—Continued												
Crude Steel—Continued												
Steel barrels:												
Production..... barrels	836,532	774,853	790,175	806,574	668,224	677,313	593,255	-17.2	+12.6	5,627,004	6,515,997	+15.8
Ratio to capacity..... per cent	72.0	61.8	64.2	65.2	54.5	57.8	50.2	-16.4	+8.6			
Shipments..... barrels	834,699	779,567	782,411	809,860	658,583	675,600	595,640	-18.7	+10.6	5,624,451	6,496,121	+15.5
Stocks, end of month..... barrels	56,936	52,222	59,986	56,700	66,341	57,544	55,059	+17.0	+20.5			
Unfilled orders, end of month..... barrels	1,215,972	1,548,999	1,372,697	1,205,659	1,098,650	1,064,358	996,820	-8.9	+10.2			
Track work, production..... short tons	16,333	14,838	13,844	14,818	12,962	11,040	10,767	-12.5	+20.4	110,712	127,061	+14.8
Iron, steel, and heavy hardware sales..... rel. to Jan., 1921	230	220	223	240		215	207					
Lock washers, shipments..... thous. of dolls.	373	397	391	320	298	282	257	-6.9	+16.0	2,383	3,109	+30.5
Wholesale prices:												
Steel billets, Bessemer..... dolls. per long ton	36.00	35.25	35.00	35.00	35.00	32.00	32.00	0.0	+9.4			
Iron and steel comp..... dolls. per long ton	37.10	37.01	36.72	36.57	36.50	34.93	35.17	-0.2	+3.8			
Structural steel beams..... dolls. per 100 lbs	1.95	1.95	1.95	1.95	1.95	1.85	1.85	0.0	+5.4			
Composite finished steel..... dolls. per 100 lbs	2.56	2.56	2.56	2.56	2.54	2.48	2.50	-0.8	+1.6			
Fabricated Steel Products												
Structural steel, fabricated:												
New orders (prorated)..... short tons	342,650	346,500	350,350	365,750	315,700	354,200	319,550	-13.7	-1.2	2,541,000	2,952,950	+16.0
Ratio to capacity..... per cent	89	90	91	95	82	92	83	-13.7	-1.2			
Shipments (prorated)..... short tons	311,850	292,600	304,150	346,500	319,550	288,750	273,350	-7.8	+16.9	2,252,250	2,671,900	+18.6
Ratio to capacity..... per cent	81	76	79	90	83	75	71	-7.8	+16.9			
Steel plate, fabricated, new orders:												
Total..... short tons	47,763	45,918	48,968	39,702	40,432	47,245	40,281	+1.8	+0.4	383,968	412,716	+7.5
Ratio to capacity..... per cent	60	58	62	51	51	60	50	0.0	+2.0			
Oil storage tanks..... short tons	10,087	6,890	14,963	11,150	14,991	24,807	18,572	+34.4	-19.3	171,270	117,258	-31.5
Steel bars, cold finished, shipments..... short tons	58,768	51,181	49,910	46,747	40,889	42,993	43,893	-12.5	-6.8	367,094	473,370	+29.0
Steel boilers, new orders:												
Quantity..... number	1,751	1,685	5,052	5,1,859	1,909	2,018	1,749	+2.7	+0.1	14,866	14,545	-2.2
Area..... thous. of sq. ft.	2,145	1,823	5,075	5,1,781	1,958	1,691	1,453	+9.9	+34.8	13,417	15,557	+15.9
Steel furniture:												
Business group—												
Shipments..... thous. of dolls.	2,784	2,574	2,625	2,483	2,323	2,565	2,754	-6.4	-15.6	25,913	25,415	-1.9
New orders..... thous. of dolls.	2,814	2,522	2,560	2,418	2,279	2,619	2,689	-5.7	-15.2	26,494	25,310	-4.5
Unfilled orders, end mo. thous. of dolls.	2,401	2,320	2,240	2,171	2,068	2,118	2,062	-4.7	+0.3			
Shelving—												
Shipments..... thous. of dolls.	989	920	867	890	689	836	678	-22.6	+1.6	6,636	8,472	+27.7
New orders..... thous. of dolls.	1,121	959	939	931	732	863	800	-21.4	-8.5	6,933	8,943	+28.9
Unfilled orders, end mo. thous. of dolls.	897	934	999	1,041	808	734	754	-22.4	+7.2			
Iron and steel:												
Exports..... long tons	261,516	247,811	270,532	242,856	222,408	287,297	228,056	-8.4	-2.5	2,127,431	2,327,635	+9.4
Imports..... long tons	54,445	46,397	51,275	61,547	46,346	54,062	47,685	-24.7	-2.8	447,362	434,740	-2.8
Enameling Ware												
Baths:												
Shipments..... pieces	94,452	89,388	99,705	101,050	77,374	103,878	86,342	-23.4	-10.4	895,970	774,396	-13.6
Stocks, end of month..... pieces	197,472	181,677	162,694	152,349	152,107	122,167	134,749	-0.2	+12.9			
New orders..... pieces	89,944	82,349	119,670	116,532	58,574	96,876	76,074	-49.7	-23.0	993,702	806,166	-18.9
Unfilled orders, end month..... pieces	49,870	41,644	61,118	74,973	55,984	68,263	53,303	-25.3	+5.0			
Lavatories:												
Shipments..... pieces	104,471	101,900	108,077	125,920	96,488	114,070	94,383	-23.4	+2.2	1,015,145	897,497	-11.6
Stocks, end of month..... pieces	257,245	246,575	223,657	192,213	172,124	161,276	168,211	-10.5	+2.3			
New orders..... pieces	102,187	92,709	140,109	146,983	72,078	102,140	89,126	-51.0	-19.1	1,127,717	946,048	-16.1
Sinks:												
Shipments..... pieces	108,081	102,709	114,051	120,018	103,121	116,497	101,777	-14.1	+1.3	1,042,491	927,640	-11.0
Stocks, end of month..... pieces	313,022	298,739	273,463	254,210	233,452	216,338	216,255	-8.2	+8.0			
New orders..... pieces	111,580	94,446	138,064	142,536	84,040	96,830	99,749	-41.0	-15.7	1,148,750	981,935	-14.5
Miscellaneous sanitary ware:												
Shipments..... pieces	35,616	42,061	44,762	48,554	37,879	54,003	44,910	-22.0	-15.7	433,412	360,739	-16.8
Stocks, end of month..... pieces	145,277	142,411	133,265	126,626	122,951	103,509	95,958	-2.9	+18.8			
New orders..... pieces	33,781	41,817	54,131	53,402	29,312	41,692	44,707	-45.1	-34.4	452,034	377,253	-16.5
Small ware (all except baths):												
Unfilled orders, end of month..... pieces	174,981	154,243	214,996	259,787	207,826	174,072	155,483	-20.0	+33.7			
Enameling sheet-metal ware:												
Shipments..... dozen pieces	352,885	337,375	290,532	385,162		358,811	352,484			6,270,676	6,3,097,404	+11.8
Machinery												
Vacuum cleaners, shipments..... number	116,192	87,951	62,750	92,537		65,164	89,222			629,011	676,804	+21.7
Water softeners, shipments..... units	1,444	1,228	1,177	1,581	1,484	1,402	1,187	-6.1	+25.0	12,631	12,614	-0.1
Water systems, shipments..... units	12,348	13,031	12,267	14,196	12,600	11,248	10,200	-11.2	+23.5	88,600	99,179	+11.9
Pumps:												
Domestic shipments—												
Pitcher, hands..... units	40,915	39,808	539,586	52,451	48,039	50,689	42,538	-8.4	+12.9	427,040	412,750	-3.3
Power, horizontal type..... units	2,528	2,989	2,768	2,902	2,262	2,531	2,017	-22.1	+12.1	19,541	22,628	+15.8
Steam, power, and centrifugal—												
New orders..... thous. of dolls.	1,772	2,014	1,778	1,819	1,625	1,579	1,405	-10.5	+15.9	12,782	16,191	+26.7
Shipments..... thous. of dolls.	1,886	1,715	1,849	1,978	1,774	1,520	1,369	-10.3	+29.6	12,643	15,609	+23.5
Unfilled orders, end mo. thous. of dolls.	4,058	4,364	4,282	4,115	4,052	3,023	3,056	-1.5	+32.6			
Agricultural machinery and equipment:												
Shipments—												
Total..... rel. to 1923-25	225.5	240.1	231.2	229.3	172.6	219.7	179.2	-24.7	-3.6			
Domestic..... rel. to 1923-25	223.9	233.3	224.9	218.4	153.2	187.5	145.7	-29.9	+5.1			
Foreign..... rel. to 1923-25	233.6	275.3	263.8	285.7	272.0	387.5	354.0	-4.8	-23.1			
Production..... rel. to 1923-25	182.5	174.2	167.7	156.4	153.6	146.1	145.5	-1.8	+5.6			
Foundry equipment:												
New orders..... rel. to 1922-24	177.7	177.3	219.3	229.5	216.3	278.0	170.0	-38	+27.2			
Shipments..... rel. to 1922-24	217.0	172.7	182.1	150.8	176.8	154.1	129.7	+17.2	+36.3			
Unfilled orders, end of mo. rel. to 1922-24	323.8	300.8	368.7	441.1	480.8	467.2	529.5	+9.0	-9.2			
Stokers, mechanical, sales:												
Quantity..... number	174	203	186	199	152	162	161	-23.6	-5.6	1,172	1,349	+15.1
Power..... horsepower	60,772	67,322	65,197	54,929	44,485	51,572	65,060	-19.0	-31.6	401,319	457,832	+14.1

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929						1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929		
IRON AND STEEL—Continued													
Machinery—Continued													
Machine tools:													
New orders.....rel. to 1922-24..	334	292	259	298	241	241	265	-19.1	-9.1				
Shipments.....rel. to 1922-24..	301	296	278	277	257	208	205	-7.2	+25.4				
Unfilled orders, end of mo.....rel. to 1922-24..	721	722	694	693	709	428	441	+2.3	+60.8				
Electric hoists:													
New orders—													
Quantity.....number..	541	600	504	437	423	402	447	-3.2	-5.4	3,843	4,891	+27.3	
Value.....dollars..	268,043	283,170	249,447	264,888	230,543	180,365	228,510	-13.0	+0.9	1,790,816	2,428,233	+35.6	
Shipments.....dollars..	262,641	269,978	29,0141	339,881	281,439	193,248	172,986	-17.2	+62.7	1,633,423	2,338,978	+43.2	
Electric overhead cranes:													
Shipments.....thous. of dollars..	1,122	1,091	1,146	1,060	1,048	564	464	-1.1	+125.9	4,996	8,426	+68.7	
New orders.....thous. of dollars..	1,457	1,189	1,157	1,165	701	821	713	-39.8	-1.7	5,539	11,338	+104.7	
Unfilled orders, end of mo.....thous. of dollars..	4,786	5,047	5,118	5,193	4,879	1,952	2,188	-6.0	+123.0				
Woodworking machinery:													
New orders.....thous. of dollars..	1,620	1,678	1,691	1,748	1,297	1,641	1,639	-25.8	-20.9	12,721	15,444	+21.4	
Shipments.....thous. of dollars..	1,786	1,612	1,767	1,974	1,555	1,436	1,413	-21.2	+10.0	11,695	15,294	+30.8	
Shipments.....number of machines..	1,231	1,056	1,232	1,386	1,129	1,170	1,050	-18.5	+7.5	8,910	10,634	+19.3	
Cancellations.....thous. of dollars..	40	27	18	25	15	6	26	-40.0	-42.3	227	291	+28.2	
Unfilled orders, end of mo.....thous. of dollars..	2,406	2,445	2,369	2,130	1,829	2,058	2,265	-14.1	-19.2				
Electric industrial trucks and tractors:													
Shipments, domestic—													
Tractors.....number of vehicles..	28	17	18	15	21	5	11	+40.0	+90.9	82	139	+69.5	
All other types.....number of vehicles..	174	168	145	129	133	85	102	+3.1	+30.4	863	1,355	+57.0	
Exports.....number of vehicles..	9	16	5	10	7	6	5	-30.0	+40.0	102	92	-9.8	
Fire-extinguishing equipments, shipments:													
Motor vehicles.....number..	118	120	132	115	125	125	143	+8.7	-12.6	950	991	+4.3	
Hand types.....number..	54,420	51,929	62,266	63,806	51,197	47,490	42,193	-19.8	+21.3	424,639	490,601	+15.5	
Patents issued:													
Total, all classes.....number..	3,861	3,591	4,054	3,533	3,081	3,390	3,039	-12.8	+1.4	31,249	32,706	+4.7	
Agricultural implements.....number..	62	51	53	51	29	40	0	0.0	+27.5	364	460	+26.4	
Internal-combustion engines.....number..	50	39	92	55	44	43	42	-20.0	+4.8	456	483	+5.9	
NONFERROUS METALS													
Copper													
Production:													
Mines.....short tons..	93,392	82,354	79,229	78,885	78,669	76,952	78,341	-0.3	+0.4	651,612	772,189	+18.5	
Smelter.....short tons..	108,961	95,339	94,690	91,735	92,538	88,517	85,795	+0.9	+7.9	752,851	897,214	+19.2	
Refined (N. and S. America).....short tons..	161,784	156,447	153,513	148,648	134,343	143,560	137,018	-9.6	-2.0	1,175,297	1,375,438	+17.0	
World production, blister.....short tons..	192,589	174,586	174,347	174,329	174,853	161,838	157,518	+0.3	+11.0	1,376,795	1,626,189	+18.1	
Domestic shipments, refined.....short tons..	93,743	95,258	98,720	96,970	98,043	83,398	88,707	+1.1	+10.5	698,378	886,551	+26.9	
Exports.....short tons..	36,949	40,852	33,876	36,811	42,978	41,186	36,190	+16.8	+18.8	421,212	383,472	-9.0	
Stocks (North and South America), end mo:													
Refined.....short tons..	70,412	83,140	97,729	104,372	94,751	54,793	51,812	-9.2	+82.9				
Blister.....short tons..	262,229	251,489	239,470	241,678	252,685	238,923	239,142	+4.6	+5.7				
Wholesale price, electrolytic.....dollars per lb..	.1778	.1778	.1778	.1778	.1778	.1453	.1472	0.0	+20.8				
Wire Cloth													
Production.....thous. of sq. ft..	536	456	438	498	373	430	403	-25.1	-7.4	3,912	4,155	+6.2	
Shipments.....thous. of sq. ft..	518	404	461	434	394	387	423	-9.2	-6.9	3,681	3,808	+3.5	
Stocks, end of month.....thous. of sq. ft..	1,120	1,084	1,049	978	928	1,120	1,099	-5.1	-15.6				
New orders.....thous. of sq. ft..	202	244	345	302	333	408	412	+10.3	-19.2	3,459	3,691	+6.7	
Unfilled orders, end of mo.....thous. of sq. ft..	495	249	405	211	242	285	320	+14.7	-24.4				
Make and hold orders, end of month.....thous. of sq. ft..	618	568	507	480	435	457	453	-9.4	-4.0				
Tin													
Deliveries (consumption).....long tons..	8,480	7,455	6,855	7,185	8,120	7,200	6,885	+13.0	+17.9	58,090	70,260	+21.0	
Stocks, end of month:													
World visible supply.....long tons..	24,765	23,751	23,789	26,400	24,556	18,456	19,924	-7.0	+23.2				
United States.....long tons..	3,484	3,820	3,087	2,858	2,479	1,718	3,508	-13.3	-29.3				
Imports.....long tons..	8,902	7,150	5,521	9,737	7,712	6,584	8,187	-20.8	-5.8	58,416	72,118	+23.5	
Wholesale price, Straits, N. Y.....dollars per lb..	.4392	.4426	.4640	.4665	.4538	.4808	.4807	-2.7	-5.6				
Zinc													
Retorts in operation, end of month.....number..	73,231	72,087	72,329	58,800	68,828	66,428	61,965	+17.1	+11.1				
Per cent of total.....per cent..	61.1	60.2	60.1	49.2	57.4	57.4	53.4	+16.7	+7.5				
Production.....short tons..	56,958	52,953	54,441	55,290	53,285	52,157	49,361	-3.6	+7.9	468,485	480,914	+2.7	
Stocks, end of month.....short tons..	33,826	36,932	44,142	47,833	53,363	44,416	47,915	+11.6	+11.4				
Ore, Joplin district:													
Shipments.....short tons..	37,961	60,119	48,995	63,127	45,084	43,466	41,429	-28.6	+8.8	427,663	481,938	+12.7	
Stocks, mines, end of month.....short tons..	40,957	47,458	39,813	42,876	43,832	39,303	48,474	+2.2	-9.6				
Price, slab, prime western.....dollars per lb..	.0662	.0669	.0677	.0680	.0680	.0625	.0625	0.0	+8.8				
Lead													
Production.....short tons..	62,119	57,579	56,924	53,316	56,879	53,403	55,167	+6.7	+3.1	477,766	515,452	+7.9	
Ore shipments:													
Joplin district.....short tons..	8,424	8,491	5,373	7,808	7,461	6,125	9,326	-4.4	-20.0	68,693	77,527	+12.9	
Utah.....short tons..	96,688	76,003	66,083	92,668	75,927	78,811	65,353	-18.1	+16.2	622,997	727,761	+16.8	
Receipts in U. S. ore.....short tons..	58,140	53,542	54,865	54,365	53,363	53,575	51,978			642,136	640,393	+4.6	
Stocks, U. S. and Mexico, end mo.....short tons..	162,255	173,612	173,549	175,641	156,976	155,482							
Price, pig, desilverized, N. Y.....dollars per lb..	.0700	.0700	.0675	.0689	.0625	.0645	+2.1	+6.8					
Other Metal Products													
Babbitt metal, consumption:													
Total apparent.....thous. of lbs..	5,479	5,928	5,361	5,433	5,225	4,756	5,308	-3.8	-1.6	43,265	51,751	+19.6	
Direct by producers.....thous. of lbs..	1,230	1,107	1,313	1,435	1,337	939	999	-6.8	+33.8	9,036	11,199	+23.9	
Sale to consumers.....thous. of lbs..	4,249	4,821	4,048	3,997	3,888	3,817	4,309	-2.7	-9.8	34,228	40,553	+18.5	
Band instruments, shipments:													
Total.....dollars..	5,275,234	5,263,237	5,228,226	269,807		5,268,453	5,379,357			6,236,315	6,218,974	-7.6	
Cup mouthpieces.....dollars..	120,003	119,045	89,130	117,562		5,115,991	5,150,872			6,905,631	8,897,224	-0.9	
Saxophone.....dollars..	5,126,384	5,112,249	5,107,976	119,923		5,135,278	5,185,522			6,126,724	6,107,279	-19.4	
Wood wind.....dollars..	28,847	31,943	31,120	32,322		17,184	42,963			6,192,960	6,268,471	+39.1	
Pails and tubs, galvanized:													
Production.....dozens..	176,622	98,857	105,454	107,004		127,797	150,845			6,1, 246,252	6,1, 166,469	-6.4	
Shipments.....dozens..	150,501	104											

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
						August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
	May	June	July	August	September	August	September					
NONFERROUS METALS—Continued												
Other Metal Products—Continued												
Other galvanized ware:												
Production—dozens.	43,370	.37,479	42,384	53,250		37,846	55,850			6 333,514	6 383,436	+15.0
Shipments—dozens.	38,597	35,334	44,117	54,860		44,377	50,606			6 318,640	6 358,314	+12.5
Electrical porcelain, shipments:												
Standard—dollars.	110,326	101,013	139,240	97,631	135,487	111,803	112,210	+38.8	+20.7	718,634	1,042,583	+45.1
Special—dollars.	159,785	174,704	168,066	165,385	171,668	129,813	129,587	+3.8	+32.5	1,127,984	1,444,120	+28.0
High tension—dollars.	670,579	667,099	632,172			649,599	493,067					
Glazed nail knobs—thous. of pieces.	4,160	3,794	3,301	2,794	4,146	4,328	4,213	+48.4	-1.6	26,697	38,813	+45.4
Un glazed nail knobs—thous. of pieces.	3,202	1,998	2,426	1,968	2,250	2,401	2,796	+14.3	-19.5	14,663	21,887	+49.3
Tubes—thous. of pieces.	2,025	1,746	3,330	1,870	1,729	2,542	2,694	-7.5	-35.8	14,929	16,804	+12.6
Laminated phenolic products, shipments—dollars.	1,477,523	1,456,335	1,732,023	1,915,381		1,356,179	1,243,476			6 7,471,634	11,910,629	+59.4
Motors:												
New orders—dollars.	854,349	1,098,864	811,575	1,082,845		920,083	957,093			6 6,384,377	6 7,797,931	+22.1
Billings, (shipments)—dollars.	1,038,218	883,821	854,986	853,961		894,690	781,472			6 6,020,178	6 7,761,202	+12.3
Power switching equipment:												
New orders—												
Indoor—dollars.	246,171	133,418	208,495	169,384		148,156	118,301			6 1,163,857	6 1,403,986	+20.6
Outdoor—dollars.	460,749	598,645	520,058	605,273		413,435	231,502			6 3,201,815	6 3,802,728	+18.8
Outlet boxes and covers, shipments—pieces.	2,931,583	2,114,582	2,587,786	2,719,688		3,049,567	2,915,560			6 21,900,267	6 21,489,95	-1.9
Vulcanized fiber:												
Shipments, total—thous. of dolls.	827	814	878	1,029		591	568			6 5,071	6 6,714	+32.4
Consumption—thous. of lbs.	3,693	3,470	3,489	3,808		2,805	2,362			6 22,063	6 27,110	+22.8
Industrial reflectors, sales—units.	153,716	130,413	124,466	157,473		122,124	126,151			6 965,644	6 1,114,104	+15.4
Power cables, shipments—thous. of ft.	1,936	2,112	2,366	2,411	2,676	2,138	2,197	+11.0	+21.8	17,101	10,531	+14.2
Flexible cords:												
Shipments—thous. of ft.	48,324	40,588	45,114	50,538		51,062	43,854			6 320,154	6 377,599	+17.9
Stocks, end of month—thous. of ft.	55,771	66,831	58,486	57,202		47,351	44,193					
Welding sets, new orders:												
Single operator—units.	387	296	282	296		228	234			6 1,790	6 2,684	+49.9
Multiple operator—units.	8	9	5	7		8	7			6 118	6 58	-50.8
Panel boards and cabinets, shipments (quarterly)—thous. of dolls.	7,1,288	8,1,192					8,1,357					
Nonmetallic conduits, shipments—thous. of ft.	8,242	6,684	7,320	6,364		6,960	7,376			6 60,887	6 54,359	-10.7
Electric furnaces, new orders—kilowatts.	6,562	6,237	6,932	5,114	4,105	6,493	4,226	-19.7	-2.9	44,133	73,571	+66.7
Manufactured mica:												
Shipments—thous. of dolls.	303	252	254	274	263	283	247	-4.0	+6.5			
Unfilled orders, end of mo. thous. of dolls.	302	294	326	275	235	290	285	-14.5	-17.5			
Delinquent accounts, electrical trade:												
Amount—dollars.	189,067	168,724	146,166	174,438	128,059	165,138	5 140,637	-26.6	-8.9			
Delinquent firms—number.	1,235	1,223	1,027	1,176	1,117	1,367	5 1,220	-5.0	-8.4			
AUTOMOBILES												
Production:												
United States—												
Total—number of cars.	5 604,078	5 545,353	5 500,387	5 498,361	415,332	461,298	415,314	-16.7	0.0	3,470,219	4,637,471	+33.6
Passenger cars—number of cars.	516,055	542,598	426,137	441,942	304,786	400,124	358,615	-17.5	+1.7	3,059,938	4,005,177	+30.9
Taxis—number of cars.	1,318	1,378	1,054	1,040	865	469	276	-16.8	+213.4	4,318	13,592	+214.8
Trucks—number of cars.	5 80,705	5 91,377	5 73,196	5 55,379	49,681	60,705	56,423	-10.3	-11.9	405,963	618,702	+52.4
Canada—												
Total—number of cars.	31,559	21,492	17,461	14,214	13,817	31,245	21,193	-2.8	-34.8	202,652	233,853	+15.4
Passenger cars—number of cars.	25,129	16,511	13,600	11,037	10,710	24,274	16,572	-3.0	-35.4	168,837	186,960	+10.7
Trucks—number of cars.	6,430	4,981	3,861	3,177	3,107	6,971	4,621	-2.2	-32.8	33,815	46,893	+38.7
Exports (assembled):												
From United States—												
Total—number of cars.	39,913	50,976	55,545	42,829	33,919	49,007	30,559	-20.8	+11.0	384,574	456,724	+18.8
Passenger cars—number of cars.	28,417	34,106	29,082	22,123	20,934	32,815	22,494	-5.4	-6.9	288,493	293,782	+1.8
Trucks—number of cars.	11,496	16,870	26,463	20,706	12,985	8,065	37.3	+61.0		96,081	162,942	+69.6
From Canada—												
Total—number of cars.	9,561	8,219	7,319	7,629	6,641	11,011	8,670	-13.0	-23.4	54,614	81,303	+48.9
Passenger cars—number of cars.	5,727	5,346	4,732	4,901	4,293	7,985	6,279	-12.4	-31.6	39,860	52,691	+32.2
Trucks—number of cars.	3,834	2,873	2,587	2,728	2,348	3,026	2,391	-13.9	-1.8	14,754	28,612	+93.9
Shipments (General Motors Co.):												
To dealers—number of cars.	220,277	200,754	189,428	168,185	146,483	186,653	167,460	-12.9	-12.5	1,606,902	1,675,964	+4.3
To users—number of cars.	214,870	194,705	181,851	173,884	145,171	187,463	148,784	-16.5	-2.4	1,576,708	1,581,960	+0.3
Accessories and parts:												
Shipments—												
Original equipment—rel. to Jan., 1925.	278	231	205	193	186	230	218	-3.6	-14.7			
Replacement parts—rel. to Jan., 1925.	169	150	152	169	173	176	185	+2.4	-6.5			
Accessories—rel. to Jan., 1925.	91	90	92	88	84	147	122	-4.5	-31.1			
Service parts—rel. to Jan., 1925.	200	186	170	170	147	148	140	-13.5	+5.0			
Rim production—thous. of rims.	2,574	2,184	1,897	1,570	2,110	2,319	2,316	+34.4	-8.9	19,815	19,778	-0.2
New passenger-car registrations:												
Total—number of cars.	453,981	386,441	432,609	376,882	304,359	329,674	5 271,821	-19.2	+12.0	2,482,021	3,209,051	+31.7
Highest price group—number of cars.	14,977	11,447	11,240	12,326	11,463	11,482	11,600	-7.0	-1.2	101,011	102,404	+1.4
Second highest group—number of cars.	67,815	57,915	64,768	67,177	52,325	76,537	60,475	-22.1	-13.5	529,917	513,477	-3.1
Third highest group—number of cars.	103,859	85,913	87,685	86,834	52,424	80,114	56,432	-21.6	-18.5	728,105	692,736	-4.2
Lowest price group—number of cars.	266,891	230,801	267,878	230,023	187,846	160,596	154,688	-18.3	+39.5	1,117,339	1,055,745	+75.0
Miscellaneous—number of cars.	439	365	1,038	522	301	945	5 732	-42.3	-58.9	10,649	4,689	-56.0
FUELS												
Coal and Coke												
Bituminous:												
Production:												
United States—thous. of short tons.	40,172	38,073	40,635	43,859	44,515	5 41,774	5 41,971	+1.4	+6.1	358,698	382,246	+6.6
Canada—thous. of short tons.	1,338	1,348	1,290	1,344	1,552	5 1,412				6 11,162	6 11,281	+1.1
Exports—thous. of long tons.	1,402	1,721	1,735	1,441	1,631	1,618	1,577	+13.2	+3.4	10,235	11,575	+13.1
Consumption—												
By vessels—thous. of long tons.	338	314	351	339	347	356	313	+2.4	+10.9	2,866	2,765	-3.5
By electric power plants—thous. of short tons.	3,370	3,403	3,598	3,866		3,438	5 3,418			6 26,498	6 29,087	+9.8
By railroads—thous. of short tons.	7,630	7,071	7,155	7,500		5 7,409	7,627			6 60,679	6 61,801	+1.8
By coke plants—												
United States—thous. of short tons.	7,658	7,442	7,588	7,571	7,153	6,194	6,180	-5.5	+15.7	55,986	65,668	+17.3
Canada—thous.												

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
FUELS—Continued												
Coal and Coke—Continued												
Bituminous—Continued.												
Prices—												
Mine aver. (spot) dollars per short ton—	1.68	1.67	1.67	\$ 1.77	1.82	1.74	1.81	+2.8	+0.5			
Wholesale, comp. dollars per short ton—	3.908	3.905	3.906	3.913	3.930	4.009	4.019	+0.4	-2.2			
Retail, composite dollars per short ton—	8.52	8.50	8.62	8.69	8.87	8.74	8.84	+2.1	+0.3			
Anthracite:												
Production—thous. of short tons—	6,308	5,069	4,993	5,954	6,792	6,759	\$ 5,927	+14.1	+14.6	53,512	54,608	+2.0
Exports—thous. of long tons—	246	189	203	222	323	278	265	+45.5	+21.9	2,010	2,066	+2.8
Prices—												
Wholesale, comp. dollars per long ton—	12,539	12,628	12,754	12,843	12,924	12,853	13,040	+0.6	-0.9			
Retail, composite dollars per short ton—	14.40	14.48	14.63	14.67	14.87	14.76	14.93	+1.4	-0.4			
Coke:												
Production, U. S.—												
Beehive—thous. of short tons—	597	602	600	\$ 562	507	295	\$ 322	-9.9	+57.5	3,167	4,786	+51.1
By-product—thous. of short tons—	4,664	4,510	4,614	4,643	4,413	3,995	3,959	-5.0	+11.5	35,536	40,364	+13.6
Production, Canada—thous. of short tons—	231	221	225	227		191	194			61,486	61,775	+19.4
Exports—thous. of long tons—	83	92	84	86	98	70	77	+14.0	+27.0	661	770	+16.5
Price, furnace, Connellsburg—dollars per short ton—	2.80	2.80	2.80	2.76	2.70	2.88	2.88	-2.2	-6.3			
Petroleum												
Crude petroleum:												
Production—thous. of bbls—	84,415	83,403	91,327	92,288	87,269	77,807	\$ 76,474	-5.4	+14.1	666,097	758,999	+13.9
Stocks at end of month—												
Total (comparable)—thous. of bbls—	379,542	379,089	383,343	386,677	388,662	368,707	\$ 366,720	0.0	+5.4			
Tank farms and pipe lines—thous. of bbls—	330,984	331,786	335,232	339,679	341,557	326,290	\$ 326,123	+0.6	+4.7			
Refineries—thous. of bbls—	48,558	47,303	48,111	46,998	45,105	42,417	\$ 40,597	-4.0	+11.1			
California—												
Light—thous. of bbls—	29,934	32,667	34,430	37,685	40,433	18,310	16,870	+7.3	+139.7			
Heavy—thous. of bbls—	102,177	103,660	105,646	108,362	110,010	95,057	96,563	+1.5	+13.0			
Imports—thous. of bbls—	7,552	6,591	6,122	5,800	6,953	6,141	\$ 7,140	+19.9	-2.6	59,350	62,727	+5.7
Consumption (run to stills)—thous. of bbls—	84,420	84,400	85,019	86,733	84,699	81,581	\$ 79,894	-3.0	+5.3	676,963	737,594	+9.0
Refinery operation—per ct. of capacity—	81	83	81	81	80	83	84	-1.2	-4.8			
Price, Kansas-Oklahoma—dollars per bbl—	1,158	1,300	1,300	1,300	1,300	1,210	1,210	0.0	+7.4			
Oil wells completed—number—	1,191	1,316	1,420	1,671	1,440	1,233	\$ 1,185	-13.8	+21.5	9,063	11,610	+28.1
Mexico—												
Production—thous. of bbls—	3,635	3,648	3,906	4,931		4,047	3,716			\$ 35,052	\$ 28,955	-17.4
Exports—thous. of bbls—	2,923	2,961	2,483	2,511		2,212	2,244			\$ 24,640	\$ 18,300	-25.7
Venezuela—												
Production—thous. of bbls—	12,038	12,101	10,793	11,394	11,338	9,031	9,478	-0.5	+19.6	74,018	101,556	+37.2
Exports—thous. of bbls—	10,275	10,564	10,731	10,897	10,146	8,933	8,615	-6.9	+17.8	71,664	90,726	+26.6
Gasoline:												
Production—												
Raw (at refineries)—thous. of bbls—	36,270	35,666	37,855	38,510	37,152	33,937	\$ 33,670	-3.5	+10.3	275,531	320,095	+16.2
Natural gas (at plants)—thous. of bbls—	4,343	4,250	4,417	4,507	4,574	3,438	\$ 3,488	+1.5	+31.1	30,897	38,398	+24.3
Exports—thous. of bbls—	5,233	5,655	5,925	5,491	4,233	4,452	4,676	-22.9	-9.5	39,414	43,944	+11.5
Consumption—thous. of bbls—	34,117	33,163	36,360	37,759	34,193	33,173	\$ 29,766	-9.4	+14.9	245,276	280,984	+14.6
Stocks, end of month—												
Raw (at refineries)—thous. of bbls—	44,648	41,991	37,880	33,783	33,222	27,075	\$ 26,378	-1.7	+25.9			
Natural gas (at plants)—thous. of bbls—	1,391	1,357	1,156	893	661	414	436	-26.0	+57.6			
Retail distribution, 41 States—thous. of gals—	934,284	944,989	\$ 1,025,073	1,008,569		983,898	919,055			\$ 6,393,924	\$ 6,818,715	+6.6
Prices—												
Wholesale, New York—dollars per gal—	.190	.190	.190	.188	.160	.180	.180	-11.7	-7.8			
Retail, wagon, 50 cities—dollars per gal—	.157	.160	.158	.157		.160	.163					
Kerosene:												
Production—thous. of bbls—	4,902	4,928	4,406	5,111	4,667	5,339	\$ 4,930	-8.7	-5.9	44,505	42,098	-5.4
Exports—thous. of bbls—	1,454	1,761	1,281	2,634	1,101	1,653	2,058	-45.9	-46.8	16,787	14,601	-13.0
Consumption—thous. of bbls—	3,200	2,547	2,684	3,189	3,387	3,246	\$ 3,164	+6.2	+7.0	26,802	27,614	+3.0
Stocks at refineries, end mo.—thous. of bbls—	7,742	8,343	8,797	8,689	8,864	8,887	\$ 8,593	+2.0	+3.2			
Retail distribution, 13 States—thous. of bbls—	34,388	31,266	35,213			38,048	39,713					
Price, 150° water white—dollars per gal—	.080	.074	.069	.068	.070	.072	.086	+2.9	-18.6			
Gas and fuel oils:												
Production—thous. of bbls—	33,570	37,338	37,980	39,011	37,468	37,517	\$ 37,104	-4.0	+1.0	316,844	336,525	+6.2
Consumption—												
By vessels—thous. of bbls—	4,704	4,544	4,593	4,734	4,424	4,564	4,053	-6.5	+9.2	38,245	39,528	+3.4
By electric pow. plants—thous. of bbls—	600	616	702	785		614	612					
By railroads—thous. of bbls—	4,259	4,170	4,477	4,326		54,054	4,363			\$ 32,157	\$ 34,716	+8.0
Stocks at refineries, end mo.—thous. of bbls—	35,636	37,332	40,075	39,316	40,646	39,236	39,900	+3.4	+1.9			
Price, Okla. 24-26, refineries—dollars per bbl—	.631	.675	.695			.650	.650					
Lubricating oil:												
Production—thous. of bbls—	3,005	2,928	2,936	3,143	2,852	2,891	2,833	-9.3	+0.7	25,936	26,154	+0.8
Consumption—thous. of bbls—	2,322	2,446	2,167	2,268	2,054	2,035	\$ 1,995	-9.4	+3.0	17,553	18,552	+5.7
Stocks at refineries, end mo.—thous. of bbls—	8,370	8,869	7,524	7,478	7,589	7,711	7,742	+1.5	-2.0			
Price, cylinder oil—dollars per gal—	.405	.400	.388	.238	.869	.229	.236	+55.0	+56.4			
Asphalt:												
Production—thous. of short tons—	315	327	386	379	365	316	306	-3.7	+19.3	2,564	2,679	+4.5
Stocks, end of month—thous. of short tons—	236	247	243	247	231	247	203	-6.5	+13.8			
Imports—thous. of short tons—	4	13	3	18	11	13	4	-38.9	+175.0	69	77	+11.6
Coke:												
Production—thous. of short tons—	142	154	158	169	161	136	119	-4.7	+35.3	1,037	1,309	+26.2
Stocks, end of month—thous. of short tons—	471	498	504	608	649	402	402	+6.7	+61.4			
Wax:												
Production—thous. of lbs—	53,783	52,714	46,171	53,377	44,513	54,429	50,428	-16.6	-11.7	464,248	473,818	+2.1
Stocks, end of month—thous. of lbs—	179,139	188,764	191,298	190,878	183,714	79,622	\$ 85,417	-3.8	+115.1			
RUBBER												
Crude Rubber												
World shipments, plantation—long tons—	66,345	61,390	71,562	70,532		58,345	48,338			\$ 375,706	\$ 568,508	+51.3
Imports (including latex)—long tons—	51,186	41,828	44,338	37,851	34,814	31,204	39,838	-8.0	-12.6	312,441	438,229	+40.3
Consumption by tire mfrs.—thous. of lbs—	66,028	56,851	52,249			62,224	55,351					
Consumption (quarterly):												
Total—long tons—		\$ 128,149					\$ 108,167					
For tires—long tons—		\$ 111,068					\$ 93,173					

* Revised.

* Cumulative through Aug. 31.

* Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
RUBBER—Continued												
Crude Rubber—Continued												
Stocks, end of quarter:												
Total long tons	\$ 95,519							\$ 68,729				
Manufactures long tons	\$ 70,598							\$ 54,428				
Dealers long tons	\$ 24,924							\$ 14,301				
Afloat long tons	\$ 42,719							\$ 43,492				
World stocks, end of month:												
World total long tons	252,867	245,553	255,247	259,583		201,078	198,481					
United States long tons	97,192	92,062	95,532	90,769	84,362	68,995	68,851					
Europe long tons	37,143	37,135	37,168	44,795		35,755	35,243					
Producing countries long tons	35,242	36,336	39,131	36,803		21,328	17,687					
Afloat	83,290	80,020	83,412	87,217		74,500	76,700					
Wholesale price, smoked sheets, New York dollars per pound	.214	.206	.213	.206	.202	.193	.182	-1.9	+11.0			
Tires and Tubes												
Pneumatic tires:												
Production thousands	6,109	5,478	4,856	4,167	3,557	5,607	5,101	-19.6	-30.3	44,284	45,045	+3.7
Stocks, end of month thousands	13,386	13,468	11,872	10,394	9,635	7,539	7,324	-7.3	+31.6			
Shipments												
Domestic thousands	5,185	5,288	5,891	5,544	4,343	6,131	5,191	-21.7	-16.3	42,945	44,768	+4.2
Export thousands	204	153	168	175	158	179	168	-9.7	-6.0	1,380	1,774	+28.6
Inner tubes:												
Production thousands	5,745	5,234	4,634	4,428	4,113	6,264	5,327	-7.1	-22.8	46,892	45,445	-3.1
Stocks, end of month thousands	14,196	14,056	14,055	10,338	9,923	10,466	10,158	-4.0	-2.3			
Shipments												
Domestic thousands	5,146	5,115	5,993	6,113	4,624	6,886	5,245	-24.4	-11.8	45,352	46,186	+1.8
Export thousands	133	98	91	110	117	132	121	+6.4	+3.3	896	1,169	+30.5
Solid and cushion:												
Production thousands	40	40	39	33	27	52	43	-18.2	-37.2	399	309	-22.6
Stocks, end of month thousands	135	133	129	120	113	149	151	-5.8	-25.2			
Shipments												
Domestic thousands	40	38	39	41	35	49	42	-14.6	-16.7	373	333	-10.7
Exports thousands	3	3	2	2	2	5	2	0.0	0.0			
Other Rubber Products												
Reclaimed rubber (quarterly):												
Production long tons	\$ 57,760							\$ 52,823				
Stocks, end of quarter long tons	\$ 16,446							\$ 14,963				
Scrap rubber (quarterly):												
Stocks at reclaimers long tons	\$ 61,429							\$ 61,016				
Consumption by reclaimers long tons	\$ 74,292							\$ 66,298				
Rubber-proofed fabrics, production:												
Total thous. of yds.	4,860	4,409	4,260	5,085		4,613	4,966			\$ 24,068	\$ 32,422	+34.7
Auto fabrics thous. of yds.	919	1,199	1,188	1,349	1,120	764	780	-17.0	+43.6	7,214	9,067	+25.7
All other thous. of yds.	1,554	1,262	1,208	1,317		1,251	1,007			6,621	10,131	+53.0
Raincoat fabrics thous. of yds.	2,387	1,948	1,864	2,419		2,598	3,179			6,11,013	6,14,344	+30.2
Rubber heels:												
Production thous. of pairs	19,541	20,007	19,315	23,095		21,289	21,451			\$ 157,290	\$ 155,304	-1.2
Shipments												
To shoe manufacturers thous. of pairs	12,552	12,262	13,785	14,942		11,642	9,207			\$ 82,085	\$ 96,430	+17.5
To repair trade thous. of pairs	7,604	8,256	6,337	8,025		9,244	9,199			61,845	65,199	+5.9
For export thous. of pairs	1,054	926	794	1,098		729	875			6,842	6,8,654	+26.5
Stocks, end of month thous. of pairs	44,969	44,581	44,243	43,960		49,511	49,751			(*)		
Rubber soles:												
Production thous. of pairs	2,916	2,502	1,295	2,948		3,461	2,725			6,27,203	6,21,753	-20.0
Shipments												
To shoe manufacturers thous. of pairs	2,361	2,185	1,272	2,548		2,209	1,703			6,15,484	6,17,346	+12.0
To repair trade thous. of pairs	635	522	163	517		917	893			6,7,449	6,4,781	-35.8
For export thous. of pairs	32	17	70	78		46	29			6,1,889	6,434	-77.0
Stocks, end of month thous. of pairs	3,997	3,843	2,895	3,319		5,633	5,501					
Mechanical rubber goods:												
Shipments												
Total thous. of dolls.	7,188	6,792	6,306	6,792		6,306	5,393			6,47,402	6,53,294	+12.4
Beltling thous. of dolls.	1,798	1,613	1,645	1,940		1,888	1,412			6,11,698	6,12,928	+10.5
Hose thous. of dolls.	2,643	2,658	2,355	2,196		2,068	1,731			6,18,041	6,19,964	+10.7
All other thous. of dolls.	2,748	2,521	2,305	2,656		2,360	2,250			6,17,702	6,20,403	+15.3
Rubber bands, shipments thous. of lbs.	205	187	192	196	189	193	186	-3.6	+1.6	1,719	1,947	+13.3
Rubber flooring, shipments thous. of sq. ft.	733	525	566	598	630	583	754	+5.4	-16.4	5,260	5,101	-3.0
Calendered rubber clothing:												
Production no coats and sundries	100,706	87,530	89,871	96,281		74,509	92,588			6,819,751	6,661,276	-19.3
Net orders no coats and sundries	78,972	98,444	60,921	37,906		64,695	108,156			6,525,400	6,473,423	-9.9
HIDES AND LEATHER												
Hides												
Imports:												
Total hides and skins thous. of lbs.	38,643	41,509	49,910	47,956	51,903	47,056	34,448	+8.2	+50.7	414,820	374,087	-9.8
Calfskins thous. of lbs.	5,096	6,559	5,636	4,900	3,178	4,053	2,707	-35.1	+17.4	34,041	34,769	+2.1
Cattle hides thous. of lbs.	14,122	17,450	24,259	28,137	29,132	26,540	18,504	+3.5	+57.4	234,377	183,067	-21.9
Goatskins thous. of lbs.	9,882	8,309	9,361	7,692	8,893	7,951	6,728	+15.6	+32.2	70,462	77,526	+10.0
Sheepskins thous. of lbs.	6,301	6,824	6,849	4,405	7,336	6,773	4,902	+66.5	+49.7	50,847	51,858	+2.0
Stocks, end of month:												
Total hides and skins thous. of lbs.	246,330	250,025	248,549	253,415		243,591	249,272					
Cattle hides thous. of lbs.	201,176	196,202	194,453	202,564		197,086	203,227					
Calf and kid skins thous. of lbs.	26,068	32,525	30,951	28,141		25,758	24,059					
Sheep and lamb skins thous. of lbs.	19,086	21,298	23,145	22,710		20,747	21,986					
Prices:												
Green salted, packers' heavy native steers dolls. per lb.	149	168	181	188	196	.236	.246	+4.3	-20.3			
Calfskins, country, No. 1 dolls. per lb.	.179	.186	.199	.198	.204	.275	.275	+3.0	-25.8			
Inspected slaughter of livestock:												
United States:												
Cattle thous. of animals	676	636	706	726	753	717	764	+3.7	-1.4	6,237	6,096	-2.3
Calves thous. of animals	427	344	363	388	365	369	352	-5.9	+3.7	3,556	3,436	-3.4
Swine thous. of animals	3,798	3,756	3,597	3,130	3,104	2,545	2,508	-0.8	+23.8	35,764	35,007	-2.1
Sheep thous. of animals	1,202	1,108	1,255	1,298	1,317	1,196	1,307	+1.5	+0.8	9,836	10,408	+5.8

* Cumulative through Aug. 31.

* Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
HIDES AND LEATHER —Continued												
Hides —Continued												
Inspected slaughter of livestock—Continued.												
Canada—												
Cattle and calves—thous. of animals—	110	93	105	99	98	105	96	-1.0	+2.1	827	812	-1.8
Swine—thous. of animals—	187	161	159	160	142	140	161	-11.2	-11.8	1,877	1,690	-10.0
Sheep—thous. of animals—	17	25	55	77	93	62	86	+20.8	+8.1	312	363	+16.3
Leather												
Sole and belting leather:												
Production—												
Sole only—thous. of backs, bends, sides—	1,144	1,244	1,176	\$ 1,300	1,186	1,463	1,324	-8.8	-10.4	12,213	10,761	-11.9
Sole and belting—thous. of lbs—	22,691	24,911	23,965	25,323		25,701	23,510			197,392	186,900	-5.3
Stocks, end of month—												
In process of tanning—thous. of lbs—	80,606	79,153	80,641	80,587		89,508	85,990					
Finished—thous. of lbs—	72,070	70,616	68,538	66,276		72,439	72,243					
Exports—thous. of lbs—	1,149	758	832	782	539	996	733	-31.1	-26.5	7,521	8,259	+9.8
Price oak, scoured backs—dolls. per lb—	.49	.49	.51	.52	.54	.67	.65	+3.8	-16.9			
Upper leather:												
Production—thous. of sq. ft—	63,653	66,425	71,323	82,954		73,150	66,380			546,434	545,017	-0.3
Stocks, end of month—												
In process of tanning—thous. of sq. ft—	134,079	135,198	141,207	147,678		147,602	146,010					
Finished—thous. of sq. ft—	241,783	235,156	230,871	216,406		253,854	247,386					
Exports—thous. of sq. ft—	10,208	8,491	9,267	7,736	8,264	9,000	9,093	+6.8	-9.1	103,087	87,137	-15.5
Chrome calfs, "B" grades—dolls. per sq. ft—	.51	.50	.49	.49	.49	.57	.57	0.0	-14.0			
Leather Products												
Shoes:												
Production—thous. of pairs—	29,159	28,120	\$ 30,223	36,295		34,974	31,000			231,607	239,031	+3.2
Exports—thous. of pairs—	333	357	320	291	321	331	275	+10.3	+16.7	3,233	3,219	-0.4
Wholesale prices—												
Men's black calf blucher, Boston—dolls. per pair—	6.75	6.75	6.75	6.75	6.75	6.75	6.75	0.0	0.0			
Men's dress welt, tan calf oxford, St. Louis—dolls. per pair—	4.85	4.85	4.85	4.85	4.85	5.00	5.00	0.0	-3.0			
Women's black kid, dress welt, lace, oxford—dolls. per pair—	4.25	4.25	4.25	4.25	4.25	4.25	4.25	0.0	0.0			
Gloves, cut—dozen pairs—	263,933	252,703	255,711	292,545	285,094	237,043	213,945	-2.5	+33.3	1,912,163	2,319,920	-21.3
PAPER AND PRINTING												
Wood Pulp												
Mechanical:												
Production—short tons—	166,375	142,915	122,946			114,668	108,166			1,193,456		
Consumption and shipments—short tons—	148,251	136,669	136,695			138,309	122,771			1,819,753		
Stocks, end of month—short tons—	178,963	185,209	171,535			147,611	133,006					
Imports—short tons—	21,044	24,014	18,724	24,731	20,666	17,233	21,953	-16.4	-5.9	180,197	180,034	+4.9
Chemical:												
Production—short tons—	241,354	225,940	221,388	237,762		222,116	201,646			1,923,104		
Consumption and shipments—short tons—	242,254	223,016	221,105			221,008	204,378			1,929,502		
Stocks, end of month—short tons—	34,112	36,188	35,940			44,682	42,510					
Imports—short tons—	121,989	153,956	161,185	142,502	134,533	120,643	124,048	-5.6	+8.5	1,038,071	1,192,482	+14.9
Price, sulphite—dollars per 100 lbs—	2.49	2.53	2.60	2.60	2.60	2.53	2.53	0.0	+2.8			
Newsprint Paper												
Production:												
United States, total—short tons—	123,504	113,407	111,578	120,868	108,155	116,120	102,821	-10.5	+5.2	1,047,602	1,038,243	-0.9
Ratio to capacity—per cent—	82	82	81	77		77	74					
Canada—short tons—	245,644	225,055	220,045	225,873	227,665	200,480	186,396	+0.8	+22.1	\$ 1,732,563	\$ 1,992,604	+15.0
Consumption by publishers—short tons—	200,326	192,424	173,375	172,239		162,184	169,625			1,375,349	1,481,938	+7.7
Shipments:												
United States—short tons—	124,840	114,558	112,616	118,789	107,495	114,768	107,834	-9.5	-0.3	1,031,630	1,048,487	+1.6
Canada—short tons—	247,449	233,920	227,502	224,254	226,623	197,224	197,532	+1.1	+14.7	1,728,423	1,895,172	+9.6
Imports:												
Canada—short tons—	206,036	202,398	210,497	209,901	196,123	173,872	164,648	-6.6	+19.1	1,545,425	1,748,238	+13.1
Exports:												
Canada—short tons—	214,342	219,895	199,692	217,638	201,249	179,334	170,840	-7.5	+17.8	1,583,010	1,828,880	+15.5
Stocks, end of month:												
At mills—												
United States—short tons—	25,778	24,602	23,603	25,656	26,490	40,838	35,687	+3.3	-25.8			
Canada—short tons—	23,893	24,199	28,993	29,785	30,742	52,108	43,800	+3.2	-29.8			
At publishers—short tons—	154,948	161,318	191,647	205,532		209,044	191,287					
In transit to publishers—short tons—	51,425	48,716	44,781	44,676		39,744	48,229					
Price, roll, f. o. b. mill—dollars per 100 lbs—	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.0	0.0			
Printing												
Book publication:												
American manufacture—no. of titles—	601	605	501	819		551	835			5,161	5,437	+5.4
Imported—no. of titles—	135	125	131	177		169	261			1,074	1,140	+6.1
Sales books:												
New orders—thous. of books—	12,748	12,332	11,476	12,839	12,977	12,538	11,837	+1.1	+9.6	110,993	112,030	+0.9
Shipments—thous. of books—	12,154	12,445	13,737	13,631	12,226	13,738	11,976	-10.3	+2.1	107,801	112,934	+4.8
Blank forms, new orders—thous. of sets—	70,169	58,687	57,225	54,054	56,428	58,108	50,114	+4.4	+12.6	420,429	520,741	+26.0
Box Board												
Operation—thous. of inch hours—	9,526	9,171	9,045	9,590	8,526	9,236	8,344	-11.1	+2.2	75,632	82,287	+8.8
Operation—per ct. of capacity—	83.4	83.5	79.2	809	809	81.6	83.0	+0.6	-1.9			
Production—short tons—	264,530	241,028	236,377	264,365	237,759	230,750	224,971	-10.1	+5.7	1,992,076	2,227,948	+11.8
New orders—short tons—	240,395	231,230	240,617	257,318	246,801	236,682	234,449	-4.1	+5.3	2,009,361	2,202,301	+9.6
Shipments—short tons—	260,283	235,865	235,863	262,889	242,421	233,104	228,880	-7.8	+5.9	1,989,817	2,218,402	+11.5
Stocks, end of month—short tons—	62,311	62,384	63,333	61,853	58,664	47,709	45,271	+5.2	+29.6			
Stocks of waste paper, end of month:												
On hand—short tons—	150,048	159,005	175,306	171,360	174,526	117,009	116,197	+1.8	+50.2			
In transit and unshipped purchases—tons—	54,433	56,904	64,359	61,571	89,280	48,108	53,344	+45.0	+67.4			
Unfilled orders, end of month—short tons—	89,485	81,886	88,275	82,969	87,304	81,816	87,097	+5.2	+0.2			
Consumption of waste paper—short tons—	248,813	234,119	215,537	256,560	230,146	213,628	217,361	-10.3	+5.9	1,852,272	2,214,431	+14.2

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>												
PAPER AND PRINTING—Continued												
Other Paper												
Binder's board, production.....short tons..	3,491	3,092	2,828	3,443	-----	3,092	2,431	-----	-----	-----	-----	-----
Book paper:												
Production.....short tons..	138,024	129,743	130,768	138,614	-----	130,416	117,374	-----	-----	€ 1,008,705	€ 1,065,847	+5.7
Ratio to capacity.....per cent..	91	93	91	89	86	90	84	-----	-----	-----	-----	+7.4
Shipments.....short tons..	137,034	130,132	130,245	136,951	-----	133,024	120,895	-----	-----	998,024	€ 1,072,080	-----
Stocks, end of month.....short tons..	74,255	74,255	74,998	77,248	-----	85,836	82,403	-----	-----	-----	-----	-----
New orders:												
Coated...p. ct. of normal production..	86	84	82	85	87	77	81	+2.4	+7.4	-----	-----	-----
Unecoated...p. ct. of normal production..	80	82	81	77	86	79	80	+11.7	+7.5	-----	-----	-----
Unfilled orders, end of month—												
Coated...p. ct. of normal production..	10	9	10	9	10	8	10	+11.1	0.0	-----	-----	-----
Unecoated...p. ct. of normal production..	9	8	9	8	8	7	7	0.0	+14.3	-----	-----	-----
Wrapping paper:												
Production.....short tons..	94,302	87,191	84,093	91,849	-----	100,779	83,582	-----	-----	€ 760,460	€ 729,153	-4.1
Ratio to capacity.....per cent..	85	85	79	83	84	89	84	-----	-----	-----	-----	-----
Shipments.....short tons..	92,227	86,406	85,775	90,655	-----	100,174	86,173	-----	-----	€ 750,741	€ 730,128	-2.7
Stocks, end of month.....short tons..	87,733	-----	-----	-----	-----	93,340	91,977	-----	-----	-----	-----	-----
Fine paper:												
Production.....short tons..	41,660	38,513	37,624	38,924	-----	39,331	34,885	-----	-----	€ 311,472	€ 315,905	+1.4
Ratio to capacity.....per cent..	90	90	85	84	84	84	80	-----	-----	-----	-----	-----
Shipments.....short tons..	42,368	37,897	-----	-----	-----	38,938	34,885	-----	-----	€ 308,082	€ 318,778	+3.5
Stocks, end of month.....short tons..	49,488	-----	-----	-----	-----	53,535	53,361	-----	-----	-----	-----	-----
All other grades:												
Production.....short tons..	111,182	100,897	100,503	105,855	-----	110,677	100,138	-----	-----	€ 819,803	€ 832,982	+1.6
Shipments.....short tons..	107,735	100,098	101,783	104,638	-----	109,154	102,437	-----	-----	€ 812,281	€ 825,702	+1.7
Stocks, end of month.....short tons..	58,932	59,875	57,592	58,009	-----	72,438	70,140	-----	-----	-----	-----	-----
Total paper (inc. newsprint and box board):												
Production.....short tons..	773,502	710,779	700,943	759,302	-----	728,073	663,771	-----	-----	€ 5,612,326	€ 6,659,898	+18.7
Ratio to capacity.....per cent..	87	86	83	84	84	78	84	-----	-----	-----	-----	-----
Shipments.....short tons..	764,487	704,956	702,890	751,475	-----	729,162	681,104	-----	-----	€ 5,553,861	€ 5,863,084	+5.6
Stocks, end of month.....short tons..	358,497	359,310	353,342	356,781	-----	393,696	378,839	-----	-----	-----	-----	-----
Paperboard Shipping Boxes												
Production:												
Total.....thous. of sq. ft..	490,117	506,830	481,762	550,170	544,276	441,792	434,371	-1.1	+25.3	3,687,406	4,521,384	+22.6
Corrugated.....thous. of sq. ft..	386,241	406,968	384,885	448,920	434,351	364,756	359,553	-3.2	+20.8	2,955,185	3,582,890	+21.2
Solid fiber.....thous. of sq. ft..	103,876	9,922	96,877	101,250	100,925	77,036	74,818	+8.6	+46.9	683,472	938,494	+37.3
Operating activity:												
Total.....per cent of normal..	82	85	80	89	89	79	79	0.0	+12.7	-----	-----	-----
Corrugated.....per cent of normal..	83	87	82	91	91	77	78	0.0	+16.7	-----	-----	-----
Solid fiber.....per cent of normal..	79	77	74	82	82	84	80	0.0	+2.5	-----	-----	-----
Abrasive paper and cloth:												
Domestic sales.....reams..	95,224	90,855	88,566	100,924	99,221	99,789	95,131	-1.7	+4.3	802,614	856,612	+6.7
Foreign sales.....reams..	26,040	16,696	11,400	20,514	17,817	17,875	18,281	-13.3	-2.5	165,060	178,565	+8.2
Rope paper sacks, shipments rel. to 1921-22..	81	96	85	101	95	111	102	-5.9	-6.9	-----	-----	-----
BUILDING CONSTRUCTION AND HOUSING												
Building Costs												
Building materials:												
Frame house, 6-rm, 1st of mo rel. to 1913..	177	176	177	177	176	177	177	-0.6	-0.6	-----	-----	-----
Brick house, 6-rm, 1st of mo rel. to 1913..	182	181	182	182	182	181	181	0.0	+0.6	-----	-----	-----
Bldg. costs, 1st of mo.....rel. to 1913..	205.2	205.7	204.8	205.9	207.6	207.3	207.3	+0.8	+0.1	-----	-----	-----
Bldg. costs (A. G. C.), 1st of mo.....rel. to 1913..	203	203	202	203	201	200	201	-1.0	0.0	-----	-----	-----
Plumbing fixtures, 6 pieces.....dollars..	98.16	97.54	97.94	98.84	98.97	101.21	101.13	+0.1	-2.1	-----	-----	-----
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913..	204	204	204	204	205	204	204	+0.5	+0.5	-----	-----	-----
Brick, wood frame.....rel. to 1913..	214	214	214	214	214	213	213	0.0	+0.5	-----	-----	-----
Brick, steel frame.....rel. to 1913..	197	197	197	197	197	198	198	0.0	-0.5	-----	-----	-----
Reinforced concrete.....rel. to 1913..	201	201	200	201	201	201	201	0.0	0.0	-----	-----	-----
Contracts and Losses												
Contracts awarded (36 States):												
Commercial buildings.....thous. of sq. ft..	15,789	13,353	12,873	13,481	12,612	11,974	11,442	-6.4	+10.2	113,158	121,145	+7.0
Industrial buildings.....thous. of sq. ft..	10,325	8,341	9,563	10,148	7,585	8,548	10,348	-25.3	-26.7	69,223	77,125	+11.4
Residential buildings.....thous. of sq. ft..	38,740	36,227	36,161	28,339	24,354	42,859	38,744	-14.1	-37.1	423,308	307,135	-27.4
Educational buildings.....thous. of sq. ft..	6,050	6,349	6,525	5,190	4,914	5,418	5,651	-5.3	-13.0	47,324	45,927	-3.0
Other public and semi-public buildings.....thous. of sq. ft..	5,866	5,195	5,743	5,896	6,958	6,392	6,278	+18.0	+10.8	53,666	45,627	-15.0
Grand total.....thous. of sq. ft..	77,586	70,297	71,320	63,575	57,152	€ 75,638	73,146	-10.5	-21.9	711,122	603,513	-15.1
Contracts awarded, value (36 States):												
Commercial buildings.....thous. of dollars..	82,681	78,625	88,137	68,365	71,590	57,178	58,525	+4.7	+22.3	654,472	606,559	+6.4
Industrial buildings.....thous. of dollars..	79,915	69,621	66,318	71,820	52,090	41,318	112,925	-27.5	-53.9	472,352	575,317	+21.8
Residential buildings.....thous. of dollars..	185,658	185,328	194,754	142,049	114,184	207,521	196,850	-19.6	-42.0	2,111,698	1,518,636	-28.1
Educational buildings.....thous. of dollars..	36,690	41,745	46,333	31,149	29,034	33,559	37,088	-6.8	-21.7	301,992	289,939	-4.0
Other public and semi-public buildings.....thous. of dollars..	47,387	39,324	49,537	42,762	49,307	45,470	51,317	+15.3	-3.9	434,719	377,734	-13.1
Public works and utilities.....thous. of dollars..	132,383	117,426	179,897	114,766	114,146	114,714	115,808	-0.5	-1.4	978,816	985,729	+0.7
Grand total.....thous. of dollars..	560,010	532,069	624,976	470,910	430,351	499,760	572,513	-8.6	-24.8	4,954,049	4,381,536	-11.6
Contracts awarded, Canada.....thous. of dollars..	64,860	72,420	57,941	58,622	46,959	39,449	45,439	-19.9	+3.3	379,505	441,644	+16.4
Building volume (A. G. C.).....rel. to 1913..	211	231	218	239	259	239	266	+8.4	-2.6	-----	-----	-----
Fire losses:												
United States and Canada, <i>(Journal of Commerce)</i>thous. of dollars..	21,637	26,631	31,528	27,504	21,422	17,724	17,183	-22.1	+24.7	227,062	244,128	+7.5
Canada (<i>Monetary Times</i>).....thous. of dollars..	2,551	3,079	5,027	3,776	2,040	2,356	1,739	-46.0	+17.3	19,176	26,640	+38.9

* Revised.

* Cumulative through Aug. 31

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30												
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929											
LUMBER PRODUCTS																						
Softwood Lumber																						
Southern pine:																						
Production (computed) M ft. b. m.	414,166	369,971	393,932	400,274	359,757	425,493	386,671	-10.1	-7.0	3,788,585	3,538,421											
Operation per cent of full time	87	83	81	83	83	87	88	0.0	-5.7													
Shipments (computed) M ft. b. m.	409,616	370,310	377,571	384,203	347,704	468,672	423,218	-9.5	-17.8	4,004,819	3,487,352											
New orders (computed) M ft. b. m.	388,317	343,106	379,217	378,878	344,703	479,370	434,884	-9.0	-20.7	4,041,897	3,487,304											
Stocks, end of mo. (computed) M ft. b. m.	985,377	985,588	1,001,899	1,017,970	1,030,023	1,019,050	991,781	+1.2	+3.9													
Unfilled orders, end of mo. (comp.) M ft. b. m.	320,351	293,147	294,793	289,468	286,467	339,038	340,875	-1.0	-16.0													
Exports, lumber M ft. b. m.	59,384	59,263	57,275	52,630	43,087	43,287	40,837	-18.1	+5.5	509,407	516,552											
Exports, timber M ft. b. m.	10,722	9,311	17,474	9,300	14,874	7,465	14,897	+59.9	-0.2	132,652	95,284											
Price, flooring dolls. per M ft. b. m.	37.00	37.04	37.27	37.43	36.76	36.34	37.73	-1.8	-2.6													
Douglas fir:																						
Production M ft. b. m.	361,700	334,841	302,162	353,642		358,566	296,343			3,601,753	2,665,744											
Shipments (computed) M ft. b. m.	384,530	371,995	319,621	333,498		389,454	315,144			3,992,800	2,844,083											
New orders M ft. b. m.	365,728	354,537	306,639	327,678		381,396	322,754			4,055,242	2,795,113											
Exports, lumber M ft. b. m.	95,104	83,966	98,179	72,811	64,085	59,236	64,265	-12.0	-0.3	581,810	699,007											
Exports, timber M ft. b. m.	23,309	51,571	43,932	48,303	38,493	40,837	44,264	-20.3	-13.0	427,357	419,036											
Price, No. 1 common, dolls. per M ft. b. m.	18.89	18.74	18.77	18.57	18.36	17.75	17.32	-1.1	+6.0													
Price, flooring, 1 x 4, "B" and better, V. G. dolls. per M ft. b. m.	42.95	42.69	42.73	42.96	42.79	37.19	38.85	-0.4	+10.1													
California redwood:																						
Production (computed) M ft. b. m.	48,083	37,866	28,435	44,923	35,291	41,137	34,329	-21.4	+2.8	355,577	340,036											
Shipments (computed) M ft. b. m.	48,742	41,507	28,672	48,048	37,363	43,983	33,107	-23.2	+12.9	344,870	345,408											
New orders (computed) M ft. b. m.	49,507	38,776	35,657	44,930	34,086	39,855	33,519	-24.1	+1.7	350,486	361,610											
Unfilled orders, end of month (computed) M ft. b. m.	45,062	40,257	47,235	44,590	41,837	45,093	47,916	-6.2	-12.7													
California white pine:																						
Production M ft. b. m.	127,672	118,422	120,968	126,934	94,983	145,491	122,708	-25.2	-22.6	917,713	877,930											
Shipments M ft. b. m.	109,599	95,779	97,302	102,334	93,900	118,310	105,246	-8.2	-10.8	910,653	909,144											
Stocks, end of month M ft. b. m.	442,929	463,175	486,416	516,220	523,772	516,764	538,136	+1.5	-2.7													
New orders M ft. b. m.	105,597	105,832	88,208	95,986	80,250	102,805	86,716	-6.4	-7.5	800,345	853,903											
Unfilled orders, end of month M ft. b. m.	143,950	156,475	150,643	162,494	153,701	181,014	188,747	-5.4	-18.6													
North Carolina pine:																						
Production (computed) M ft. b. m.	61,243	53,270	47,831	48,993	48,132	45,437	37,457	-1.8	+28.5	441,322	506,569											
Shipments (computed) M ft. b. m.	65,954	59,080	50,946	48,230	45,605	48,643	39,900	-5.4	+14.3	460,249	493,710											
Northern pine:																						
Lumber—																						
Production M ft. b. m.	56,031	50,537	50,733	49,846	41,882	57,335	51,618	-16.0	-18.9	395,986	359,918											
Shipments M ft. b. m.	47,541	44,197	44,825	43,764	37,054	47,755	44,618	-15.3	-17.0	374,491	367,052											
New orders M ft. b. m.	37,478	37,142	40,012	42,485	30,291	41,435	44,209	-23.7	-31.5	354,411	336,280											
Lath—																						
Production thousands	10,001	6,818	8,822	8,442	6,268	12,318	12,419	-25.8	-49.5	84,254	58,689											
Shipments thousands	9,632	10,256	10,083	9,258	6,509	10,099	8,897	-29.7	-26.8	76,626	73,194											
Northern hemlock:																						
Production M ft. b. m.	14,488	13,527	15,359	14,908	17,079	20,449	15,315	+14.6	+11.5	150,287	137,028											
Shipments M ft. b. m.	14,247	16,262	18,614	16,020	12,859	22,661	19,951	-19.7	-35.5	150,698	123,316											
Hardwood Lumber																						
Walnut lumber:																						
Production M ft. b. m.	4,508	4,532	3,839	4,608	4,649	2,931	2,749	+0.9	+69.1	26,394	34,607											
Shipments M ft. b. m.	3,823	3,699	3,570	3,607	3,289	2,863	3,299	-8.8	-0.3	26,420	32,513											
Stocks, end of month M ft. b. m.	11,970	12,960	12,640	14,303	15,347	13,166	12,625	+7.3	+21.6													
New orders M ft. b. m.	4,120	3,625	2,627	3,266	3,398	2,990	2,635	+4.0	+29.0	25,996	32,187											
Unfilled orders, end of month M ft. b. m.	7,563	7,636	6,474	6,892	7,000	5,270	4,741	+1.6	+47.6													
Walnut logs:																						
Purchased M ft. log measure	3,735	3,711	2,951	3,667	3,367	2,736	2,274	-8.2	+48.1	22,107	26,849											
Made into lumber and veneer M ft. log measure	3,005	3,241	3,217	3,358	3,724	2,579	2,643	+10.9	+40.9	22,703	26,547											
Stocks, end of month M ft. log measure	1,897	2,253	2,773	2,441	2,148	3,058	2,684	-12.0	-20.0													
Northern hardwoods:																						
Production M ft. b. m.	30,885	31,348	24,961	22,459	17,195	20,073	16,624	-23.4	+3.4	308,021	281,754											
Shipments M ft. b. m.	23,818	24,444	24,413	27,469	24,275	27,597	25,086	-11.6	-3.2	270,936	243,387											
Lower Michigan hardwoods:																						
Production M ft. b. m.	5,825	4,882	6,179			5,502	4,915															
Shipments M ft. b. m.	5,734	4,672	5,875			7,349	6,467															
Stocks, end of month M ft. b. m.	28,467	24,364	26,121	17,880		23,509	20,915															
Gum:																						
Stocks, total, end of month mill. ft. b. m.	464	475	465	469	482	543	529	+2.8	-8.9													
Stocks, unsold, end of month mill. ft. b. m.	328	325	318	325	328	410	396	+0.9	-17.2													
Unfilled orders, end of month mill. ft. b. m.	136	150	147	144	154	132	133	+6.9	+15.8													
Oak:																						
Stocks, total, end of month mill. ft. b. m.	918	923	955	982	1,004	959	954	+2.2	+5.2													
Stocks, unsold, end of month mill. ft. b. m.	748	747	785	802	808	800	775	+0.7	+4.3													
Unfilled orders, end of month mill. ft. b. m.	169	176	169	181	195	159	161	+7.7	+21.1													
All hardwoods:																						
Production mill. ft. b. m.	296	300	311	334	334	263	270	0.0	+23.7	2,368	2,836											
Shipments mill. ft. b. m.	293	285	278	296	311	285	293	+5.1	+6.1	2,420	2,746											
New orders mill. ft. b. m.	311	277	278	300	323	289	293	+7.7	+10.2	2,495	2,799											
Stocks, total, end of month mill. ft. b. m.	2,638	2,681	2,731	2,772	2,848	2,771	2,731	+2.7	+4.3													
Stocks, unsold, end of month mill. ft. b. m.	2,015	2,031	2,088	2,122	2,239	2,211	2,164	+5.5	+3.5													
Unfilled orders, end of month mill. ft. b. m.	617	657	643	645	678	557	566	+5.1	+19.8													
Production, 10 species M ft. b. m.	2,369,329	2,186,504	2,171,397	2,289,977	2,076,526	2,206,862	1,927,716	-9.3	+7.7	20,212,629	19,268,749											
Exports, planks, joists, etc. M ft. b. m.	220,153	211,952	231,516	181,897	163,427	162,221	170,457	-10.2	-4.1	1,726,603	1,829,659											
Flooring																						
Maple flooring:																						
Production M ft. b. m.	5,625	5,418	6,450	6,918	7,334	8,413	7,675	+6.0	-4.4	68,608	59,091											
Shipments M ft. b. m.	6,848	6,420	7,883	8,435	7,239	9,515	7,929	-14.2	-8.7	72,567	61,716											
Stocks, end of month M ft. b. m.	22,230	20,964	21,913	20,480	20,827	23,282	22,554	+1.7	-7.7													
New orders M ft. b. m.	6,336	3,822	6,159	6,927	4,750	8,851	7,110	-31.4	-33.2	70,611	57,530											
Unfilled orders, end of month M ft. b. m.	13,104	10,600	10,431	8,881	7,641	10,187	10,106	-14.0	-24.4													
Oak flooring:																						
Production M ft. b. m.	41,353	36,722	37,638	36,382	33,055	51,529	45,926	+9.1	-28.0	395,663	316,294											
Shipments M ft. b. m.	41,558	39,979	37,002	37,631	31,464	51,860	45,020	-16.4	-30.1	417,459	330,923											
Stocks, end of month M ft. b. m.	74,013	72,147	70,435	70,198	72,141	67,864	68,456	+2.8	+5.4													
New orders M ft. b. m.	33,909	34,479	25,901	30,972	37,388	49,427	43,141	+20.7	-13.3	422,645	317,032											
Unfilled orders, end of month M ft. b. m.	57,496	50,832	43,995	40,417	47,026	47,099	41,224	-12.5	-14.2													

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928													
	May	June	July	August	September	August	September		September, 1929, from August, 1929	September, 1929, from September, 1928														
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey."</i>																								
LUMBER PRODUCTS—Continued																								
Doors at Wholesale																								
Fir, manufacturing plants:																								
Production.....number	371,162	322,987	302,452	177,332	216,004	314,154	273,076	+21.8	-21.0															
Shipments.....number	357,900	258,041	340,978	177,111	193,576	344,643	305,555	+9.3	-36.6															
Stocks, end of month.....number	217,204	282,150	217,547	206,382	228,810	267,118	238,390	+10.9	-4.0															
New orders.....number	222,746	261,271	204,745	164,355	225,779	227,311	237,789	+37.4	-5.0															
Unfilled orders, end of month.....number	476,213	477,349	315,566	254,210	284,191	344,094	300,106	+11.8	-5.3															
Wooden Furniture																								
Household furniture and case goods:																								
Shipments.....dolls., average per firm	57,605	47,831	53,748	70,482	75,319	65,947	65,010	+6.9	+15.9	454,935	534,924													
Unfilled orders.....dolls., average per firm	38,713	36,232	64,573	77,568	84,318	57,288	58,576	+8.7	+43.9		+17.6													
Grand Rapids district:																								
Unfilled orders, end of month.....No. of days' production	60	58	68	64	58	53	49	-9.4	+18.4															
New orders.....No. of days' production	49	20	36	30	31	30	31	+3.3	0.0															
Shipments.....No. of days' production	23	22	24	30	32	31	30	+6.7	+6.7															
Outstanding accounts, end of month.....No. of days' sales	43	44	46	53	58	56	65	+9.4	-10.8															
Cancellations.....per cent of new orders	4.0	11.0	5.0	5.0	6.0	7.0	9.0	+20.0	-33.3															
Plant operation.....per cent of full time	39.0	88.0	90.0	97.0	101.0	92.0	101.0	+4.1	0.0															
Plywood and Veneer																								
Douglas-fir plywood:																								
Production.....thous. of sq. ft. of surface	15,652	13,169	15,567	12,713	11,625	11,094	9,426	-8.6	+23.3															
Shipments.....thous. of sq. ft. of surface	15,906	12,778	14,113	12,681	11,698	10,988	9,257	-7.6	+26.4															
New orders (sales).....thous. of sq. ft. of surface	14,342	10,525	12,149	7,803	10,377	11,030	10,245	+32.0	+1.3															
Unfilled orders, end of month.....thous. of sq. ft. of surface	17,222	14,120	12,308	8,691	5,971	8,024	7,715	-31.3	-22.6															
Stocks, end of month.....thous. of sq. ft. of surface	5,185	5,702	7,158	7,201	7,415	7,358	7,309	+3.0	+1.5															
Rotary-cut veneer:																								
Receipts.....number of carloads	220	169	272	174	223	259	244	+28.2	-8.6	1,454	1,823													
Purchases.....number of carloads	157	181	260	122	257	325	199	+135.2	+44.2	1,851	2,141													
Bushel baskets:																								
Production.....dozens	244,782	202,426	232,860	264,212	190,939	243,056	177,982	-27.7	+7.3	1,819,706	1,817,606													
Shipments.....dozens	152,274	200,814	232,154	360,050	314,904	262,810	285,813	-12.5	+10.2	1,891,623	1,744,713													
Stocks, end of month.....dozens	662,036	665,881	674,339	584,410	461,717	570,726	409,110	-21.0	+12.9		-7.8													
STONE, CLAY, AND GLASS PRODUCTS																								
Common brick:																								
Stocks, end of month—																								
Burned.....thousands	325,208	308,257	290,044	290,265		491,088	498,691																	
Unburned.....thousands	168,036	154,185	95,756	110,904		206,938	257,692																	
Shipments.....thousands	121,641	154,021	118,834	130,982		218,339	167,078			1,625,111	1,077,096													
Unfilled orders, end of month.....thousands	144,271	163,126	148,289	109,564		221,625	213,274				-33.7													
Plants closed down.....number	15	50	17	56		14	21																	
Price, red, New York.....dollars. per thous.	11.50	11.00	10.13	10.13	10.53	13.50	12.50	+3.9	-15.8															
Porcelain plumbing fixtures:																								
Net new orders.....pieces	8,970	9,669	12,153	12,168	9,524	12,960	9,939	-21.7	-4.2	209,833	165,326													
Shipments.....pieces	10,059	10,807	11,845	13,873	9,569	22,970	16,525	-31.0	-42.1	148,788	98,624													
Unfilled orders, end of month.....pieces	35,045	31,234	30,088	26,911	26,115	65,029	54,583	-3.0	-52.2															
Stocks, end of month.....pieces	48,228	45,848	37,947	40,343	39,708	47,690	50,953	-1.6	-22.1															
Vitreous china plumbing fixtures:																								
New orders.....pieces	199,477	196,707	244,351	242,596	195,931	217,305	180,758	-19.2	+8.4	2,404,139	2,255,320													
Shipments.....pieces	254,776	246,071	271,411	268,639	237,788	267,610	215,284	-11.5	+10.5	2,407,755	2,301,191													
Unfilled orders, end of month.....pieces	488,070	438,715	411,655	385,632	343,775	353,034	318,508	-10.9	+7.9		-4.4													
Stocks, end of month.....pieces	543,987	591,633	582,314	559,418	566,776	477,593	510,864	+1.3	+10.9															
Floor and wall tile:																								
Production.....thous. of sq. ft.	6,300	6,247	6,244	6,390		6,841	6,621			45,177	49,222													
Shipments, quantity.....thous. of sq. ft.	6,355	6,424	6,459	6,813		7,403	6,755			45,823	46,082													
Shipments, value.....thous. of dollars	2,437	2,412	2,505	2,690		2,847	2,572			17,423	17,834													
Stocks, end of month.....thous. of sq. ft.	18,465	18,092	18,301	17,929		12,343	12,253				-2.4													
Terra cotta, new orders:																								
Quantity.....net tons	13,313	10,798	11,756	8,606	7,784	12,058	10,570	-9.6	-26.4	113,707	96,553													
Value.....thous. of dollars	1,487	1,178	1,183	940	817	1,123	1,005	-13.1	-18.7	10,780	10,535													
Sand-lime brick:																								
Production.....thous. of sq. ft.	12,969	17,578	16,061	16,838	13,389	21,680	17,267	-20.5	-22.5	149,182	122,403													
Shipments by rail.....thous. of sq. ft.	5,658	5,412	4,263	4,684	3,960	8,284	6,767	-15.5	-41.5	51,763	36,910													
Shipments by trucks.....thous. of sq. ft.	13,107	13,757	12,266	11,615	10,216	13,215	11,281	-12.0	-9.4	100,735	96,187													
Stocks, end of month.....thous. of sq. ft.	10,561	10,447	8,854	9,714	8,614	14,446	15,304	-11.3	-43.7															
Unfilled orders, end of month.....thous. of sq. ft.	9,188	14,968	14,739	9,925	12,086	14,503	14,455	+21.8	-16.4															
Portland Cement																								
Production.....thous. of bbls.	16,151	16,803	17,281	18,585	17,223	18,759	17,884	-7.3	-3.7	131,178	128,165													
Operation.....per ct. of capacity	76.4	80.9	80.4	86.1	81.8	93.1	91.7	-5.0	-10.8															
Shipments.....thous. of bbls.	16,706	18,949	20,295	23,052	19,950	21,970	20,460	-13.5	-2.5	136,284	133,545													
Stocks, end of month.....thous. of bbls.	29,624	27,457	24,525	20,056	17,329	19,374	16,799	-13.6	+3.2															
Stocks, clinker, end of month.....thous. of bbls.	14,911	13,586	11,619	8,933	7,039	9,357	7,566	-21.7	-7.0															
Wholesale prices, composite.....dollars. per bbl.	1.650	1.650	1.650	1.604	1.500	1.683	1.650	-6.5	-9.1															
Highways																								
Concrete pavements, new contracts:																								
Total.....thous. of sq. yds.	23,704	16,421	18,022	11,969	10,220	16,889	14,752	-14.6	-30.7	124,500	113,692													
Road.....thous. of sq. yds.	17,518	10,410	11,344	7,010	5,945	9,254	9,630	-15.2	-38.3	79,297	75,146													
Federal-aid highways:																								
Completed—																								
Cost.....thous. of dollars	10,309	15,552	16,445	9,729	22,469	12,145	26,105	+130.9	-13.9	119,513	115,729													
Distance.....miles	335	520	693	442	830	599	1,169	+87.8	-29.0	5,109	4,112													
Under construction, end of month.....miles	7,900	8,359	8,494	8,724	8,584	9,547	9,427	-8.9	-8.9															

* Revised.

* Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
STONE, CLAY, AND GLASS PRODUCTS—Continued												
Plate Glass												
Production, polished.....thous. of sq. ft.	12,732	12,278	13,057	14,722	14,011	12,159	10,807	-4.8	+29.6	97,283	115,264	+18.5
Glass Containers												
Actual production:												
Quantity.....gross..	2,683	2,561	2,396	2,715	2,246	2,686	2,322	-17.3	-3.3	21,942	22,322	+1.7
Relation to capacity.....per cent..	79.1	81.5	73.3	77.5	74.5	80.9	78.7	-3.9	-5.3			
New orders.....gross..	2,584	2,023	2,224	1,922	2,042	1,909	2,122	+53.1	+38.6	21,047	22,551	+7.1
Shipments.....gross..	2,657	2,674	2,507	2,656	2,700	2,654	2,433	+1.7	+11.0	21,887	22,849	+4.4
Stock, end of month.....gross..	6,601	6,500	6,388	6,447	5,994	6,297	6,173	-7.0	-2.9			
Unfilled orders, end of month.....gross..	9,859	9,278	8,824	8,079	8,072	8,467	8,084	-0.1	-0.1			
Illuminating Glassware												
Production:												
Total.....number of turns..	3,884	3,239	1,818	2,819	3,225	2,985	3,190	+14.4	+1.1	26,657	28,450	+6.7
Ratio to capacity.....per ct. of capacity..	46.8	46.3	18.7	36.4	45.3	36.5	43.0	+24.5	+5.3			
New orders.....per ct. of capacity..	48.1	44.6	40.1	42.9	46.8	44.5	44.2	+9.1	+5.9			
Shipments.....per ct. of capacity..	42.2	45.1	35.3	43.8	49.6	42.5	43.0	+13.2	+15.3			
Unfilled orders, end of month.....number of weeks' supply..	1.4	1.6	1.5	1.4	1.4	1.8	1.7	0.0	-17.6			
Stocks, end of month.....number of weeks' supply..	5.8	6.0	5.4	4.7	4.6	4.3	4.3	-2.1	+7.0			
CHEMICALS AND OILS												
Chemicals												
Sulphur production (quarterly).....long tons..	\$ 652,735											
Sulphuric acid:												
Exports.....thous. of lbs..	287,306	693,027	506,758	641,492	516,264	291,035	581,760	-19.5	-11.3	5,604,363	5,040,588	-10.1
Price, wholesale.....dolls. per 100 lbs..	.78	.78	.78	.78	.78	.78	.78	0.0	0.0			
Nitrate of soda:												
Imports.....long tons..	127,645	64,733	40,501	51,684	31,539	75,318	36,644	-39.0	-13.9	853,558	767,021	-10.1
Production in Chile.....metric tons..	276,600	252,600	272,300	270,300	253,200	275,000	259,400	-6.3	-2.4	2,301,700	2,406,300	+4.5
Potash salts:												
Imports, (commercial).....long tons..	24,696	9,895	37,126	45,505	40,088	57,327	43,313	-11.9	-7.4	282,410	253,938	-10.1
Production in France.....metric tons..												
(K ₂ O content).....metric tons..	37,242	39,700	41,000	42,500		34,300	35,200			\$ 259,178	\$ 319,031	+23.1
Sales in Germany												
(K ₂ O content).....metric tons..	77,326	97,723	89,190	95,372		108,696	140,818			\$ 1,014,282	\$ 1,009,611	-0.5
Superphosphate, (acid phosphate):												
Production.....short tons..	276,462	302,434	305,808	344,460		304,857	276,811			\$ 2,546,674	\$ 2,476,096	-2.8
Stocks, end of month.....short tons..	822,659	967,766	1,206,174	1,358,748		1,380,278	1,424,169					
Shipments.....short tons..	116,580	55,459	62,956	86,251		87,088	154,443			\$ 1,507,320	\$ 1,505,151	-0.1
Fertilizer:												
Exports.....long tons..	114,655	140,090	123,515	112,346	155,103	103,575	99,149	+38.1	+56.4	963,918	1,148,456	+19.1
Consumption, Southern States.....short tons..	219,763	99,407	20,047	45,517	174,347	62,823	131,120	+233.0	+33.0	5,232,287	5,188,188	-0.8
Dye and dyestuffs, exports:												
Vegetable.....thous. of lbs..	202	264	126	191	422	237	157	+120.9	+168.8	2,381	1,802	-24.3
Coal tar.....thous. of lbs..	27	21	3,180	13	39	1,335	1,330	+200.0		22,715	5,698	-74.9
Arsenic												
Crude:												
Production.....short tons..	1,888	2,452	1,444	887		2,086	1,079			\$ 11,331	\$ 11,758	+3.8
Stocks, end of month.....short tons..	2,073	2,161	1,998	1,876		2,999	2,978					
Refined:												
Production.....short tons..	779	917	812	857		803	799			\$ 5,828	\$ 6,950	+19.4
Stocks, end of month.....short tons..	3,236	3,709	3,305	3,414		1,618	1,971					
Price index numbers:												
Crude drugs.....rel. to Aug., 1914..	187	184	183	179	180	193	193	+0.6	-6.7			
Essential oils.....rel. to Aug., 1914..	193	190	191	188	168	161	158	-10.6	+6.3			
Drugs and pharmaceuticals.....rel. to Aug., 1914..	163	163	173	177	177	164	164	0.0	+7.9			
Chemicals.....rel. to 1913-14..	113	113	113	112	112	113	113	0.0	-0.9			
Oils and fats.....rel. to 1913-14..	118	116	117	123	129	121	121	+4.9	+6.6			
Wood Chemicals												
Acetate of lime:												
Production.....												
United States.....thous. of lbs..	12,703	11,935	10,658	11,025		9,486	8,605			\$ 88,385	\$ 94,184	+6.6
Canada.....thous. of lbs..	751	677	720	715	421		446	-41.1	-5.6	6,609	7,818	+18.3
Shipments.....												
United States.....thous. of lbs..	12,588	11,772	11,072	10,862		12,840	13,355			\$ 96,790	\$ 93,384	-3.5
Canada.....thous. of lbs..	723	676	716	821	349		348	-57.5	+0.3	8,360	7,805	-6.6
Stocks, end of month—												
United States.....thous. of lbs..	1,867	1,755	1,206	1,259		7,950	3,134					
Canada.....thous. of lbs..	109	102	179	73	147		140	183	+101.4	-19.7		
Exports.....												
thous. of lbs..	13	120					1,141	449				
Price, wholesale.....dolls. per cwt..	4.50	4.50	4.50	4.50	4.50	3.88	4.00	0.0	+12.5			
Methanol, crude:												
Production.....												
United States.....gallons..	743,632	676,193	633,731	656,414		535,803	495,555			\$ 4,925,248	\$ 5,567,819	+13.0
Canada.....gallons..	32,614	28,291	28,688	25,950	17,581		18,816	-32.3	-6.6	265,985	325,602	+22.4
Stocks at crude plants, end of month—												
United States.....gallons..	234,600	227,513	252,749	244,185		287,492	229,683					
Canada.....gallons..	14,322	11,533	21,863	20,092	17,061		37,933	13,665	-15.1	+24.9		
Stocks at refineries and in transit—												
United States.....gallons..	262,082	277,376	475,695	526,172	514,572	160,156	164,972	-2.2	+211.9			
Canada.....gallons..	65,965	66,870	78,120	63,702	65,505	64,817	67,314	+2.8	-2.7			
Exports.....												
gallons..	44,602	16,613	95,755	33,849	49,948	14,000	32,540	+47.6	+53.5	443,354	407,507	-8.1

* Revised.

* Cumulative through Aug. 31.

* Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30	Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	May	June	July	August	September	August	September				
								September, 1929, from August, 1929	September, 1929, from September, 1928		
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>											
CHEMICALS AND OILS—Continued											
Wood Chemicals—Continued											
Wood at chemical plants:											
Consumption—											
United States.....cords..	77,832	72,217	68,428	70,454	55,085	49,444	49,444	6 498,890	6 581,439	+16.5	
Canada.....cords..	3,831	3,509	3,587	3,228	2,041	2,160	2,160	33,081	40,183	+21.5	
Stocks, end of month—											
United States.....cords..	525,185	530,111	530,264	565,119	509,435	514,204	514,204	-----	-----	-----	
Canada.....cords..	73,095	72,586	72,126	72,026	72,040	73,759	73,759	-----	-----	-----	
Daily capacity—											
Total.....cords..	8,336	8,326	8,276	8,264	8,264	8,482	8,482	0.0	-6.4	-----	
Shutdown.....cords..	337	361	468	475	525	1,053	1,083	+10.5	-51.5	-----	
Methanol, refined:											
Production—											
United States.....gallons..	423,244	423,811	259,118	454,160	432,094	436,811	355,353	-4.9	+21.6	4,290,945	
Canada.....gallons..	49,700	36,900	10,400	43,700	27,800	14,700	38,600	-36.4	-28.0	278,550	
Stocks, end of month—											
United States.....gallons..	716,762	750,740	712,752	783,674	720,932	396,730	300,478	-6.9	+142.9	-----	
Canada.....gallons..	43,474	51,787	31,185	37,761	21,888	26,715	33,101	-42.0	-33.9	-----	
Shipments—											
United States.....gallons..	472,360	449,245	365,438	487,153	598,551	497,971	415,340	+22.9	+44.1	4,441,365	
Canada.....gallons..	45,274	11,650	21,403	22,188	31,902	22,076	25,396	+25.6	191,256	272,130	
Price, wholesale, N. Y.....dollars. per gal.	58	.58	.58	.58	.58	.48	.48	0.0	+20.8	-----	
Ethyl Alcohol											
Production.....thous. of gals..	15,216	12,545	16,871	20,026	18,764	18,613	-----	6 106,565	6 123,337	+15.7	
Withdrawn for denaturation.....thous. of gals..	13,812	12,909	15,982	18,688	16,128	15,269	-----	6 95,038	6 112,208	+18.1	
Warehouse stocks, end of month.....thous. of gals..	12,341	11,860	11,166	11,489	9,263	11,295	-----	-----	-----	-----	
Explosives											
(Black powder, permissible, and other high explosives)											
Production.....thous. of lbs..	37,235	34,383	35,756	40,584	42,019	35,092	35,310	+3.5	+19.0	289,617	
Shipments.....thous. of lbs..	39,474	35,032	36,811	39,163	42,299	33,039	37,465	+8.0	+12.9	291,655	
New orders.....thous. of lbs..	37,199	34,202	35,499	39,580	40,141	33,611	33,611	+1.4	+19.4	276,782	
Stocks, end of month.....thous. of lbs..	17,989	17,225	16,964	17,529	16,895	18,554	16,274	-3.6	+3.8	322,289	
Naval Stores											
Turpentine (gum):											
Net receipts, southern ports.....barrels..	43,722	48,658	54,872	49,436	42,127	42,724	34,312	-14.8	+22.8	250,269	
Stocks at port, end of month.....barrels..	53,536	57,728	65,570	63,151	65,770	73,304	73,595	+4.1	-10.6	291,798	
Price, southern, New York.....dollars. per gal..	.54	.52	.52	.52	.55	.52	.52	+5.8	+5.8	-----	
Rosin (gum):											
Net receipts, southern ports.....barrels..	137,384	154,168	181,433	172,670	140,212	145,357	116,029	-18.8	+20.8	841,152	
Stocks at 3 ports, end of month.....barrels..	120,665	123,505	169,420	205,955	233,215	227,517	230,672	+13.2	+1.1	998,541	
Price, B, New York.....dollars. per bbl..	7.58	7.88	8.51	8.51	9.01	9.59	9.18	+5.9	-1.9	-----	
Rosin (wood):											
Production.....barrels..	37,708	36,123	37,844	38,315	36,905	37,623	35,473	-3.7	+4.0	314,173	
Stocks, end of month.....barrels..	115,870	113,449	104,492	98,777	90,036	114,074	112,964	-8.8	-20.3	331,323	
Turpentine (wood):											
Production.....barrels..	6,855	6,505	6,718	6,721	6,695	6,274	6,257	-0.4	+7.0	55,000	
Stocks, end of month.....barrels..	4,503	4,778	4,628	4,713	4,344	6,898	6,027	-7.8	-27.9	61,253	
Pine oil:											
Production.....gallons..	219,304	215,153	235,892	220,388	222,112	225,668	211,828	-3.2	+4.9	2,053,339	
Stocks, end of month.....gallons..	878,784	873,358	882,037	894,993	888,328	822,813	845,762	-0.7	+5.0	2,013,417	
Roofing											
Roofing, felt:											
Production, dry felt.....tons..	31,402	29,981	28,188	26,665	23,997	25,574	24,343	-10.9	-1.4	225,591	
Stocks, end of month, dry felt.....tons..	2,138	3,077	2,846	3,974	4,465	3,356	3,427	+12.4	+30.3	242,667	
Fats and Oils											
Total vegetable oils and copra:											
Exports.....thous. of lbs..	1,816	1,428	541	1,285	2,632	1,444	2,222	+104.8	+18.5	40,827	
Imports.....thous. of lbs..	129,285	91,375	73,157	109,091	82,942	56,364	80,914	-24.0	+2.5	538,669	
Copra, imports.....short tons..	34,728	23,828	21,693	26,622	18,007	19,716	20,754	-32.4	-13.2	168,093	
Copra or coconut oil:											
Imports.....thous. of lbs..	49,260	32,571	23,669	36,623	36,952	12,581	34,008	+0.9	+8.7	192,988	
Consumption in oleomargarine.....thous. of lbs..	14,603	12,029	12,658	14,715	16,075	11,910	14,452	+9.2	+11.2	310,664	
Oleomargarine:											
Production.....thous. of lbs..	28,357	24,276	24,873	28,400	30,562	23,610	28,446	+7.6	+7.4	226,390	
Consumption.....thous. of lbs..	29,008	23,379	24,972	25,788	31,423	24,985	29,002	+21.9	+8.3	226,047	
Animal glues, shipments.....thous. of lbs..	7,225	6,246	6,376	7,231	6,749	6,780	6,256	-6.7	+7.9	58,630	
Cottonseed											
Cottonseed:											
Receipts at mills.....short tons..	22,007	26,041	29,377	239,538	920,318	175,643	865,691	+284.2	+6.3	1,694,859	
Consumption (crush).....short tons..	112,421	63,274	51,438	121,769	488,946	74,116	421,362	+301.5	+16.0	2,139,984	
Stocks at mills, end of month.....short tons..	100,634	63,401	41,340	159,109	590,747	123,499	567,828	+271.3	+4.0	-----	
Cottonseed oil, crude:											
Production.....thous. of lbs..	39,688	21,552	18,558	34,453	149,388	20,913	126,787	+333.6	+17.8	687,646	
Stocks, end of month.....thous. of lbs..	51,284	30,079	19,094	29,232	77,339	15,261	68,836	+164.6	+12.3	867,937	
Cottonseed oil, refined:											
Production.....thous. of lbs..	60,581	40,795	27,680	24,376	82,859	21,012	61,637	+239.9	+34.4	684,194	
Stocks, end of month.....thous. of lbs..	512,118	431,100	338,320	234,922	175,023	234,485	159,588	+25.5	+9.7	888,182	
Price, yellow, prime, New York.....dollars. per lb..	.097	.096	.096	.094	.093	.094	.099	-1.1	-6.1	-----	
Consumption in oleomargarine.....thous. of lbs..	2,518	2,124	2,051	2,387	2,362	2,062	2,437	-1.0	-3.1	19,110	
Cottonseed cake and meal:											
Production.....short tons..	50,278	28,423	25,971	56,311	215,663	35,101	185,728	+283.0	+16.1	977,944	
Stocks, end of month.....short tons..	191,983	142,014	80,914	51,727	83,778	18,715	51,411	+62.0	+36.4	1,224,633	
Exports.....short tons..	6,151	4,777	11,969	12,837	21,608	944	22,013	+68.3	-1.8	129,741	
										148,953	

* Revised.

* Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JUN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928													
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929														
CHEMICALS AND OILS—Continued																									
Flaxseed																									
Production, crop estimate—thous. of bushels																									
Minneapolis and Duluth:																									
Receipts—thous. of bushels	313	492	381	1,479	4,111	1,025	3,812	+178.0	+7.8	8,594	8,130	-5.4													
Shipments—thous. of bushels	101	271	340	567	1,655	426	1,260	+191.9	+31.3	5,215	4,186	-19.7													
Stocks, end of month—thous. of bushels	578	764	360	23	909	310	615		+47.8																
Imports—thous. of bushels	2,518	2,366	1,203	1,020	842	1,068	1,254	-17.5	-32.9	13,440	18,627	+38.6													
Mill receipts at Duluth—																									
Superior—thous. of bushels		33	84	42			137	62		6534	6282	-47.2													
Linseed oil:																									
Shipments from Minneapolis—thous. of lbs.	18,005	15,205	14,381	10,787	14,759	13,571	14,443	+37.1	+2.4	133,425	128,002	-4.1													
Price, New York—dollars per lb.	.102	.105	.120	.129	.155	.098	.098	+20.2	+58.2																
Linseed cake and meal:																									
Shipments from Minneapolis—thous. of lbs.	12,067	7,632	12,215	15,683	27,415	16,051	26,257	+74.8	+4.4	187,157	159,246	-14.9													
Exports—thous. of lbs.	32,501	30,065	40,428	37,437	29,770	52,392	38,772	-20.5	-23.2	419,056	290,079	-30.8													
FOODSTUFFS																									
Wheat																									
Visible supply, end of month:																									
United States—thous. of bushels	97,962	94,060	142,855	190,911	198,982	92,108	114,523	+4.2	+73.7																
Canada—thous. of bushels	142,108	118,249	103,315	96,224	156,620	32,728	78,069	+62.8	+100.6																
Production, crop estimate:																									
Winter wheat—thous. of bushels						2 568,233	3 578,133																		
Spring wheat—thous. of bushels						2 223,535	3 324,058																		
Total wheat—thous. of bushels						2 791,768	3 902,191																		
Receipts, principal markets—thous. of bushels	18,637	25,604	94,158	101,669	47,046	84,221	73,322	-53.7	-35.8	361,869	383,131	+5.9													
Shipments, principal markets—thous. of bushels	23,560	18,644	42,577	60,983	32,134	46,105	39,608	-47.3	-18.7	218,115	242,475	+11.2													
Exports:																									
United States—																									
Wheat only—thous. of bushels	11,741	4,564	8,691	12,094	13,104	10,394	17,939	+8.4	-27.0	56,010	64,236	+14.7													
Including wheat flour—thous. of bushels	15,941	8,814	13,575	16,935	18,335	14,588	22,528	+8.3	-18.6	93,943	109,946	+17.0													
Canada—																									
Including wheat flour—thous. of bushels	31,155	29,796	20,538	13,050	9,624	29,220	30,928	-26.3	-68.9	230,914	187,024	-19.0													
Prices:																									
No. 1, Northern Spring,																									
Minneapolis—dollars per bushel	1.11	1.15	1.43	\$ 1.35	1.35	1.19	1.19	0.0	+13.4																
No. 2 Red Winter,																									
St. Louis—dollars per bushel	1.17	1.21	1.39	1.32	1.35	1.38	1.45	+2.3	-6.9																
No. 2 Hard Winter,																									
Kansas City—dollars per bushel	1.01	1.05	1.25	1.23	1.24	1.06	1.07	+0.8	+15.9																
Wheat flour																									
Grindings of wheat:																									
United States—thous. of bushels	42,738	40,833	42,895	\$ 50,725	47,578	47,657	48,014	-6.2	-0.9	381,024	393,307	+3.2													
Canada—thous. of bushels	7,998	7,029	7,247	7,178		7,330	8,554			655,063	659,326	+7.7													
Production:																									
United States, actual—thous. of bbls.	9,334	8,912	9,337	\$ 11,058	10,371	10,370	10,512	-6.2	-1.3	82,364	85,895	+4.3													
United States, prorated—thous. of bbls.	10,680	9,838	10,449	12,562		\$ 11,567	11,197			80,798	84,655	+4.8													
Canada—thous. of bbls.	1,749	1,548	1,603	1,607		1,590	1,892			611,922	613,042	+0.4													
Grain offal, production—thous. of lbs.	742,133	711,357	746,628	\$ 882,931	831,260	819,944	820,934	-5.9	+1.3	6,687,588	6,832,682	+2.2													
Capacity operated, flour mills—per cent	.55	.54	.55	.62	.66	.58	.66	+6.5	0.0																
Consumption (computed)—thous. of bbls.	9,847	8,494	8,365	11,686		\$ 10,435	9,077			672,090	74,238	+3.0													
Stocks, all positions, end of month (computed)—thous. of bbls.	7,600	8,000	10,084	8,800		7,400	8,500																		
Exports:																									
United States—thous. of bbls.	933	944	1,085	1,076	1,163	932	1,020	+8.1	+14.0	8,430	10,157	+20.5													
Canada—thous. of bbls.	907	935	782	643	492	925	1,890	-23.5	-44.7	7,484	7,823	+4.5													
Wholesale prices:																									
Standard patents, Minn.—dollars per bbl.	6.12	6.38	7.69	7.31	7.17	6.62	6.59	-1.9	+8.8																
Winter, straight,																									
Kansas City—dollars per bbl.	5.21	5.26	6.31	6.24	6.10	5.66	5.65	-2.2	+8.0																
Corn																									
Production, crop estimate—thous. of bushels						2 2,528,077	3 2,835,678																		
Exports, including meal—thous. of bushels	1,050	981	850	895	693	1,018	668	-22.6	+3.7	17,618	32,494	+84.4													
Visible supply, end of month—thous. of bushels	15,571	13,932	9,493	5,765	4,638	9,985	7,114	-19.5	-34.8																
Receipts, principal markets—thous. of bushels	11,420	20,644	21,205	19,023	19,532	21,467	19,658	+2.7	-0.6	245,091	198,924	-19.8													
Shipments, prin. markets—thous. of bushels	16,276	15,160	15,644	13,643	11,082	15,778	11,949	-18.8	-7.3	172,989	136,732	-21.0													
Grindings (starch, glucose)—thous. of bushels	6,338	6,697	6,558	7,672	7,913	5,193	6,641	+3.1	+21.0	65,114	65,390	+0.4													
Price, No. 2, Chicago—dollars per bushel	.86	.92	1.00	1.00	1.01	.97	.99	+1.0	+2.0																
Oats																									
Production, crop estimate—thous. of bushels						2 1,226,573	3 1,448,677																		
Receipts, principal markets—thous. of bushels	10,432	8,486	10,123	36,320	13,833	27,271	14,375	-61.9	-3.8	118,379	116,704	-1.4													
Visible supply, end of month—thous. of bushels	10,063	8,114	8,129	25,987	28,809	15,687	18,004	+11.2	+60.0																
Exports, including meal—thous. of bushels	513	254	255	837	1,080	2,403	2,308	+29.0	-53.2	7,157	4,964	-30.6													
Price, contract grades, Chi.—dollars per bushel	.46	.47	.48	.44	.49	.39	.43	+11.4	+14.0																
Grindings, Canada—thous. of bushels	900	895	854	1,101		988	1,100			67,003	67,200	+2.8													
Production, oatmeal and rolled oats, Canada—thous. of lbs.	10,728	11,360	12,145	14,228		15,968	16,499			689,793	691,247	+1.6													
Barley																									
Production, crop estimate—thous. of bushels						2 313,368	3 356,667																		
Receipts, principal markets—thous. of bushels	3,264	3,338	4,849	18,666	7,807	23,611	21,710	-58.2	-64.0	71,848	54,195	-24.6													
Visible supply, end of month—thous. of bushels	6,022	5,731	5,518	9,805	9,519	6,313	8,084	+19.5	+17.8																
Exports—thous. of bushels	1,268	2,783	4,120	4,624	6,209	8,758	14,830	+34.3	+58.1	33,822	28,596	-15.5													
Price, fair to good, malting, Chicago—dollars per bushel	.55	.53	.65	.64	.69	.73	.67	+7.8	+3.0																

² As of Oct. 1.³ Final estimate for 1928.⁴ Revised.⁵ Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Aug-ust, 1929	Sep-tem-ber, 1929, from Sep-tember, 1928	1928	1929	
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>												
FOODSTUFFS—Continued												
Rye												
Production, crop estimate—thous. of bushels												
Receipts, principal markets—thous. of bushels	1,484	870	880	5,766	3,726	2,636	6,001	-35.5	-38.0	17,557	16,842	-4.1
Visible supply, end of month—thous. of bushels	6,325	6,422	6,447	8,015	8,889	1,440	1,927	+10.9	+361.3	9,673	2,911	-69.9
Exports, including flour—thous. of bushels	368	295	106	470	1,220	709	2,471	+159.6	-50.6			
Price, No. 2, Chicago—dollars per bushel	.90	.89	1.05	1.03	1.02	.98	1.00	-1.0	+2.0			
Total Grains												
Total grain exports, incl. flour—thous. of bushels	19,140	13,127	18,907	23,761	27,537	27,476	42,805	+15.9	-35.7	158,204	178,911	+13.1
Rice												
Production, crop estimate—thous. of bushels												
Southern paddy, receipts at mills—bbls.	231,893	191,944	125,737	583,944	1,387,795	338,269	1,197,924	+137.7	+15.9	5,254,968	4,602,915	-12.4
Shipments:												
Total from mills—pockets (100 lbs.)	714,677	650,414	515,342	506,895	841,027	346,076	777,583	+65.9	+8.2	6,670,504	6,529,443	-2.1
New Orleans—pockets (100 lbs.)	125,528	130,369	113,969	126,470	156,832	96,043	147,464	+24.0	+6.4	1,356,886	1,169,759	-13.8
Stocks, end of month—pockets (100 lbs.)	1,311,568	865,117	485,177	506,953	1,099,055	695,600	1,108,564	+116.8	-0.9			
Exports—pockets (100 lbs.)	343,168	261,377	231,401	221,314	131,509	126,668	182,906	-40.6	-14.0	2,614,254	2,869,489	+9.8
Imports—pockets (100 lbs.)	15,257	2,984	6,556	5,549	6,292	6,026	15,412	+13.4	-59.2	280,683	182,485	-35.0
Other Crops												
Apples:												
Production, crop estimates—thous. of bushels												
Cold-storage holdings, end of month—thous. of bbls.												
Car-lot shipment—carloads	1,608	1,001	1,903	3,532	13,114	4,170	1,631	-6.2	-27.5	41,576	44,868	+0.7
Potatoes:												
Production, crop estimate—thous. of bushels												
Car-lot shipments—carloads	19,683	24,321	19,359	16,871	23,978	15,538	20,267	+42.1	+18.3	191,240	185,234	-3.1
Onions, car-lot shipments—carloads	3,366	1,700	2,351	2,545	5,040	2,561	6,009	+98.0	-16.1	25,875	24,867	-3.9
Citrus fruits, car-lot shipments—carloads	15,524	11,820	8,152	7,348	5,684	4,254	3,636	-22.6	+56.3	63,323	108,949	+72.1
Hay, all tame:												
Production, crop estimates—thous. of tons												
Cattle and Beef												
Cattle movements, primary markets:												
Receipts—thousands	1,653	1,444	1,659	51,616	2,099	1,829	2,191	+29.9	-4.2	15,463	14,490	-6.3
Shipments, total—thousands	680	528	592	6,685	883	814	1,067	+28.9	-17.2	6,139	5,477	-10.8
Shipments, stocker and feeder—thousands	292	176	173	267	423	336	563	+58.4	-24.9	2,417	2,080	-13.9
Local slaughter—thousands	979	901	1,039	938	1,118	1,007	1,069	+19.2	+4.6	9,166	8,822	-3.8
Beef products:												
Production, inspected—thous. of lbs.	392,816	364,470	402,501	406,700	419,281	398,056	418,882	+3.1	+0.1	3,520,081	3,499,027	-0.6
Apparent consumption—thous. of lbs.	417,481	388,426	420,212	519,494	423,709	407,512	433,958	+1.0	-2.4	3,638,022	3,644,307	+0.2
Exports—thous. of lbs.	1,293	1,496	2,268	1,457	1,259	1,419	647	-13.6	+94.6	10,237	12,852	+25.5
Cold-storage holdings, end of month—thous. of lbs.	57,315	52,055	45,930	54,014	56,426	31,065	37,223	+17.5	+51.6			
Prices:												
Cattle, corn-fed, Chicago—dollars per 100 lbs.	13.44	.14.38	14.98	14.69	13.80	15.11	16.19	-6.1	-14.8			
Steer rounds, No. 2—dollars per lb.	.230	.234	.238	.238	.236	.244	.259	-0.8	-8.9			
Western dressed steers, N. Y.—dollars per lb.	.231	.238	.255	.251	.250	.260	.284	-0.4	-12.0			
Hogs and Pork												
Hog movements, primary markets:												
Receipts—thousands	3,375	3,230	3,257	52,930	3,062	2,523	2,600	+4.5	+17.8	34,013	31,760	-6.6
Shipments, total—thousands	1,300	1,149	1,199	51,124	1,123	1,160	1,093	-0.1	+2.7	12,845	11,899	-7.4
Shipments, stocker and feeder—thousands	57	53	38	40	43	55	53	+5.3	-27.3	560	467	-16.6
Local slaughter—thousands	2,083	2,081	2,055	1,810	1,923	1,363	1,500	+6.2	+28.2	21,141	19,825	-6.2
Pork products, total:												
Production, inspected—thous. of lbs.	665,985	672,947	675,915	586,150	552,490	466,696	434,296	-5.7	+27.2	6,245,067	6,188,852	-0.9
Apparent consumption—thous. of lbs.	622,890	582,512	604,320	517,430	615,899	588,472	581,185	-0.2	+4.7	5,380,033	5,320,059	-1.1
Exports—thous. of lbs.	98,080	100,556	96,298	87,277	84,650	81,924	65,617	-3.0	+29.0	811,138	875,208	+7.9
Cold-storage holdings, end of month:												
Total—thous. of lbs.	870,785	841,937	814,354	519,400	598,913	859,903	641,977	-16.7	-6.7			
Fresh and cured—thous. of lbs.	687,295	642,238	611,344	539,315	445,419	682,015	515,087	-17.4	-13.5			
Lard (included in pork products):												
Production—thous. of lbs.	141,989	144,272	139,693	121,894	92,401	80,135	61,217,426	+1.6	+1.6	61,217,426	61,198,419	-1.6
Exports—thous. of lbs.	64,192	67,252	64,274	55,487	58,329	50,658	46,158	+5.1	+26.4	545,747	595,106	+9.0
Cold-storage holdings, end of month—thous. of lbs.	183,490	199,699	203,010	5180,055	153,494	177,888	126,890	-14.8	+21.0			
Prices:												
Hogs, heavy, Chicago—dollars per 100 lbs.	10.75	10.66	11.20	10.66	9.96	11.71	12.43	-6.6	-19.9			
Hams, smoked, Chicago—dollars per lb.	.249	.254	.267	.275	.267	.249	.254	-2.9	+5.1			
Lard, prime contract, N. Y.—dollars per lb.	.120	.123	.125	.124	.122	.128	.132	-1.6	-7.6			
Sheep and Lambs												
Sheep movement, primary market:												
Receipts—thousands	2,169	1,749	2,112	2,537	3,353	2,362	3,386	+32.2	-1.0	17,996	18,875	+4.9
Shipments, total—thousands	1,074	740	876	1,334	1,969	1,250	2,161	+42.3	-8.9	9,054	9,216	+1.8
Shipments, stocker and feeder—thousands	217	226	231	639	1,027	564	1,080	+60.7	-4.9	2,806	2,976	+6.1
Local slaughter—thousands	1,101	1,020	1,216	1,155	1,301	1,097	1,213	+12.6	+7.3	8,916	9,556	+7.2
Lamb and mutton:												
Production, inspected—thous. of lbs.	46,397	42,012	46,804	49,096	50,158	44,525	49,237	+2.2	+1.9	381,819	403,839	+5.8
Apparent consumption—thous. of lbs.	46,694	41,967	47,563	518,743	49,593	44,443	49,042	+1.7	+1.1	385,676	409,120	+6.1
Cold-storage holdings, end of month—thous. of lbs.	2,461	3,061	2,639	3,159	4,091	1,691	2,113	+29.5	+93.6			
Prices:												
Sheep, ewes, Chicago—dollars per 100 lbs.	5.91	5.81	5.55	5.16	4.68	5.72	5.50	-9.3	-14.9			
Sheep, lambs, Chicago—dollars per 100 lbs.	12.78	12.75	13.80	12.88	12.55	14.31	14.16	-2.6	-11.4			

* As of Oct. 1.

* Final estimate for 1928.

* Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from August 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
FOODSTUFFS—Continued												
Miscellaneous Meats												
Cold-storage holdings, end of mo. thous. of lbs.	82,331	81,132	81,068	876,539	71,491	56,888	49,798	-6.6	+43.6	-----	-----	-----
Total Meats												
Production, inspected.....thous. of lbs.	1,105,198	1,079,429	1,125,231	1,041,946	1,021,929	909,277	902,414	-1.9	+13.2	10,146,964	10,091,719	-0.5
Cold-storage holdings, end mo. thous. of lbs.	1,012,892	978,185	943,991	847,112	730,921	949,547	731,111	-13.7	-----	-----	-----	-----
Apparent consumption.....thous. of lbs.	1,087,065	1,012,905	1,072,095	1,085,667	1,089,200	1,002,140	1,071,472	+0.3	+1.7	9,403,731	9,373,485	-0.3
Poultry												
Receipts at 5 markets.....thous. of lbs.	17,593	20,434	22,548	26,150	28,477	22,361	23,859	+8.9	+19.4	189,514	200,805	+6.0
Cold-storage holdings, end of mo. thous. of lbs.	41,643	42,001	40,896	49,010	61,969	40,749	43,578	+26.4	+22.2	-----	-----	-----
Fish												
Total catch, prin. ports.....thous. of bbls.	28,631	31,728	43,185	43,903	50,270	30,130	24,284	+14.5	+107.0	225,060	294,578	+30.9
Cold-storage holdings, 15th of mo. thous. of lbs.	30,119	40,451	51,334	64,723	72,198	66,170	71,352	+11.5	+1.2	-----	-----	-----
Canned salmon:												
Shipments, United States.....cases.	186,202	217,781	367,842	830,404	832,632	1,113,495	-----	-----	-----	62,683,493	63,028,493	+12.9
Exports, Canada.....cases.	90,775	42,794	38,983	53,100	118,250	121,152	168,963	+122.7	-30.0	770,735	760,956	-1.3
Butter												
Production (factory).....thous. of lbs.	226,180	181,359	173,314	144,436	117,431	143,391	117,790	-18.7	-0.3	1,185,475	1,232,259	+8.2
Receipts, 5 markets.....thous. of lbs.	63,259	69,511	68,104	54,885	44,500	55,339	44,969	-18.9	-1.0	463,410	481,634	+3.9
Cold-storage holdings, creamery, end of month.....thous. of lbs.	28,369	91,982	151,621	168,952	158,504	136,175	128,071	-6.2	+23.8	-----	-----	-----
Apparent consumption.....thous. of lbs.	203,760	192,045	241,232	185,708	174,193	189,164	176,879	-6.2	-1.5	1,592,494	1,626,018	+2.1
Wholesale price, New York.....dollars per lb.	.44	.44	.42	.43	.46	.47	.49	+7.0	-6.1	-----	-----	-----
Cheese												
Total, all varieties:												
Production (factory).....thous. of lbs.	41,083	48,854	47,004	37,751	30,373	49,401	45,156	-16.9	-32.7	418,154	302,038	-27.8
Receipts, 5 markets.....thous. of lbs.	16,751	18,404	20,548	18,605	15,259	18,727	18,222	-17.8	-16.1	152,078	141,848	-6.7
Apparent consumption.....thous. of lbs.	40,639	38,625	36,607	39,453	38,414	36,541	48,660	-2.6	-21.1	371,064	344,878	-7.1
Cold-storage holdings, end mo. thous. of lbs.	61,097	79,724	98,070	106,009	102,613	101,498	98,339	-3.2	+4.3	-----	-----	-----
Imports.....thous. of lbs.	6,183	8,608	6,653	5,268	4,929	5,597	6,744	-6.4	-26.9	53,777	55,505	+3.4
Exports, United States.....thous. of lbs.	204	209	285	138	284	215	141	+105.8	+101.4	1,929	2,078	+7.7
Exports, Canada.....thous. of lbs.	1,692	8,403	15,074	11,047	16,954	15,788	17,123	+53.5	-1.0	68,866	56,914	-17.4
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs.	47,641	62,737	79,907	86,558	84,596	83,906	81,833	-2.3	+3.4	-----	-----	-----
Wholesale price, New York.....dollars per lb.	.23	.23	.23	.23	.24	.26	.27	+4.3	-11.1	-----	-----	-----
Eggs												
Receipts, 5 markets.....thous. of cases.	2,331	1,813	1,409	1,151	944	1,076	930	-18.0	+0.5	14,192	13,810	-2.7
Cold-storage holdings, end of month:												
Case.....thous. of cases.	6,705	8,510	8,962	8,547	7,191	9,944	8,542	-15.9	-15.8	-----	-----	-----
Frozen.....thous. of lbs.	71,560	84,766	91,488	86,693	81,414	89,196	82,255	-6.1	-1.0	-----	-----	-----
Milk												
Condensed milk:												
Total stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	22,193	31,459	34,750	32,142	29,893	30,542	27,837	-7.0	+7.4	-----	-----	-----
Bulk goods.....thous. of lbs.	18,262	25,803	29,890	29,217	29,907	19,332	17,604	+2.4	+69.8	-----	-----	-----
Unsold stocks, mfrs., end mo.—												
Case goods.....thous. of lbs.	17,249	25,140	28,883	26,950	24,237	24,159	21,821	-10.1	+11.1	-----	-----	-----
Bulk goods.....thous. of lbs.	6,644	9,296	9,221	5,751	8,019	8,367	6,351	-8.4	+26.3	-----	-----	-----
Exports.....thous. of lbs.	2,689	3,280	3,865	3,366	3,116	3,246	3,405	-7.4	-8.5	29,866	31,337	+5.1
Wholesale price, New York.....dollars per case.	6.13	6.13	6.13	6.13	6.13	6.18	0.0	-0.8	-----	-----	-----	-----
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs.	160,426	222,956	281,137	272,427	249,936	161,679	165,682	-8.3	+50.9	-----	-----	-----
Unsold, case goods.....thous. of lbs.	116,144	173,684	215,878	186,717	192,761	101,819	134,259	+2.2	+43.6	-----	-----	-----
Exports.....thous. of lbs.	5,917	7,121	5,929	4,609	3,703	6,343	5,583	-19.7	-33.7	60,430	53,637	-11.2
Wholesale price, New York.....dollars per case.	4.30	4.30	4.30	4.21	4.21	4.45	4.58	-2.1	-8.1	-----	-----	-----
Production, condensed and evaporated milk.....thous. of lbs.	257,343	290,350	261,989	180,084	136,738	160,360	140,388	-24.1	-2.6	1,591,129	1,702,554	+7.0
Powdered milk:												
Manuftrs.' stocks, end mo.....thous. of lbs.	22,802	31,103	33,921	33,491	30,248	19,941	18,857	-9.7	+60.4	-----	-----	-----
Exports.....thous. of lbs.	396	488	400	250	329	526	322	+31.6	+2.2	2,838	3,657	+28.9
Net new orders.....thous. of lbs.	7,358	8,228	7,786	8,069	7,780	6,736	5,662	-3.6	+37.4	53,141	61,769	+16.2
Fluid milk:												
Receipts—												
Boston (includ. cream).....thous. of qts.	19,381	19,920	20,114	19,115	19,081	17,329	-----	-----	-----	644,688	647,166	+1.7
Greater New York.....thous. of qts.	118,227	122,902	119,886	114,768	117,162	113,552	-----	-----	-----	610,635	616,195	+0.6
Production—												
Minneapolis, St. Paul.....thous. of lbs.	35,435	36,949	32,021	25,737	21,974	24,413	21,572	-14.6	+1.9	247,628	269,737	+8.9
Consumption in manufacture of oleomargarine.....thous. of lbs.	7,514	6,487	7,045	8,144	8,824	7,014	8,530	+8.3	+3.4	66,789	69,865	+4.6
Sugar												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons.	134,891	112,546	156,633	90,922	120,481	107,202	89,047	+32.5	+35.3	1,182,152	1,053,864	-10.9
From foreign countries.....long tons.	458,183	338,905	359,393	410,479	292,699	274,366	315,722	-28.7	-7.3	2,761,962	3,766,314	+36.4
Meltings, 8 ports.....long tons.	409,503	450,035	445,904	504,207	322,716	471,175	417,983	-36.0	-22.8	3,600,481	3,854,402	+7.1
Stocks at refineries, end month.....long tons.	911,055	875,942	864,589	830,508	873,286	488,161	465,386	+5.2	+87.6	-----	-----	-----
Refined:												
Shipments, 2 ports.....long tons.	73,898	81,088	93,673	89,294	47,447	82,773	66,428	-46.9	-28.6	559,008	659,901	+18.0
Stocks, 2 ports.....long tons.	47,158	50,753	42,889	47,419	49,631	34,049	26,725	+4.7	+85.7	78,405	78,824	+2.1
Exports, including maple.....long tons.	8,538	6,341	11,631	8,579	5,705	11,329	7,413	-33.5	-23.0	-----	-----	-----

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 188 of the August, 1929, "Survey"												
FOODSTUFFS—Continued												
Sugar—Continued												
Prices:												
Wholesale, 96° centrif., N. Y. dollars per lb.	0.036	0.035	0.038	0.038	0.040	0.041	0.042	+5.3	-4.8			
Wholesale, granulated, N. Y. dollars per lb.	.049	.049	.052	.054	.053	.055	.056	-1.9	-5.4			
Retail, granulated, N. Y. dollars per lb.	.056	.056	.057	.060	.061	.063	.063	+1.7	-3.2			
Retail average, 51 cities relative to 1913	116	116	116	120	122	129	127	+1.7	-3.9			
Cuban movement (raw):												
Receipts at Cuban ports long tons	440,821	196,995	153,925	211,090	120,530	182,414	168,638	-42.9	-28.5	3,599,087	4,592,954	+27.6
Exports long tons	510,217	356,616	428,066	464,310	349,972	348,808	370,339	-24.6	-5.5	3,106,407	4,058,553	+30.7
Stocks, end of month long tons	1,439,050	1,298,387	978,543	739,068	503,592	829,437	630,548	-31.9	-20.1			
Candy												
Sales by manufacturers thous. of dolls.	27,047	22,774	17,962	26,174	34,779							
Coffee												
Imports thous. of bags	860	817	864	875	925	925	1,655	+5.7	-44.1	9,338	8,449	9.5
Visible supply:												
World thous. of bags	5,335	5,352	5,448	5,269	5,227	5,515	5,378	-0.8	-2.8			
United States thous. of bags	633	700	760	685	689	793	702	+0.6	-1.9			
Receipts, total, Brazil thous. of bags	1,079	1,069	1,056	1,191	1,266	1,181	1,040	+6.3	+21.7	10,641	10,242	-3.7
Clearances:												
Total, Brazil, for world thous. of bags	971	1,020	1,267	1,242	1,234	1,057	997	-0.6	+23.8	10,171	10,235	+0.6
Total, Brazil, for U. S. thous. of bags	503	488	634	655	642	548	570	-1.9	+12.6	5,415	5,296	-2.2
Price, Rio No. 7, Brazil grades dollars per lb.	.171	.168	.163	.161	.158	.173	.173	-1.9	-8.7			
Tea												
Imports thous. of lbs.	4,769	6,029	6,734	7,019	8,737	8,086	9,754	+24.5	-10.4	60,790	61,051	+0.4
Price, Formosa, fine, New York dollars per lb.	.330	.325	.310	.310	.310	.325	.325	0.0	-4.6			
Cocoa												
Shipments from the Gold and Nigerian Coasts, Africa long tons	12,464	9,889	7,224	5,238	4,459	4,011	3,724	-14.9	+19.7	172,575	192,196	+11.4
Imports long tons	15,394	14,486	18,862	15,922	10,481	13,461	6,388	-34.2	+64.1	143,048	173,357	+21.2
Spot price, Accra, New York dollars	.1031	.1069	.1069	.1081	.1100	.1213	.1163	+1.8	-5.4			
TOBACCO												
Production, crop estimate thous. of lbs.					21,472,525					1,378,139		
Consumption (tax-paid withdrawals):												
Large cigars thousands	572,413	556,746	589,282	598,583	591,738	601,877	586,267	-1.1	+0.9	4,687,910	4,816,171	+2.7
Small cigarettes thousands	11,168,407	10,839,673	10,724,403	10,930,629	10,350,544	10,627,344	9,126,271	-5.3	+13.4	79,942,901	90,534,149	+13.2
Manufac. tobacco and snuff thous. of lbs.	33,360	32,353	32,694	34,470	32,260	34,981	31,789	-6.4	+1.5	293,264	290,993	-0.8
Exports:												
Unmanufactured thous. of lbs.	32,753	28,588	26,266	41,343	55,965	26,833	57,509	+35.4	-2.9	348,598	349,729	+0.3
Cigarettes thousands	703,045	784,160	504,565	558,249	860,791	961,827	-15.3	-42.0	8,525,491	6,751,583	-20.8	
Sales of loose-leaf, warehouses thous. of lbs.	441	48			70,579	133,718						
Price, leaf, Kentucky dollars per 100 lbs.	11,692	8,722			11,580	7,871						
TRANSPORTATION												
River and Canal Cargo Traffic												
Panama Canal:												
Total cargo traffic thous. of long tons	2,537	2,424	2,598	2,681	2,433	2,425	2,313	-9.3	+5.2	21,595	23,546	+9.0
In American vessels thous. of long tons	1,206	1,186	1,335	1,311	1,194	1,103	1,140	-8.9	+4.7	10,109	11,011	+8.9
In British vessels thous. of long tons	667	591	583	639	600	707	602	-6.1	-0.3	6,075	6,192	+1.9
Sault Ste. Marie canals thous. of short tons	13,930	14,076	14,120	14,085	13,385	13,680	12,812	-5.2	+4.3	61,670	73,975	+20.0
New York State canals thous. of short tons	393	387	444	380	389	517	411	+2.4	-5.4	2,275	2,053	-9.8
Cape Cod Canal short tons	201,444	161,143	175,179	206,188	199,955	148,691	130,566	-3.0	+53.1	490,577	1,535,727	+66.9
Suez Canal thous. of met tons	3,093	2,590	2,745	2,762	2,602	2,634	2,634	+21,567		23,122		+7.2
Welland Canal short tons	775,786	760,431	628,041	612,943	574,241	1,115,601	996,833	-6.3	-42.4	5,206,151	3,650,462	-61.9
St. Lawrence Canal short tons	878,458	927,933	781,310	809,323	775,772	1,359,561	1,150,058	-4.1	-32.5	5,974,108	4,388,198	-22.5
Mississippi River Govt. barges short tons	123,851	103,934	94,141	85,000	91,000	113,903	148,377	-7.1	-38.7	1,031,459	978,509	-5.1
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va. short tons	1,070,125	1,056,795	1,088,912	1,080,996	1,144,682	1,084,775	963,766	+5.9	+18.8	7,458,861	8,263,071	+10.8
Allegheny River short tons	328,289	345,995	396,514	330,123	346,309	346,670	288,629	+10.4	+26.2	2,031,547	2,354,457	+15.9
Monongahela River short tons	2,450,876	2,460,644	2,396,993	2,500,617	2,374,949	2,304,619	2,305,681	-5.0	+3.0	19,283,211	21,253,650	+10.2
Ohio River tonnage originating (quarterly):												
Pittsburgh district thous. of short tons		\$ 3,070				\$ 3,287				\$ 2,932	+7.1	+12.1
Huntington district thous. of short tons		\$ 1,348				\$ 1,362				\$ 1,233	+38.1	+30.9
Cincinnati district thous. of short tons		\$ 1,133				\$ 1,179				\$ 1,189	+34.6	+28.8
Louisville district thous. of short tons		\$ 1,869				\$ 1,251				\$ 1,178	-33.1	+6.2
Total thous. of short tons		\$ 6,426				\$ 6,579				\$ 5,673	+2.5	+16.0
Ocean Traffic												
Clearances, vessels in foreign trade:												
Total thous. of net tons	7,277	7,664	8,099	8,428	7,559	8,377	7,365	-10.3	+2.6	58,206	62,413	+7.2
American thous. of net tons	2,851	2,985	3,176	3,219	2,833	3,173	2,912	-12.0	-2.7	22,552	23,806	+5.6
Foreign thous. of net tons	4,425	4,679	4,923	5,208	4,726	5,204	4,453	-9.3	+6.1	35,654	38,606	+8.3
Shipbuilding												
Completed during month:												
Total gross tons	9,775	37,616	21,585	32,289		12,537	27,833			\$ 120,158	\$ 143,806	+19.7
Steel seagoing gross tons	3,804	14,379	15,708	21,497		2,245	24,453			\$ 166,258	\$ 73,502	+10.9
Building or under contract, end of month:												
Merchant vessels thous. of gross tons	268	170	160	215		235	242			\$ 1,919	\$ 1,584	-17.5
World construction (quarterly) thous. of gross tons		\$ 2,838										
World launchings (quarterly) thous. of gross tons		\$ 711										

² As of Oct. 1.³ Final estimate for 1928.⁴ Cumulative through Aug. 31.⁵ Quarter ending in month indicated

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
TRANSPORTATION—Continued												
Freight Cars												
Surplus (daily av. last week of month):												
Total cars.	222,626	217,657	197,923	158,112	118,523	201,864	103,906	-25.0	+14.1			
Box cars.	109,924	116,657	96,577	87,985	72,612	114,355	53,170	-17.5	+36.6			
Coal cars.	64,156	55,150	58,485	31,021	12,117	47,615	21,809	-60.9	-44.4			
Shortage (daily av. last week of month):												
Total cars.	18	75	3	12	127	8	279		-54.5			
Box cars.												
Coal cars.	18	11				112	8	159		-29.6		
Car loadings:												
Total cars.	4,205,709	5,260,571	4,153,220	5,590,853	4,538,575	5,348,407	4,470,541	-18.8	+1.5	38,224,762	39,879,586	+4.3
Grain and grain products cars.	152,544	215,606	246,696	315,570	199,367	288,572	238,470	-36.8	-16.4	1,841,716	1,857,127	+0.8
Livestock cars.	105,838	116,744	91,969	121,255	123,644	126,780	136,923	+1.9	-9.7	1,093,830	1,011,161	-7.6
Coal and coke cars.	690,020	842,553	644,715	916,215	811,081	874,369	764,880	-11.5	+6.0	6,659,875	7,163,818	+7.6
Forest products cars.	277,316	347,917	245,036	343,449	251,726	332,061	254,527	-26.7	-1.1	2,529,162	2,539,420	+0.4
Ore cars.	283,805	379,813	304,962	378,560	274,599	321,700	250,969	-27.5	+9.4	1,465,063	1,862,174	+27.1
Merchandise and l. c. l. cars.	1,053,688	1,273,002	996,357	1,307,417	1,048,579	1,290,844	1,034,957	-19.8	+1.3	9,862,727	9,929,971	+0.7
Miscellaneous cars.	1,642,498	2,084,936	1,623,485	2,208,357	1,829,579	2,114,081	1,789,815	-17.2	+2.2	14,772,386	15,515,915	+5.0
Railroad Operations												
Operating revenue:												
Freight thous. of dolls.	412,018	390,360	416,405	446,001		421,771	423,347					
Passenger thous. of dolls.	68,896	79,329	79,551	84,267		58,187	80,098					
Total operating thous. of dolls.	537,748	531,743	557,568	586,563		558,751	556,044					
Operating expenses thous. of dolls.	390,977	381,596	389,262	395,686		384,528	375,646					
Net operating income thous. of dolls.	103,616	105,961	122,783	152,232		138,728	134,513					
Freight carried mills. ton-miles.	43,027	40,725	41,991	44,944		42,425	43,778					
Railway Equipment												
Locomotives (Am. Ry. Assn.):												
Owned, end of month—												
Quantity number.	58,052	57,876	57,635	57,477	57,356	59,769	59,600	-0.2	-3.8			
Tractive power mills. of lbs.	2,549	2,546	2,541	2,540	2,540	2,885	2,582	0.0	-1.6			
In bad order, end of month—												
Quantity number.	7,803	7,453	7,681	7,106	7,668	7,954	7,815	+7.9	-1.9			
Per cent of total in use per cent.	13.4	13.0	13.4	12.4	13.5	13.4	13.2	+8.9	+2.3			
Installed number.	177	158	120	153	127	114	93	-17.0	+36.6	1,088	1,211	+11.3
Retired number.	269	297	369	306	248	320	260	-19.0	-4.6	2,269	2,554	+12.6
New orders number.	50	181	36	46	87	70	8	+89.1		249	696	+179.5
Shipments, manufacturers' (Census)—												
Total number.	99	78	69	129	75	34	41	-41.9	+82.9	435	592	+36.1
Steam, domestic number.	92	58	39	117	60	23	28	-48.7	+114.3	285	480	+68.4
Electric, domestic number.	2	1	3	6	7	4	2	+16.7	+250.0	87	32	-63.2
Unfilled orders (railroads), end of mo.—												
From manufacturers number.	265	334	365	370	329	81	98	-11.1	+235.7			
In railroad shops number.	59	55	45	25	25	19	15	0.0	+66.7			
Unfilled orders, manufacturers' (Census)—												
Total number.	444	552	539	436	429	204	178	-1.6	+141.0			
Steam, domestic number.	362	489	490	392	347	135	118	-11.5	+194.1			
Electric, domestic number.	22	21	18	13	55	26	27	+323.1	+103.7			
Exports, steam number.	14	14	32	30	20	20	33	-33.3	-39.4	166	173	+4.2
Freight cars (Am. Ry. Assn.):												
Owned, end of month—												
Quantity thous. of cars.	2,267	2,266	2,267	2,268	2,266	2,299	2,296	-0.1	-1.3			
Capacity mills. of lbs.	208,850	208,867	209,095	208,897	208,999	210,483	210,335	0.0	-0.6			
In bad order, end of month—												
Quantity cars.	144,634	142,064	137,495	134,253	132,611	149,252	148,333	-1.2	-10.6			
Per cent of total in use per cent.	6.5	6.4	6.2	6.0	6.0	6.6	6.6	0.0	-9.1			
New orders cars.	8,364	5,869	442	2,585	4,257	767	1,236	+64.7	+244.4	24,636	66,413	+169.6
Shipments—												
Total cars.	8,459	6,517	7,109	7,811	7,614	5,295	3,220	-2.5	+136.5	33,650	49,585	+47.4
Domestic cars.	8,350	6,514	6,963	7,633	7,239	5,261	3,000	-5.2	+141.3	32,763	47,000	+43.5
Unfilled orders (railroads)—												
Total cars.	39,843	39,173	36,014	31,671	29,317	8,177	6,619	-7.4	+342.9			
From manufacturers cars.	33,588	34,145	31,590	27,289	25,554	5,673	3,878	-6.4				
In railroad shops cars.	6,255	5,028	4,424	4,382	3,763	2,504	2,741	-14.1	+37.3			
Passenger cars:												
New orders cars.	131	176	97	149		589	2			1,704	1,105	-35.2
Shipments—												
Total cars.	48	94	64	76	496	147	146	+26.3	-32.9	817	752	-8.0
Domestic cars.	44	82	53	64	77	144	143	+20.3	-46.2	747	684	-8.4
Passenger Travel												
National parks:												
Visitors number.	102,207	273,059	593,324	523,623	220,766	499,633	222,698	-57.8	-0.9	1,910,400	1,939,910	+1.5
Automobiles entered number.	21,190	59,412	131,511	112,574	49,102	98,523	44,873	-56.4	+9.4	411,055	411,055	+25.5
Arrivals from abroad:												
Immigrants number.	25,711	22,490	20,068	22,778		24,629	29,317			6,187,901	6,174,817	-7.0
United States citizens number.	27,169	28,119	37,636	70,783		63,191	80,233			6,270,426	6,290,036	+7.3
Departures abroad:												
Emigrants number.	4,985	4,881	5,086	5,571		6,488	8,093			6,47,214	6,35,183	-25.5
United States citizens number.	31,505	42,846	56,339	70,551		50,323	42,105			6,327,671	6,315,645	-3.7
Passports issued number.	38,175	29,508	18,115	11,295	9,135	9,866	8,056	-19.1	+13.4	163,319	171,690	+5.1
Fullman company operations:												
Revenue thous. of dollars.	6,471	7,763	7,230	7,927		7,593	7,297			6,54,619	6,55,872	+2.3
Passengers carried thousands.	2,590	3,000	2,939	3,287		3,312	3,081			6,22,881	6,22,515	-1.6
Trend of business in hotels:												
Room occupancy per ct. of capacity.	71	66	63	65	60	63	68	+6.2	+1.5			
Average sale per occupied room dollars.	3.88	3.97	3.94	4.13	4.02	4.09	3.98	-2.7	+1.0			
Warehouses												
Public merchandise warehouses, space occupied per ct. of total.	71.0	71.0	71.2	71.8		67.9	66.1					

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
PUBLIC UTILITIES												
Telephone companies:												
Operating revenues.....thous. of dolls..	76,158	74,622	75,141	75,898		68,784	68,432			6 540,570	6 597,370	+10.5
Operating income.....thous. of dolls..	18,355	18,194	15,905	17,601		15,985	16,496			6 132,545	6 143,193	+8.0
Telegraph companies:												
Commercial telegraph tolls.....thous. of dolls..	11,853	11,396	11,679	12,067		11,530	11,010			6 85,864	6 91,632	+6.7
Operating revenues.....thous. of dolls..	15,016	14,446	14,843	15,316		14,328	13,911			6 107,348	6 116,069	+8.1
Operating income.....thous. of dolls..	1,749	1,516	1,528	1,688		1,887	1,918			6 13,658	6 13,186	-3.5
Gas and electric companies:												
Gross earnings.....thous. of dolls..	189,750	183,000	178,000	179,500		173,952	179,346			6 1,459,378	6 1,512,250	+3.6
Net earnings.....thous. of dolls..	82,500	79,000	71,000	73,000		61,810	68,236			6 554,432	6 651,500	+17.5
Electric railways (212 companies):												
Passengers carried.....thous. of persons..	792,894	744,310	722,289	724,812	704,818	736,223	717,810	-2.8	-1.8	6,917,365	6,824,911	-1.3
Average fare.....cents..	8,221	8,228	8,244	8,260	8,260	8,121	8,121	0.0	+1.7			
ELECTRIC POWER												
Electric power production:												
Total.....mills. of kw. hours..	8,084	7,768	8,014	8,250		7,510	7,276			6 60,987	6 63,665	+4.4
By water power.....mills. of kw. hours..	3,483	3,066	3,055	2,840		3,036	2,788			6 23,487	6 24,028	+2.3
By fuels.....mills. of kw. hours..	4,601	4,702	4,959	5,419		4,474	4,488			6 33,500	6 39,649	+18.4
In street railways,												
manfg. plants, etc.....mills. of kw. hours..	378	362	368	390		382	355			6 3,516	6 3,075	-12.5
In central stations.....mills. of kw. hours..	7,706	7,406	7,646	7,389		7,128	6,927			6 53,512	6 60,590	+13.2
Electric power production (Canada):												
Total.....mills. of kw. hours..	1,457	1,377	1,411	1,444		1,314	1,280			6 10,308	6 11,422	+10.8
By water power.....mills. of kw. hours..	1,432	1,360	1,393	1,425		1,298	1,262			6 10,174	6 11,223	+10.3
Exported.....mills. of kw. hours..	112	119	129	131		146	130			6 1,043	6 954	-8.5
Electric power, gross revenue.....thous. of dolls..	165,600	162,300	159,300			148,200	156,100					
Consumption of electrical energy:												
By geographic divisions—												
United States.....rel. to 1923-25..	136.9	135.2	129.0	128.2	135.8	120.8	134.5	+5.9	+1.0			
New England.....rel. to 1923-25..	123.3	123.5	113.4	108.7	118.2	102.2	115.3	+8.7	+2.5			
North Central.....rel. to 1923-25..	148.9	142.0	141.3	135.5	140.6	132.4	149.7	+3.8	-6.1			
Middle Atlantic.....rel. to 1923-25..	130.4	129.5	120.5	127.9	138.0	118.3	136.0	+7.9	+1.5			
Southern.....rel. to 1923-25..	128.1	128.4	114.7	132.7	126.3	112.8	127.5	-4.8	-0.9			
Western.....rel. to 1923-25..	144.7	134.2	129.4	127.0	143.1	127.5	150.8	+12.7	-5.1			
By industry—												
All industry.....rel. to 1923-25..	136.9	135.2	129.0	128.2	135.8	120.8	134.5	+5.9	+1.0			
Chemical and allied products.....rel. to 1923-25..	129.2	133.8	127.0	125.0	139.9	119.2	132.0	+11.9	+6.0			
Food and kindred products.....rel. to 1923-25..	122.6	121.8	129.9	132.2	141.2	128.3	142.0	+6.8	-0.6			
Rolling mills and steel plants.....rel. to 1923-25..	172.2	154.3	144.4	150.9	152.3	125.4	141.2	+0.9	+7.9			
Metal working plants.....rel. to 1923-25..	144.2	143.4	144.4	134.6	147.4	125.8	144.2	+9.5	+2.2			
Metal groups.....rel. to 1923-24..	154.8	147.9	144.2	140.7	149.2	125.5	143.0	+6.0	+4.3			
Leather and its products.....rel. to 1923-25..	95.2	98.7	82.0	102.2	105.4	94.7	106.9	+3.1	-1.4			
Lumber and its products.....rel. to 1923-25..	111.1	113.8	103.2	102.3	111.4	111.6	111.3	+8.9	+0.1			
Paper and pulp.....rel. to 1923-25..	129.9	137.3	122.3	123.6	127.0	129.1	132.0	+2.8	-3.8			
Rubber and its products.....rel. to 1923-25..	157.6	158.1	136.7	120.7	133.7	138.4	151.2	+11.2	-11.6			
Shipbuilding.....rel. to 1923-25..	135.2	106.9	107.7	96.3	114.9	67.3	72.3	+19.3	+58.9			
Stone, clay, and glass.....rel. to 1923-25..	143.5	170.3	154.7	157.7	165.7	135.3	152.0	+5.1	+9.0			
Textiles.....rel. to 1923-25..	129.9	123.0	113.4	110.0	115.5	97.3	112.5	+5.0	+2.7			
Automobiles, including repair parts.....rel. to 1923-25..	161.8	154.0	139.5	143.0	138.1	143.2	161.0	-3.4	-14.2			
EMPLOYMENT AND WAGES												
Employment in factories:												
Massachusetts.....rel. to 1919-23..	78.8	77.2	77.0	77.8	79.8	74.2	75.6	+2.6	+5.6			
New York State.....rel. to 1923..	87.5	87.6	87.3	87.7	89.3	82.5	84.3	+1.8	+5.9			
New Jersey.....rel. to 1923..	101	101	102	103	104	91	94	+1.0	+10.6			
Pennsylvania.....rel. to 1923..	85	86	86	87	88	81	81	+1.1	+8.6			
Delaware.....rel. to 1923..	79	78	81	84	85	74	77	+1.2	+10.4			
Maryland.....rel. to 1924..	91.6	93.9	93.0	93.0	94.2	88.1	89.0	+1.3	+5.8			
Iowa.....rel. to 1923..	127.6	130.8	129.7	133.2	133.4	124.0	124.0	+0.2	+7.6			
Illinois.....rel. to 1925-27..	103.7	104.1	103.4	105.1		96.3	97.7					
Wisconsin.....rel. to 1923..	99.1	98.2	100.3	99.2		97.9	97.1					
Ohio.....rel. to 1923..	115	116	116	115		106	109	-0.9	+5.5			
Cleveland.....rel. to Jan., 1921..	124.0	123.9	124.2	125.0	124.0	113.8	114.5	-0.8	+8.3			
Milwaukee.....number..	44,067	43,814	43,761	43,736	41,555	37,385	38,077	-5.0	+9.1			
New York State.....number..	484,464	484,637	483,142	485,330	494,311	456,303	466,357	+1.9	+6.0			
Oklahoma.....number..	34,086	36,795	34,984	38,978	38,239	31,137	30,812	-1.9	+24.1			
Total pay roll:												
New York State (weekly).....thous. of dolls..	14,549	14,549	14,398	14,599	15,063	13,411	13,862	+3.2	+8.7			
Oklahoma (weekly).....thous. of dolls..	1,039	1,005	965	1,074	1,015	877	865	-5.5	+17.3			
Wisconsin.....rel. to 1923..	110.1	107.0	100.2	105.3		108.7	106.5					
New York State.....rel. to 1923..	96.5	96.5	95.5	96.8	99.9	89.0	92.0	+3.2	+8.6			
New Jersey.....rel. to 1923..	114	114	111	115	116	99	102	+0.9	+13.7			
Pennsylvania.....rel. to 1923..	94	93	88	93	91	83	83	-2.2	+9.6			
Delaware.....rel. to 1923..	88	86	84	90	88	76	77	-2.2	+14.3			
Illinois.....rel. to 1925-27..	105.7	107.5	102.7	106.0		96.3						
Employment, Canada.....rel. to calendar year 1926..	116.2	122.2	124.7	127.8	126.8	119.3	119.1	-0.8	+6.5			
Ohio construction.....rel. to 1923..	122.5	132.9	139.6	141.3	136.5	139.4	135.0	-3.4	+1.1			
Employment, trade-unions:												
United States.....per cent of total..	89.0	91.0	91.0	91.0	90.0	91.0	90.0	-1.1	0.0			
Canada.....per cent of total..	96.0	97.1	97.0	96.5		97.6	97.8					
Anthracite mines:												
Employment.....rel. to 1923-25..	107.2	95.4	85.6	93.6	105.5	110.9	112.7	+12.7	-6.4			
Pay roll.....rel. to 1923-25..	85.4	71.0	68.9	83.4		97.2	72.5	+21.0	-25.9			

5 Revised.

6 Cumulative through Aug. 31.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	September, 1929, from August, 1929	September, 1929, from September, 1928	1928	1929	
EMPLOYMENT AND WAGES—Con.												
Federal civilian employees, Washington, D. C., end month—number	63,841	63,904	63,372	63,632	63,516	62,111	62,010	-0.2	+2.4			
Average weekly earnings, factories:												
Illinois—dollars	29.05	29.46	28.16	28.57	25.40	29.13	28.31	-11.1	-10.3			
New York State—dollars	30.03	30.02	29.80	30.08	30.47	29.39	29.72	+1.3	+2.5			
Wisconsin—dollars	26.64	26.03	23.96	26.51		26.60	26.30					
Oklahoma—dollars	29.95	27.31	27.57	27.55	26.50	28.15	28.08	-3.8	-5.6			
Massachusetts—rel. to 1914	232.4	231.5	231.0	234.2	234.4	234.4	230.9	+0.1	+1.5			
New York—rel. to 1914	240.6	240.5	238.8	241.0	244.2	235.5	238.1	+1.3	+2.6			
New Jersey—rel. to 1923	114	113	110	113	112	109	110	-0.9	+1.8			
Pennsylvania—rel. to 1923	110	108	101	107	104	102	101	-2.8	+3.0			
Delaware—rel. to 1923	111	108	102	105	103	102	101	-1.9	+2.0			
Illinois—rel. to 1925-27	102.4	103.8				99.9	99.8					
Wisconsin—rel. to 1923	111.1	109.0	100.0	106.3		111.0	109.7					
Average weekly earnings (National Industrial Conference Board):												
Grand total (both sexes)—dollars	28.54	28.28	28.09	27.94		27.35	27.76					
Total male—dollars	31.48	31.16	31.01	30.69		30.30	30.93					
Skilled male—dollars	33.04	32.66	32.52	32.18		31.77	32.42					
Unskilled male—dollars	25.59	25.45	25.23	25.09		24.78	25.27					
Total women—dollars	17.95	17.86	17.54	17.47		17.04	17.33					
Average weekly hours:												
Nominal (both sexes)—hours	49.9	49.7	49.6	49.4		49.6	49.8					
Actual (both sexes)—hours	49.0	48.5	48.8	48.4		47.9	48.2					
Wages, road labor, by districts:												
New England—cents per hour	50	51	49	51	51	48	48	0.0	+6.3			
Middle Atlantic—cents per hour	42	42	42	42	43	41	42	+2.4	+2.4			
South Atlantic—cents per hour	30	29	30	30	29	34	24	-3.3	+20.8			
East South Central—cents per hour	26	26	25	25	25	25	25	0.0	0.0			
West South Central—cents per hour	31	32	30	30	31	29	26	+3.3	+19.2			
East North Central—cents per hour	40	38	40	39	39	39	38	0.0	+2.6			
West North Central—cents per hour	37	37	36	37	37	38	39	0.0	-5.1			
Mountain—cents per hour	45	47	47	48	48	50	52	0.0	-7.7			
Pacific—cents per hour	53	52	52	54	54	54	54	+3.8	0.0			
United States, average—cents per hour	40	40	39	40	41	42	43	+2.5	-4.7			
Wage rates, U. S. Steel Corp.—cents per hour	50	50	50	50	50	50	50	0.0	0.0			
Wages, steel sheet workers—per cent of base	\$127.0	\$127.0	\$127.0	\$127.0	127.0	125.5	125.5	0.0	+1.2			
Applicants per 100 jobs, employment agencies:												
United States—number	126	128	131	124	114	129	107	-8.1	+6.5			
Eastern States—number	126	127	139	136	121	223	120	-11.0	+0.8			
Central States—number	126	140	141	135	132	132	126	-2.2	+4.8			
Southern States—number	108	185	174	173	148	121	91	-16.9	+62.6			
Western States—number	93	71	83	75	67	69	63	-10.7	+6.3			
Illinois—number	124	139	148	137	136	138	130	-0.7	+4.6			
Wisconsin—number	106	120	115	117	120	107	104	+2.6	+15.4			
Canada—number	118	121	125	111		109	98					
Factory Labor Turnover												
(Percentage of number on payroll)												
Departures:												
Total—per cent (annual basis)	52.1	51.1	46.5	48.5	53.7	42.3	50.6	+10.7	+6.1			
Voluntary quits—per cent (annual basis)	40.8	39.5	35.7	38.4	41.5	31.9	40.3	+8.1	+3.0			
Lay offs—per cent (annual basis)	5.7	5.4	5.0	4.8	6.3	5.1	5.0	+31.3	+26.0			
Discharges—per cent (annual basis)	5.6	6.2	5.8	5.3	5.9	5.3	5.3	+11.3	+11.3			
Accessions—per cent (annual basis)	59.9	60.9	61.4	54.3	64.5	55.7	56.9	+18.8	+13.4			
Industrial disputes:												
Disputes—number	73	71	80	81		42	34					
Workers involved—number	58,959	54,584	22,008	15,189		105,760	62,862					
Man-days lost in month—number	1,578,929	1,526,627	1,150,187	524,099		3,553,750	2,571,982					
DISTRIBUTION MOVEMENT												
Retail Sales												
Mail-order houses:												
Total sales, 2 houses—thous. of dolls	55,006	57,702	53,309	60,088	63,078	45,994	50,814	+5.0	+24.1	379,727	492,011	+29.6
Sears, Roebuck & Co.—thous. of dolls	35,126	35,748	33,501	35,133	36,950	28,986	30,004	+5.2	+23.2	231,365	298,312	+28.9
Montgomery Ward & Co.—thous. of dolls	19,880	21,954	19,808	24,955	26,128	17,008	20,810	+4.7	+25.6	148,362	193,699	+30.6
Ten-cent chain stores:												
Total sales (4 chains)—thous. of dolls	49,202	44,401	42,604	46,613	43,168	41,049	42,906	-7.4	+0.6	354,510	383,640	+8.2
Total stores operated (4 chains)—number	2,728	2,744	2,767	2,787	2,816	2,552	2,586	+1.0	+8.9			
F. W. Woolworth & Co.—thous. of dolls	28,578	23,609	22,522	24,446	22,253	21,812	22,637	-9.0	-1.7	190,310	205,029	+7.7
Stores operated—number	1,767	1,775	1,789	1,802	1,815	1,675	1,698	+0.7	+6.9			
S. S. Kresge Co.—thous. of dolls	12,345	12,572	11,687	13,001	11,971	11,272	11,914	-7.9	+0.5	96,560	104,304	+8.0
Stores operated—number	531	537	542	547	560	468	474	+2.4	+18.1			
McCrory Stores Corp.—thous. of dolls	3,263	3,335	3,300	3,853	3,582	3,115	3,344	-7.0	+7.1	26,901	29,764	+10.6
Stores operated—number	236	238	239	240	241	224	224	+0.4	+7.6			
S. H. Kress & Co.—thous. of dolls	5,016	4,885	5,095	5,317	5,363	4,850	5,011	+0.9	+7.0	41,739	44,548	+6.7
Stores operated—number	194	194	197	198	200	185	190	+1.0	+5.3			
Metropolitan—thous. of dolls	1,360	1,467	1,337	1,612	1,471	993	1,109	-8.7	+32.6	8,282	11,207	+35.3
Stores operated—number	117	120	123	131	134	97	100	+2.3	+34.0			
F. & W. Grand—thous. of dolls	1,638	1,889	1,635	1,731	1,731	1,236	1,443	0.0	+20.0	10,297	14,245	+38.3
Stores operated—number	88	89	90	89	90	74	76	+1.1	+18.4			
W. T. Grant Co.—thous. of dolls	5,089	5,374	4,524	5,066	4,777	3,906	4,708	-5.7	+1.5	33,726	41,236	+22.3
Stores operated—number	227	241	244	252	258	191	199	+2.4	+29.6			
Restaurant chains:												
Total sales (3 chains)—thous. of dolls	5,025	4,763	4,821	5,151	4,953	4,577	4,591	-3.8	+7.9	41,172	43,859	+6.5
Stores operated—number	375	374	372	369	367	369	366	-0.5	+0.8			
Childs Co., sales—thous. of dolls	2,261	2,177	2,259	2,478	2,348	2,217	2,191	-5.2	+7.2	19,584	20,404	+4.2
Stores operated—number	114	114	114	113	112	116	113	-0.9	-0.9			
J. R. Thompson Co., sales—thous. of dolls	1,403	1,313	1,302	1,331	1,282	1,190	1,185	-3.7	+8.2	10,854	11,645	+7.3
Stores operated—number	124	124	124	122	122	121	121	0.0	+0.8			
Waldorf System (Inc.), sales—thous. of dolls	1,361	1,273	1,260	1,342	1,323	1,170	1,215	-1.4	+8.9	10,742	11,812	+10.0
Stores operated—number	137	136	134	134	133	132	132	-0.7	+0.8			

*Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	May	June	July	August	Septem- ber	August	Septem- ber	Sep- tember, 1929, from August, 1929	Sep- tember, 1929, from Septem- ber, 1928	1928	1929		
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>													
DISTRIBUTION MOVEMENT—Con.													
Retail Sales—Continued													
Other chain stores:													
Isaac Silver & Bros. thous. of dolls..	560	613	650	718	679	460	512	-5.4	+32.6	4,066	5,213	+28.2	
Stores operated..... number	37	39	41	43	43	26	29	0.0	+48.3				
J. C. Penny Co. thous. of dolls..	16,090	17,121	14,554	16,491	18,243	12,877	16,478	+10.6	+10.7	112,842	129,935	+15.1	
Stores operated..... number	1,109	1,215	1,215	1,292	1,337	982	1,006	+3.5	+32.9				
G. C. Murphy Co. thous. of dolls..	1,192	1,229	1,148	1,273	1,336	873	1,046	+4.9	+27.7	7,481	10,213	+36.5	
Stores operated..... number	143	145	145	148	150	118	119	+1.4	+26.1				
Installment sales in New England													
dept. stores, ratio to total sales.... per cent	6.1	4.1	6.7	12.5		12.1	8.2						
Advertising													
Magazine advertising thous. of lines..	3,120	2,895	2,346	1,978	2,542	1,800	2,302	+28.5	+10.4				
Magazine advertising, total cost..... thous. of dolls..	19,310	17,756	15,437	12,076	16,063	11,437	14,349	+33.0	+11.9	137,812	146,451	+6.3	
Newspaper advertising thous. of lines..	113,242	101,200	83,930	85,136	105,702	83,240	99,839	+24.2	+5.9	859,234	897,348	+4.4	
Radio broadcast:													
Cost of facilities..... thous. of dolls..	1,563	1,309	1,312	1,330	1,599	676	814	+20.2	+96.4	6,623	12,903	+94.8	
National advertising in newspapers:													
Total..... thous. of lines..	61,548	56,118	48,023	44,094	52,869	39,167	43,402	+19.9	+21.8	371,930	440,710	+18.5	
Passenger cars..... thous. of lines..	8,757	6,603	6,219	7,088	6,884	7,064	6,720	-2.9	+2.4	61,676	65,998	+7.0	
Tires, trucks, and accessories..... thous. of lines..	7,397	7,926	7,565	6,745	5,502	5,681	4,696	-18.4	+17.2	38,630	49,166	+27.3	
Financial..... thous. of lines..	8,176	7,485	8,672	6,304	7,457	4,796	5,821	+18.3	+28.1	55,053	65,851	+19.6	
Building materials..... thous. of lines..	1,148	632	275	775	400	811	182.8	-4.4	4,997	5,332	+6.7		
Electrical appliances, supplies..... thous. of lines..	1,553	1,763	1,093	888	1,560	887	895	+75.7	+74.3	7,621	10,500	+37.8	
Food and beverages..... thous. of lines..	8,837	8,230	6,676	5,895	6,440	5,802	5,678	+9.2	+13.4	51,979	56,294	+8.3	
Heating and plumbing equipment..... thous. of lines..	650	381	319	422	772	476	979	+82.9	-21.1	4,185	4,320	+3.2	
Medical..... thous. of lines..	3,810	2,830	2,285	2,190	2,019	2,214	2,920	-7.8	-30.9	30,748	33,534	+9.1	
Radio..... thous. of lines..	2,148	1,885	2,515	3,017	6,205	1,009	3,759	+105.7	+65.1	10,452	22,467	+115.0	
Tobacco..... thous. of lines..	5,171	4,264	2,484	2,107	3,217	2,709	2,006	+52.7	+60.4	24,482	28,176	+15.1	
Toilet requisites..... thous. of lines..	2,936	3,123	2,592	2,372	3,020	1,949	2,139	+27.3	+41.2	20,861	24,569	+17.8	
Transportation..... thous. of lines..	4,263	4,667	3,756	3,121	2,321	2,467	1,734	-25.6	+33.9	21,308	26,212	+23.0	
All other..... thous. of lines..	6,704	6,291	3,572	2,672	5,686	3,715	5,245	+112.8	+8.4	39,874	46,246	+16.0	
Postal Business													
Postal receipts:													
50 selected cities..... thous. of dolls..	32,446	29,280	29,069	29,251	30,549	27,951	29,261	+4.4	+4.4	271,463	278,930	+2.8	
50 industrial cities..... thous. of dolls..	3,339	3,061	3,189	3,289	3,303	3,115	3,074	+0.4	+7.4	29,453	29,964	+1.7	
Money orders:													
Domestic issued (50 cities)—													
Quantity..... thousands..	3,702	3,545	3,602	3,510	3,407	3,165	2,879	-2.9	+18.3	30,004	32,682	+8.9	
Value..... thous. of dolls..	38,011	36,198	37,120	37,027	35,916	32,886	32,382	-3.0	+10.9	305,620	331,946	+6.6	
Domestic paid (50 cities)—													
Quantity..... thousands..	11,693	11,223	10,741	10,862	10,328	10,183	9,748	-4.9	+5.9	96,127	100,640	+4.7	
Value..... thous. of dolls..	90,363	86,958	86,573	88,806	86,974	81,180	79,877	-2.1	+8.9	742,599	784,575	+5.7	
Air mail, weight dispatched..... pounds..	587,471	593,254	645,653	701,538	655,689	419,047	423,991	-6.5	+54.6	2,110,571	5,131,498	+143.1	
BANKING AND FINANCE													
Life Insurance													
(Association of Life Insurance Presidents)													
Policies and certificates, new (44 companies):													
Ordinary..... number of policies..	293,458	277,615	273,099	273,484	245,018	245,081	214,010	-10.4	+14.5	2,173,785	2,398,468	+10.3	
Industrial..... number of policies..	888,462	880,770	809,110	795,451	805,623	740,371	770,416	+1.3	+4.6	7,723,607	8,132,278	+5.3	
Group..... number of certificates..	45,455	66,333	72,923	40,622	21,799	24,605	52,943	-46.3	-58.8	369,888	414,946	+12.2	
Total policies and certificates..... number..	1,227,375	1,224,738	1,155,132	1,109,557	1,072,440	1,010,057	1,037,369	-3.3	+3.4	10,260,780	10,946,692	+6.6	
Amount of new insurance (44 companies):													
Ordinary..... thous. of dolls..	801,698	750,228	722,451	698,196	608,839	626,594	534,112	-12.8	+14.0	6,061,771	6,548,827	+8.0	
Industrial..... thous. of dolls..	240,501	242,166	223,680	219,144	221,006	193,365	198,949	+0.8	+11.1	2,009,999	2,174,377	+8.2	
Group..... thous. of dolls..	109,827	106,589	147,658	99,773	75,151	56,926	277,943	-24.7	-73.0	986,310	833,293	-15.5	
Total insurance..... thous. of dolls..	1,152,026	1,098,983	1,093,789	1,017,113	904,996	876,885	1,011,004	-11.0	-10.5	9,058,080	9,556,497	+5.5	
Premium collections (44 companies):													
Ordinary..... thous. of dolls..	174,278	158,733	169,773	154,206	143,078	143,386	135,743	-7.2	+5.4	1,382,661	1,469,492	+6.3	
Industrial..... thous. of dolls..	52,218	55,801	57,932	56,143	56,773	50,228	49,343	+1.1	+15.1	460,797	496,556	+7.8	
Group..... thous. of dolls..	7,691	7,345	11,494	7,129	6,485	5,705	5,738	-9.0	+13.0	67,877	82,593	+21.7	
Total..... thous. of dolls..	234,187	221,879	239,199	217,478	206,336	199,319	190,824	-5.1	+8.1	1,911,335	2,048,641	+7.2	
Admitted life insurance assets (40 companies):													
Grand total..... mills. of dolls..	13,373	13,469	13,594	13,691	13,798	12,406	12,510	+0.8	+10.3				
Mortgage loans													
Total..... mills. of dolls..	5,750	5,792	5,849	5,887	5,925	5,382	5,429	+0.6	+9.1				
Farm..... mills. of dolls..	1,599	1,599	1,607	1,600	1,600	1,602	1,604	0.0	-0.2				
All other..... mills. of dolls..	4,151	4,193	4,242	4,287	4,325	3,780	3,825	+0.9	+13.1				
Bonds and stocks (book value):													
Total..... mills. of dolls..	5,085	5,119	5,171	5,188	5,208	4,704	4,718	+0.4	+10.4				
Government..... mills. of dolls..	1,032	1,048	1,048	1,062	1,070	927	930	+0.8	+15.1				
Railroad..... mills. of dolls..	2,498	2,607	2,617	2,526	2,527	2,411	2,406	0.0	+5.0				
Public utility..... mills. of dolls..	1,256	1,261	1,267	1,274	1,281	1,138	1,151	+0.5	+11.3				
All other..... mills. of dolls..	298	303	339	326	330	228	231	+1.2	+42.9				
Policy loans and premium notes..... mills. of dolls..	1,630	1,652	1,670	1,688	1,707	1,486	1,497	+1.1	+14.0				
(Life Insurance Sales Research Bureau)													
Sales of ordinary life insurance:													
United States total..... thous. of dolls..	873,490	829,202	796,900	765,702	677,104	702,275	578,193	-11.6	+17.1	6,563,545	7,155,274	+9.0	
Eastern manuf. dis..... thous. of dolls..	352,208	334,551	319,437	300,810	261,657	273,055	218,788	-13.0	+19.6	2,681,717	2,935,924	+9.5	
Western manuf. dis..... thous. of dolls..	200,638	189,447	182,763	177,990	161,222	163,568	136,379	-9.4	+18.2	1,461,681	1,651,720	+13.0	
Western agric. distri..... thous. of dolls..	125,716	125,349	121,224	116,749	104,534	104,287	90,916	-10.5	+15.0	994,973	1,042,554	+4.8	
Southern district..... thous. of dolls..	102,475	97,104	90,954	90,526	77,810	86,288	71,371	-14.0	+9.0	779,978	807,444	+3.5	
Far western district..... thous. of dolls..	92,453	82,751	82,522	79,627	71,381	75,077	60,739	-9.7	+18.3	645,196	717,632	+11.2	
Canada total, 15 companies..... thous. of dolls..	51,283	54,700	56,078	42,468	43,911	43,503	38,872	+3.4	+13.0	413,419	449,197	+8.7	

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per ct. increase (+) or decrease (-) cumulative 1929 from 1928
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from Sep-tem-ber, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929	
BANKING AND FINANCE—Continued												
Banking												
Check payments:												
New York City..... mills. of dolls.	50,043	43,263	49,215	49,034	50,342	35,102	38,725	+2.7	+30.0	356,825	446,309	+25.1
Outside New York City..... mills. of dolls.	26,520	26,423	28,444	28,339	27,314	23,401	24,450	-3.6	+11.7	222,951	244,615	+9.7
Canada..... mills. of dolls.	2,087	1,817	2,108	1,937	1,884	1,813	1,681	-2.7	+12.1	16,732	17,505	+4.6
Federal reserve banks:												
Bills discounted..... mills. of dolls.	988	1,125	1,076	974	931	1,039	1,026	-4.4	-9.3			
Notes in circulation..... mills. of dolls.	1,654	1,736	1,779	1,829	1,851	1,651	1,704	+1.2	+8.6			
Total investments..... mills. of dolls.	270	226	232	328	484	394	545	+47.6	-11.2			
Total reserve..... mills. of dolls.	2,970	8,041	3,109	3,149	3,141	2,765	2,751	-0.3	+14.2			
Total deposits..... mills. of dolls.	2,331	2,438	2,398	2,348	2,471	2,325	2,414	+5.2	+2.4			
Reserve ratio..... per cent.	74.5	72.9	74.4	75.4	72.7	69.5	68.8	-3.6	+8.8			
Federal reserve member banks:												
Total loans and discounts..... mills. of dolls.	16,202	16,925	17,058	16,950	17,428	15,729	15,952	+2.8	+9.3			
Total investments..... mills. of dolls.	5,799	5,560	5,549	5,456	5,401	6,405	6,401	-1.0	-15.6			
Net demand deposits..... mills. of dolls.	12,791	13,293	13,395	12,985	13,295	12,871	13,226	+2.4	+0.5			
Brokers' loans, end of month:												
To N. Y. Stock Ex. members—												
Total..... mills. of dolls.	6,665	7,071	7,473	7,882	8,549	5,051	5,513	+8.5	+55.1			
Ratio to market value..... per cent.	9.39	9.15	8.87	8.79	9.82	8.80	9.23	+11.7	+5.7			
By New York F. R. member banks..... mills. of dolls.	5,288	5,769	5,960	6,217	6,804	4,235	4,570	+9.4	+48.9			
Interest rates:												
Time loans, 90 days..... per cent.	8.75	8.13	7.75	8.88	8.88	6.25	7.00	0.0	+26.9			
Call loans, renewal..... per cent.	8.91	7.70	9.23	8.23	8.50	6.87	7.26	+3.3	+17.1			
Prime com. paper (4-6 mos.)..... per cent.	6.00	6.00	6.00	6.13	6.25	5.38	5.63	+2.0	+11.0			
Prime bankers' acceptances..... per cent.	5.50	5.50	5.13	5.13	5.13	4.63	4.50	0.0	+14.0			
N. Y. Fed. Res. Bank (redis.)..... per cent.	5.00	5.00	5.00	6.00	6.00	5.00	5.00	0.0	+20.0			
Federal land banks..... per cent.	5.13	5.20	5.29	5.31	5.44	5.04	5.04	+2.4	+7.9			
Intermediate credit banks..... per cent.	5.56	5.62	5.67	5.67	5.67	4.84	5.12	0.0	+10.7			
Deposits, New York State savings banks, end of month..... mills. of dolls.	4,418	4,459	4,434	4,426	4,457	4,299	4,352	+0.7	+2.4			
Public Finance												
Government debt, gross, end mo. mills. of dolls.	17,167	16,931	16,832	16,805	16,720	17,648	17,367	-0.5	-3.7			
Customs receipts..... thous. of dolls.	48,279	52,401	52,144	56,427	52,612	52,797	50,410	-6.8	+4.4	411,520	461,667	+12.2
Total ordinary receipts..... thous. of dolls.	166,722	765,882	169,473	174,502	670,736	173,495	537,398	+284.4	+20.3	2,938,160	3,180,322	+8.2
Expenditures chargeable to ordinary receipts..... thous. of dolls.	225,269	420,473	349,825	210,725	399,068	308,594	482,600	+89.4	-17.3	2,785,904	2,771,957	-0.5
U. S. money in circulation:												
Daily average..... mills. of dolls.	4,684	4,687	4,764	4,777	4,811	4,743	4,804	+0.7	+0.1			
Gold and Silver												
Gold:												
Domestic receipts at mint..... fine ounces.	70,520	73,468	92,256	100,387	77,029	98,769	83,247	-23.3	-7.5	679,661	660,665	-2.8
Rand output..... fine ounces.	897,598	856,029	889,480	889,000	849,000	891,863	857,731	-4.5	-1.0	7,728,631	7,811,495	+1.1
Monetary stock of U. S.—												
daily average..... mills. of dolls.	4,292	4,311	4,335	4,351	4,368	4,118	4,125	+0.4	+5.9			
Imports..... thous. of dolls.	24,098	30,762	35,524	19,271	18,991	2,445	4,273	-1.5	+344.4	100,026	255,293	+155.2
Exports..... thous. of dolls.	467	550	803	1,205	1,698	3,810	3,810	+36.8	-68.4	535,216	9,938	-98.1
Silver:												
Production—												
United States..... thous. of fine oz.	5,080	4,976	4,523	5,806	4,172	4,776	4,087	-28.1	+2.1	41,768	44,991	+7.7
Canada..... thous. of fine oz.	1,560	1,146	1,910	2,744	2,081	2,252	2,177	-24.2	-4.4	15,003	15,032	+0.2
Stocks, end of month—												
United States..... thous. of fine oz.	1,105	1,382	682	1,074	1,112	263	872	+3.5	+27.5			
Canada..... thous. of fine oz.	360	543	339	880	914	720	1,457	+3.9	-37.3			
Imports..... thous. of dolls.	4,602	5,022	4,723	7,345	4,111	6,496	5,739	-44.0	-28.4	50,232	48,913	-2.6
Exports..... thous. of dolls.	7,485	5,445	6,784	8,522	4,374	9,246	6,229	-48.7	-29.8	63,966	61,035	-4.6
Price at New York..... dolls. per fine oz.	.541	.524	.525	.526	.510	.589	.575	-3.0	-11.3			
Business Failures												
Liabilities:												
Total commercial..... thous. of dolls.	41,216	31,375	32,426	33,746	34,125	58,202	33,957	+1.1	+0.5	373,194	332,427	-10.9
Manufacturing establishments..... thous. of dolls.	18,954	12,721	12,767	13,857	14,914	16,877	14,727	+7.6	+1.3	135,750	127,218	-6.3
Trade establishments..... thous. of dolls.	18,191	19,931	14,605	16,002	16,660	19,096	13,567	+4.1	+22.8	171,876	165,596	-3.7
Agents and brokers..... thous. of dolls.	4,071	4,723	5,053	3,888	2,551	22,229	5,662	-34.4	-54.9	65,558	39,615	-39.6
Banks (quarterly)..... thous. of dolls.	54,458	8,141	74,180	80,810	80,810	80,810	80,810	+36.2	+256.5	86,565	166,147	+91.9
Canada..... thous. of dolls.	4,416	3,738	2,441	1,376	2,423	2,584	2,632	+76.1	-7.9	27,681	22,240	-19.7
Firms:												
Total commercial..... number.	1,897	1,767	1,752	1,762	1,568	1,852	1,635	-11.0	-4.1	18,038	17,254	-4.3
Manufacturing establishments..... number.	515	496	461	482	427	493	454	-11.4	-5.9	4,379	4,484	+2.4
Trade establishments..... number.	1,266	1,154	1,190	1,163	1,039	1,241	1,073	-10.7	-3.2	12,576	11,696	-7.0
Agents and brokers..... number.	116	117	101	117	102	112	108	-12.8	-5.6	1,077	1,074	-0.3
Banks (quarterly)..... number.	8148	81	81	81	81	81	81	-55	+47.3	256	310	+21.1
Canada..... number.	164	154	176	132	164	136	5119	+24.2	+37.8	1,327	1,473	+11.0
By groups:												
Manufacturers—												
Metals..... number.	30	40	39	35	29	36	35	-17.1	-17.1	334	317	-5.1
Textiles..... number.	67	47	63	48	48	59	74	0.0	-35.1	560	514	-8.2
Lumber..... number.	103	107	88	102	77	60	73	-24.5	+5.5	664	847	+27.6
Chemicals..... number.	11	19	6	11	8	4	8	-27.3	0.0	66	99	+50.0
Printing and engraving..... number.	15	23	15	11	10	22	6	-9.1	+66.7	134	140	+4.5
Foodstuffs..... number.	35	45	31	34	38	51	24	+11.8	+58.3	374	361	-3.5
Leather, etc..... number.	15	12	10	4	11	8	15	+175.0	-26.7	117	110	-6.0
Liquors and tobacco..... number.	12	3	7	6	3	6	4	-50.0	-25.0	51	59	+15.7
Stone, clay, and glass..... number.	12	6	9	6	9	10	3	+50.0	+200.0	74	74	0.0
All other..... number.	215	194	193	225	194	237	212	-13.8	-8.5	2,005	1,963	-2.1
Traders—												
General stores..... number.	86	68	68	72	60	54	60	-16.7	0.0	751	770	+2.5
Foods and tobacco..... number.	385	373	406	399	363	423	376	-9.0	-3.5	3,797	2,724	-1.9
Clothing..... number.	228	202	201	163	168	210	168	+3.1	0.0	2,478	2,020	-18.5
Household furniture..... number.	214	200	180	179	127	171	187	-29.1	-32.1	2,202	2,049	-6.9
Chemicals and paints..... number.	60	50	54	64	54	71	43	-15.6	+25.6	598	547	-8.5
Books and paper..... number.	13	13	5	15	11	11	13	-26.7	-15.4	115	111	-3.5
All other..... number.	280	248	276	271	256	307	226	-5.5	+13.3	2,632	2,475	-6.0

* Revised.

* Quarter ending in month indicated.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928													
	May	June	July	August	September	August	September		September, 1929, from August, 1929	September, 1929, from September, 1928														
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>																								
BANKING AND FINANCE—Continued																								
Dividend and Interest Payments																								
Grand total	398,000	558,200	863,356	377,000	480,600	335,800	5413,250	+27.5	+16.3	4,402,864	4,986,501	+13.3												
Interest payments	237,000	386,400	515,156	201,000	292,000	182,000	5262,000	+45.3	+11.5	2,697,754	3,009,201	+11.5												
Dividend payments:																								
Total	161,000	171,800	348,200	176,000	188,600	153,800	5151,250	+7.2	+24.7	1,705,110	1,977,300	+16.0												
Industrial and misc.	124,500	136,000	250,000	132,000	152,000	112,100	5121,100	+2.5	+25.5	1,250,580	1,471,300	+17.6												
Steam railroads	28,900	29,300	55,000	37,100	29,500	35,200	523,400	-20.5	+26.1	288,480	324,500	+12.5												
Street railways	7,600	6,500	13,100	6,900	7,100	6,500	6,750	+2.9	+5.2	86,050	90,500	+5.2												
New Security Issues																								
Foreign loans in the U. S.	thous. of dolls.	55,320	144,626	* 48,703	20,250	13,168	-----	108,949	-35.0	-87.9	1,189,544	568,554	-52.2											
Foreign governments	thous. of dolls.	6,000	15,000	8,000	-----	-----	-----	43,500	-46.7	-81.6	583,370	64,750	-88.9											
Total corporation	thous. of dolls.	1,313,893	630,102	860,747	776,222	1,507,376	199,426	428,184	+94.2	+252.0	5,343,479	8,656,197	+62.0											
Purpose of issue—																								
New capital	thous. of dolls.	920,046	613,880	801,453	751,177	1,200,784	180,716	391,158	+59.9	+207.0	2,780,564	7,697,757	+176.8											
Refunding	thous. of dolls.	390,847	16,222	59,294	25,045	306,592	18,710	37,026	-----	+728.0	1,562,915	1,255,440	-19.7											
Type of security—																								
Stocks	thous. of dolls.	869,271	357,982	648,504	658,090	1,265,387	73,892	172,047	+92.3	+635.5	2,044,208	6,164,085	+201.5											
Bonds and notes	thous. of dolls.	444,622	272,120	212,243	118,132	241,989	125,534	256,137	+104.8	-5.5	3,299,271	2,622,112	-20.5											
Class of industry—																								
Railroads	thous. of dolls.	105,308	91,350	27,580	660	81,520	13,726	-----	-----	-----	544,631	561,009	+3.0											
Public utilities	thous. of dolls.	342,919	129,552	319,796	111,865	380,291	97,776	202,230	+240.0	+88.0	2,067,501	2,229,651	+7.8											
Industrials	thous. of dolls.	459,215	105,205	127,621	91,282	280,078	32,989	98,234	+266.8	+185.1	1,059,112	1,830,390	+72.8											
Oil	thous. of dolls.	36,102	45,641	17,639	2,105	51,000	-----	-----	-----	-----	102,327	350,515	+242.5											
Land and buildings	thous. of dolls.	48,857	40,843	41,269	35,503	6,501	30,256	57,517	-81.7	-88.7	606,501	471,497	-22.3											
Shipping and misc.	thous. of dolls.	319,290	217,511	326,844	534,808	707,957	44,678	70,194	+32.4	-----	969,177	3,157,907	+225.8											
States and municipalities:																								
Permanent loans	thous. of dolls.	190,222	162,168	* 86,538	* 80,158	92,810	78,445	70,170	+15.8	+32.3	1,001,621	970,399	-3.1											
Temporary loans	thous. of dolls.	60,118	48,109	59,321	* 86,164	44,525	63,543	73,419	-48.3	-39.4	593,562	645,213	+8.7											
Tax-exempt securities outstanding, end of month	mills. of dolls.	17,437	17,523	* 17,556	17,635	18,277	16,865	16,897	+3.6	+8.2	-----	-----	-----											
Agricultural Finances																								
Loans outstanding, end mo.:																								
Federal farm loan banks	thous. of dolls.	1,204,128	1,204,916	1,204,363	1,203,806	1,202,490	1,187,365	1,189,345	-0.1	+1.1	-----	-----	-----											
Joint-stock land banks	thous. of dolls.	599,413	597,956	596,403	594,876	593,388	608,706	608,451	-0.3	-2.5	-----	-----	-----											
Federal intermediate credit banks	thous. of dolls.	69,326	68,101	68,981	68,882	72,204	66,978	68,619	+4.8	+5.2	-----	-----	-----											
Stocks and Bonds																								
Stock prices, average daily closing:																								
25 industrials, average	dolls. per share	363.37	372.70	414.04	431.20	448.78	267.16	283.99	+4.1	+58.0	-----	-----	-----											
25 railroads, average	dolls. per share	128.95	134.37	149.27	151.29	152.26	121.57	124.82	+0.6	+22.0	-----	-----	-----											
Southern cotton mills	dolls. per share	96.77	95.15	92.45	90.41	89.37	104.82	103.31	-1.2	-13.5	-----	-----	-----											
103 stocks, average	dolls. per share	76.26	82.50	86.25	90.35	82.47	76.59	78.49	-8.7	+5.1	-----	-----	-----											
Stock prices, average weekly closing:																								
Stocks, rails, and utilities (405)	rel. to 1926	187.8	190.7	207.2	218.1	225.2	148.3	156.6	+3.3	+43.8	-----	-----	-----											
All industrials (333)	rel. to 1926	192.6	191.0	202.7	210.3	216.1	152.6	162.2	+2.8	+33.2	-----	-----	-----											
All railroads (33)	rel. to 1926	138.7	144.8	160.0	165.4	168.1	126.5	129.6	+1.6	+29.7	-----	-----	-----											
All utilities (34)	rel. to 1926	212.3	233.0	272.8	304.3	321.0	147.9	155.8	+5.5	+106.0	-----	-----	-----											
Automobiles and trucks (13)	rel. to 1926	260.5	241.7	241.0	240.8	244.7	270.0	0.0	0.0	-10.8	-----	-----	-----											
Automobile tires and rubber goods (7)	rel. to 1926	194.4	184.8	184.9	169.5	163.4	110.3	127.6	-3.6	+28.1	-----	-----	-----											
Airplane (10)	rel. to 1926	1,147.0	1,069.0	1,131.0	1,130.0	994.4	591.5	693.7	-12.0	+43.3	-----	-----	-----											
Agricultural implements (4)	rel. to 1926	399.8	380.5	418.6	423.9	444.8	281.7	301.3	+4.9	+47.6	-----	-----	-----											
Chain stores (17)	rel. to 1926	148.3	144.5	148.0	148.7	154.6	142.9	150.5	+4.0	+2.7	-----	-----	-----											
Copper and brass (9)	rel. to 1926	279.8	270.8	280.8	288.9	294.4	155.2	172.0	+1.9	+71.2	-----	-----	-----											
Food, other than meat (20)	rel. to 1926	172.0	175.6	189.1	186.7	191.1	158.1	167.1	+2.4	+14.4	-----	-----	-----											
Machinery and machine equipment (10)	rel. to 1926	160.8	159.4	171.8	177.2	191.4	135.4	139.4	+8.0	+37.3	-----	-----	-----											
Oil producing and refining (16)	rel. to 1926	146.3	144.1	149.1	157.5	166.7	112.6	115.7	+5.8	+44.1	-----	-----	-----											
Railroad equipment (9)	rel. to 1926	138.2	141.7	148.5	157.8	156.6	123.6	129.5	-0.1	+21.7	-----	-----	-----											
Rayon (5)	rel. to 1926	143.4	138.0	126.6	126.2	119.8	165.1	160.7	-5.1	-25.5	-----	-----	-----											
Steel and iron (10)	rel. to 1926	185.3	188.2	211.5	238.4	243.9	143.6	155.8	+2.3	+56.5	-----	-----	-----											
Textiles (30)	rel. to 1926	127.0	122.4	120.3	118.1	114.1	120.5	125.9	-3.4	-9.4	-----	-----	-----											
Theaters, motion pictures, and amusements (7)	rel. to 1926	140.1	133.4	139.0	142.5	145.2	116.6	135.1	+1.9	+7.5	-----	-----	-----											
Tobacco and tobacco products (10)	rel. to 1926	139.1	135.1	139.1	141.6	141.5	137.6	142.5	-0.1	-0.7	-----	-----	-----											
Traction, motor transportation, etc. (9)	rel. to 1926	85.8	83.7	83.0	83.1	84.7	95.7	99.5	+1.9	-14.9	-----	-----	-----											
Stock yields:																								
Total common (90)	per cent	3.37	3.38	3.16	3.01	2.92	4.01	3.78	-3.0	-22.8	-----	-----	-----											
Industrials (50)	per cent	3.37	3.51	3.36	3.26	3.19	3.96	3.72	-2.1	-14.2	-----	-----	-----											
Public utilities (20)	per cent	2.48	2.22	1.95	1.78	1.69	3.39	3.14	-5.1	-46.2	-----	-----	-----											
Railroads (20)	per cent	4.79	4.62	4.17	4.04	3.96	5.08	4.98	-2.0	-20.5	-----	-----	-----											
Preferred, high grade industrial (20)	per cent	5.45	5.49	5.52	5.54	5.52	5.43	5.41	-0.4	+2.0	-----	-----	-----											
Stock sales, N. Y. Stock Exch.	thous. of shares	91,279	69,548	93,379	95,705	100,056	67,704	90,907	+4.5	+10.1	613,202	827,002	+34.9											
Bond sales:																								
Miscellaneous	thous. of dolls.	225,716	227,676	295,577	251,287	210,995	173,561	190,582	-16.0	+10.7	2,155,943	2,028,340	-5.9											
Liberty-Treasury	thous. of dolls.	8,851	9,848	13,330	8,510	9,267	9,988	10,467	+8.9	-11.5	138,850	95,201	-31.4											
Total	thous. of dolls.	234,567	237,524	308,907	259,797	220,262	183,54	201,049	-15.2	+9.6	2,294,793	2,123,541	-7.5											

* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)	CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928	
	May	June	July	August	September	August	September		1928	1929		
								September, 1929, from August, 1929	September, 1929, from September, 1928			
BANKING AND FINANCE—Continued												
Stocks and Bonds—Continued												
Bond prices:												
Highest-grade rails, p. ct. of par, 4% bond	87.81	86.37	86.06	85.98	85.51	89.66	91.05	-0.5	-6.1			
Second-grade rails, p. ct. of par, 4% bond	79.13	78.59	78.55	77.25	77.64	80.99	82.51	+0.5	-5.9			
Public utility, p. ct. of par, 4% bond	75.03	74.32	73.25	73.14	73.13	79.08	79.51	0.0	-8.0			
Industrial, p. ct. of par, 4% bond	76.51	75.29	75.24	74.54	73.84	77.97	78.18	-0.9	-5.6			
Comb. price index, p. ct. of par, 4% bond	79.33	78.37	77.99	77.43	77.23	81.68	82.53	-0.3	-6.4			
Bond prices, 1st of following month:												
5 Liberty bonds, p. ct. of par	100.24	100.87	100.64	100.61	100.34	103.88	103.11	-0.3	-2.7			
16 foreign govt. and city, p. ct. of par	103.49	103.30	103.60	103.42	103.16	104.77	104.55	-0.3	-1.3			
Comb. price index, 66 bonds, p. ct. of par	97.91	97.69	97.95	97.66	97.48	100.36	100.40	-0.2	-2.9			
Bond yields:												
Total, 60 high grade, per cent	4.69	4.73	4.73	4.74	4.76	4.59	4.57	+0.4	+4.2			
Railroads (15), per cent	4.58	4.65	4.67	4.67	4.71	4.49	4.43	+0.9	+6.3			
Industrials (15), per cent	5.06	5.09	5.09	5.12	4.96	4.95	4.66	+3.4				
Utilities (15), per cent	4.85	4.90	4.90	4.89	4.90	4.73	4.73	+0.2	+3.6			
Municipal (15), per cent	4.23	4.26	4.28	4.31	4.32	4.16	4.17	+0.2	+3.6			
Municipal bond yield (20), per cent	4.30	4.33	4.41	4.41	4.49	4.18	4.16	+1.8	+7.9			
U. S. Treasury notes and certificates, 3-6 months, per cent	5.04	4.89	4.49	4.59	4.53	4.36	4.57	-1.3	-0.9			
Liberty and Treasury bonds, per cent	3.67	3.71	3.68	3.72	3.70	3.56	3.54	-0.5	+4.5			
Long-term and real-estate bonds issued:												
Grand total, thous. of dollars	22,868	20,025	36,790	28,403	5,338	21,947	52,116	-81.2	-89.8	518,089	298,680	
Purpose of issue:												
Finance construction, thous. of dollars	8,720	4,295	24,660	16,108	950	9,970	4,460	-94.1	-78.7	194,510	113,500	
Real-estate mortgage, thous. of dollars	4,148	4,800	4,556	8,385	188	5,590	32,955	-97.8		178,329	77,438	
Acquisitions and improvements, thous. of dollars	2,275	7,485	2,390	105	200	3,252	530	+90.5	-62.3	49,758	52,805	
Kind of structure:												
Office and commercial, thous. of dollars	4,760	10,845	24,860	9,875	880	4,785	2,510	-91.1	-64.9	162,671	98,185	
Hotels, thous. of dollars	2,900	700	1,175	9,995	2,200	400				34,560	25,230	
Apartments, thous. of dollars	1,885	2,200	1,582	1,588	215	3,145	270	-86.5	-20.4	30,279	15,652	
Corporation Stockholders												
(Quarterly)												
Pennsylvania Railroad Co.:												
Domestic, number	\$ 158,456					\$ 184,997				\$ 154,415	+16.7	
Foreign, number	\$ 2,978					\$ 2,931				\$ 3,032	-1.6	
U. S. Steel Corp. common stock:												
Domestic, number		\$ 103,805				\$ 107,747				\$ 102,457	+3.8	
Foreign, number		\$ 1,807				\$ 2,419				\$ 1,748	+33.9	
Shares held by brokers, per cent of total		\$ 25.27				\$ 25.25				\$ 23.95	-0.1	
American Telephone & Telegraph Co.:												
Domestic, number	\$ 453,434					\$ 450,170				\$ 451,603	-0.7	
Foreign, number	\$ 5,425					\$ 5,250				\$ 5,426	-3.2	
FOREIGN EXCHANGE RATES												
Europe:												
England, dolls. per £ sterling	4.85	4.85	4.85	4.85	4.85	4.85	4.85	0.0	0.0			
France, dolls. per franc	.039	.039	.039	.039	.039	.309	.039	0.0	0.0			
Italy, dolls. per lira	.052	.052	.052	.052	.052	.052	.052	0.0	0.0			
Belgium, dolls. per franc	.139	.139	.139	.139	.139	.139	.139	0.0	0.0			
Netherlands, dolls. per guilder	.402	.402	.401	.401	.401	.401	.401	0.0	0.0			
Sweden, dolls. per krona	.267	.268	.268	.268	.268	.268	.268	0.0	0.0			
Switzerland, dolls. per franc	.193	.192	.192	.192	.193	.193	.193	+0.5	0.0			
Asia:												
Japan, dolls. per yen	4.47	4.39	4.56	4.67	4.73	4.51	4.58	+1.3	+3.3			
India, dolls. per rupee	3.62	3.60	3.60	3.60	3.60	3.63	3.63	0.0	-0.8			
America:												
Canadian, dolls. per Canadian dollar	.993	.992	.995	.994	.992	1.000	1.000	-0.2	-0.8			
Argentina, dolls. per gold peso	.955	.953	.954	.954	.953	.959	.957	-0.1	-0.4			
Brazil, dolls. per milreis	.119	.119	.119	.119	.119	.119	.119	0.0	0.0			
Chile, dolls. per paper peso	.120	.120	.120	.121	.121	.121	.121	0.0	0.0			
U. S. FOREIGN TRADE												
Imports												
Grand total, thous. of dollars	400,149	353,400	\$ 352,981	369,530	351,365	346,715	319,618	-4.9	+9.9	3,070,113	3,360,247	
By grand divisions:												
Europe:												
Total, thous. of dollars	113,790	106,427	115,145	109,783		\$ 107,793	102,315			\$ 805,141	\$ 880,382	
France, thous. of dollars	13,954	13,267	14,577	14,026		\$ 15,075	13,783			\$ 98,553	\$ 109,268	
Germany, thous. of dollars	20,626	19,328	22,806	22,742		\$ 21,023	18,661			\$ 143,954	\$ 171,568	
Italy, thous. of dollars	10,374	10,608	8,485	7,057		\$ 6,876	6,548			\$ 63,529	\$ 72,755	
United Kingdom, thous. of dollars	29,753	25,378	27,970	25,891		\$ 27,535	26,373			\$ 231,282	\$ 223,467	
North America:												
Total, thous. of dollars	92,363	81,898	79,974	82,401		\$ 78,216	76,926			\$ 645,309	\$ 684,157	
Canada, thous. of dollars	44,330	44,292	44,671	43,909		\$ 43,254	42,209			\$ 317,121	\$ 335,989	
South America:												
Total, thous. of dollars	53,628	50,740	46,630	51,611		\$ 51,043	37,560			\$ 399,063	\$ 442,669	
Argentina, thous. of dollars	9,172	8,342	7,416	7,701		\$ 8,975	6,313			\$ 74,120	\$ 78,484	
Asia and Oceania:												
Total, thous. of dollars	130,059	107,848	104,963	114,595		\$ 100,880	97,554			\$ 834,296	\$ 921,070	
Japan, thous. of dollars	33,828	32,483	\$ 28,883	40,256		\$ 38,993	33,741			\$ 250,581	\$ 270,870	
Africa, total, thous. of dollars	10,308	6,488	7,437	11,140		\$ 8,782	5,263			\$ 64,711	\$ 81,193	

* Revised.

* Cumulative through Aug. 31.

* Quarter ending in month indicated.

* Period ending July 31, 1929.

TREND OF BUSINESS MOVEMENTS—Continued

	1929					1928		PER CENT INCREASE (+) OR DECREASE (-)		CUMULATIVE TOTAL FROM JAN. 1 THROUGH SEPT. 30		Per cent increase (+) or decrease (-) cumulative 1929 from 1928							
	May	June	July	August	September	August	September	Sep-tem-ber, 1929, from August, 1929	Sep-tem-ber, 1929, from Sep-tem-ber, 1928	1928	1929								
<i>The cumulatives shown are through September, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 138 of the August, 1929, "Survey"</i>																			
U. S. FOREIGN TRADE—Continued																			
Imports—Continued																			
By economic classes:																			
Crude materials.....thous. of dolls..	141,897	120,724	\$ 119,038	125,719	122,080	122,186	110,289	-2.9	+10.7	1,122,851	1,194,877	+6.4							
Foodstuffs, crude, and food animals.....thous. of dolls..	46,561	40,955	42,957	39,527	40,700	45,940	37,207	+3.0	+9.4	417,960	409,680	-2.0							
Manufactured foodstuffs.....thous. of dolls..	42,290	36,527	\$ 32,990	35,559	32,327	30,060	33,771	-9.1	-4.3	310,544	353,479	+13.8							
Semimanufactures.....thous. of dolls..	85,017	75,557	\$ 71,604	79,464	70,196	66,337	63,455	-11.7	+10.6	557,761	675,988	+21.2							
Finished manufactures.....thous. of dolls..	83,684	79,637	\$ 86,392	89,262	86,062	82,192	74,906	-3.6	+14.9	661,008	744,224	+12.6							
Exports																			
Grand total, including reexports.....thous. of dolls..	384,850	393,293	403,360	\$ 381,365	442,000	\$ 379,006	421,607	+15.9	+4.8	3,557,586	3,407,240	-4.2							
By grand division:																			
Europe—																			
Total.....thous. of dolls..	146,025	153,988	161,005	160,756	-----	\$ 149,216	192,840	-----	-----	\$ 1,399,810	\$ 1,441,659	+3.0							
France.....thous. of dolls..	13,248	14,603	15,795	17,005	-----	15,167	20,049	-----	-----	\$ 123,591	\$ 155,481	+16.4							
Germany.....thous. of dolls..	23,927	21,261	24,634	26,370	-----	24,579	46,298	-----	-----	\$ 252,709	\$ 231,224	-8.5							
Italy.....thous. of dolls..	9,771	12,642	8,667	6,764	-----	\$ 9,956	14,275	-----	-----	\$ 98,721	\$ 94,670	-4.1							
United Kingdom.....thous. of dolls..	54,431	52,824	56,889	58,340	-----	\$ 52,827	59,182	-----	-----	\$ 489,750	\$ 517,441	+5.6							
North America—																			
Total.....thous. of dolls..	132,897	115,658	116,845	112,012	-----	\$ 118,041	115,500	-----	-----	\$ 857,503	\$ 953,237	+11.2							
Canada.....thous. of dolls..	97,905	80,481	79,736	77,338	-----	\$ 84,963	87,139	-----	-----	\$ 592,868	\$ 659,264	+11.2							
South America—																			
Total.....thous. of dolls..	35,852	49,690	49,312	39,441	-----	\$ 43,767	33,805	-----	-----	\$ 305,236	\$ 376,755	+23.4							
Argentina.....thous. of dolls..	13,886	20,464	20,500	17,363	-----	17,348	11,457	-----	-----	\$ 114,263	\$ 145,973	+27.8							
Asia and Oceania—																			
Total.....thous. of dolls..	61,535	61,667	63,374	58,610	-----	\$ 59,971	71,917	-----	-----	\$ 500,655	\$ 545,089	+8.9							
Japan.....thous. of dolls..	17,380	16,966	15,005	11,507	-----	15,517	27,542	-----	-----	\$ 156,426	\$ 153,052	-2.2							
Africa, total.....thous. of dolls..	8,541	12,289	12,824	10,546	-----	8,011	7,544	-----	-----	\$ 72,973	\$ 90,499	+24.0							
By economic classes:																			
Total domestic exports only.....thous. of dolls..	376,919	\$ 386,811	\$ 393,838	\$ 374,845	432,319	371,312	414,859	+15.3	+4.2	3,482,321	3,779,436	+8.5							
Crude materials.....thous. of dolls..	57,407	56,130	\$ 50,015	50,893	112,247	52,375	120,188	+120.6	-6.6	770,827	697,339	-9.5							
Foodstuffs, crude and food animals.....thous. of dolls..	21,212	14,534	20,259	\$ 28,438	29,953	29,310	42,363	+5.3	-29.3	183,034	205,500	+12.3							
Manufactured foodstuffs.....thous. of dolls..	35,922	34,011	\$ 35,840	\$ 37,113	40,995	34,749	35,761	+10.5	+14.6	323,122	351,507	+8.8							
Semimanufactures.....thous. of dolls..	59,662	\$ 62,119	\$ 60,529	\$ 57,053	57,948	55,873	51,077	+1.6	+13.5	537,329	558,294	+3.9							
Finished manufactures.....thous. of dolls..	202,717	220,018	\$ 227,195	\$ 201,347	191,177	199,005	163,469	-5.1	+15.3	1,668,008	1,960,706	+17.9							
Agricultural exports (quantities):																			
All commodities.....rel. to 1910-1914..	79	69	70	76	121	75	138	+59.2	-12.3	-----	-----	-----							
All commodities except cotton.....rel. to 1910-1914..	122	102	117	132	143	126	168	+8.3	-14.9	-----	-----	-----							
CANADIAN FOREIGN TRADE																			
Total trade:																			
Imports.....thous. of dolls..	125,615	111,949	114,201	111,631	99,380	114,175	106,066	-11.0	-6.3	912,267	989,584	+8.5							
Exports.....thous. of dolls..	109,436	114,492	105,686	98,395	89,424	113,904	111,856	-9.1	-20.1	926,839	883,215	-4.7							

^a Revised.^b Cumulative through Aug. 31.

PUBLICATIONS OF THE DEPARTMENT OF COMMERCE

Recent publications of the Department of Commerce having the most direct interest to readers of the *Survey of Current Business* are listed below. A complete list may be obtained by addressing the Division of Publications, Department of Commerce, at Washington. Copies of the publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, at the prices stated. If no price is mentioned, the publication is distributed free.

OFFICE OF THE SECRETARY

Air Commerce Bulletin. September 15, 1929.—15 pages, 2 illus. Issued semimonthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments; also contains a list of air transport routes.

Same, October 1, 1929. 27 pages.

Same, October 15, 1929. 32 pages.

Air Marking.—Aeronautics Bulletin No. 4; ii+13 pages, 10 illus. Description of the system recommended by the Department of Commerce for marking aviation landing fields, airports, and direction indicators on roofs of buildings.

Airports and Landing Fields.—Aeronautics Bulletin No. 5 (formerly Information Bulletin No. 5), 12 pages. Shows all airports and landing fields in the United States, the lists being arranged alphabetically by place and State. The classification of the fields is also indicated.

Air Commerce Regulations.—Aeronautics Bulletin No. 7, ii+30 pages, 1 illus. Gives the regulations governing licensing, inspection, and operation of aircraft, licensing of pilots and mechanics, and rules for air traffic.

Airport Management.—Aeronautics Bulletin No. 17, ii+19 pages, 1 illus. Outlines fundamentals necessary in management of airports. An appendix contains rates charged for hangar service at various municipal airports.

Suggested City or County Aeronautics Ordinance and Uniform Field Rules for Airports.—Aeronautics Bulletin No. 20, ii+10 pages.

Radio Service Bulletin. August, 1929.—20 pages. Issued monthly by Radio Division of Department of Commerce. Contains list of radio stations and references to current radio literature. Single copy, 5¢; annual subscription, 25¢.

Same, September, 1929. 15 pages.

BUREAU OF THE CENSUS

[For information concerning the plan of publication and distribution of Census reports, address the Director of the Census.]

Birth, Stillbirth, and Infant Mortality Statistics, 1926: Part II, Text and Text Tables.—Gives an analysis of statistics regarding births and infant mortality in United States during 1926. Paper, 78 pages, 6 illus, price 15¢.

Forest Products, 1927: Crossties and Poles Purchased and Preserved.—Compiled in cooperation with Department of Agriculture, Forest Service. Contains tables showing purchases of crossties and poles by railroads and purchases of poles by light, power, telephone, and telegraph companies. Paper, 10 pages, price 5¢.

Manufacture and Sale of Farm Equipment, 1928.—Contains tables showing kinds and amount of farm equipment manufactured and sold in United States during 1928. Paper, 16 pages, price 5¢.

Mortality Statistics, 1926: Part II, Text and Text Tables.—Contains tables with explanatory text regarding deaths and their causes in United States during 1926. Paper, 158 pages, 2 illus, 13 diagrams, price 25¢.

Financial Statistics of Cities Having a Population of Over 30,000, 1927.—Presents data showing financial transactions during fiscal year 1927 of 250 cities in continental United States and city and county of Honolulu, Hawaii. Cloth, 503 pages, price \$1.25.

Census of Manufactures, 1927.—Reports giving detailed information for various industries, by States:

Brooms and Brushes. Paper, 7 pages, price 5¢.

Canning and Preserving. Paper, 23 pages, price 5¢.

Embroideries, Trimmings and Lace-Trimmed Articles. Paper, 10 pages, price 5¢.

Fertilizers. Paper, 10 pages, price 5¢.

Glass and Mirrors. Paper, 10 pages, price 5¢.

Lime and Marble, Granite, Slate, and Other Stone Products. Paper, 12 pages, price 5¢.

Paper: Pulp; Pulpwood Consumption and Wood-Pulp Production. Paper, 24 pages, price 5¢.

Principal Lumber Industries. Paper, 57 pages, 3 illus. Price 10¢.

Sewing Machines, Cases, and Attachments; Washing Machines, Wringers, Driers, and Ironing Machines for Domestic Use. Paper, 9 pages, price 5¢.

Slaughtering and Meat Packing. Paper, 29 pages, price 5¢.

Soap. Paper, 6 pages, price 5¢.

Sugar Industries and Corn Syrup, Corn Oil, and Starch. Paper, 19 pages, price 5¢.

Textile Machinery and Parts. Paper, 7 pages, price 5¢.
Tin Cans and Other Tinware. Paper, 6 pages, price 5¢.
Wall Plaster, Wall Board, and Floor Composition. Paper, 7 pages, price 5¢.
Wood Manufactures and Allied Industries. Paper, 53 pages, price 10¢.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

[The publications of this bureau may also be purchased from the bureau or its district offices]

Monthly Summary of Foreign Commerce of United States, August, 1929.—Parts I and II. Part I contains statistics of exports of domestic merchandise, and imports by articles for August, 1928 and 1929, and for eight months ended August, 1928 and 1929. Part II contains summaries of export and import trade, monthly average import and export prices, and statistics of trade with Alaska, Hawaii, and Porto Rico. Single copies, Part I, 10¢; Part II 5¢. Annual subscription, \$1.25.

Latin American Financial Developments in 1928.—Trade Information Bulletin No. 657; ii+23 pages. Price, 10¢.

Automotive Market in Argentina. by Howard H. Tewksbury, American trade commissioner.—Trade Promotion Series No. 84; iv+106 pages, 11 illus. Discussion of commercial and industrial characteristics of Argentina, the road system, number of motor vehicles in use, and method of financing sales of these products. Price, 20¢.

BUREAU OF STANDARDS

Chocks for Ships: Plain Chocks, Open and Closed Roller Chocks, Open and Closed Open Chocks with Center Pillar. compiled and promulgated by American Marine Standards Committee. American Marine Standards H No. 42-1929 to H No. 50-1929, inclusive, ii+14 pages, 11 illus. Price, 10¢.

Bureau of Standards Journal of Research, October, 1929.—Pages 507-618, illus., plates, charts. Contains papers formerly issued as Scientific and Technologic Papers series, which have been discontinued. Articles in journal are known as Research Papers series and are issued separately after publication in journal. Single copies, 40¢; annual subscription, \$2.75.

Course-shift Indicator for Double-modulation Type Radio-beacon. by H. Diamond and F. W. Dunmore.—Research Paper No. 77. Reprint from Bureau of Standards Journal of Research, vol. 3, July, 1929, pp. 1-10, 5 illus., 1 plate. Description of instrument used to indicate to a radio operator course as laid out in space during time of operation of station and as check on beacon calibration. Price, 5¢.

BUREAU OF MINES

Coal-washing Investigations: Methods and Tests. by H. F. Yancey and Thomas Fraser.—Bulletin 300; viii+259 pages, 11 illus., 3 plates, 35 charts. Report on an investigation into factors affecting washability of coal and processes used, with a classification of coals by forms of impurities. Price, 50¢.

BUREAU OF FISHERIES

Salmon-tagging Experiments in Alaska, 1927 and 1928. by Willis H. Rich and Frederick G. Morton.—Document No. 1057. (From Bulletin of Bureau of Fisheries, vol. XLV, 1929, pp. 1-23, 2 illus.) Price, 10¢.

Fishing grounds of Gulf of Maine. by Walter H. Rich.—Document No. 1059. (Appendix III to Report of U. S. Commissioner of Fisheries for 1929, pp. 51-117, 5 maps.) Description of fishing grounds off coast of Maine and kinds of fish found there. Price, 25¢.

COAST AND GEODETIC SURVEY

Tide Tables, United States and Foreign Ports for Year 1930.—Serial No. 439; 479 pages. Contains tables showing rise and fall of tide for every day of year at important ports of world. It also gives time of rising and setting of sun and moon in various parts of world. Price, 75¢.

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Compilation quarterly or monthly, of statistics on cotton, wool, leather, and other industries; annually of forest products; and publication monthly of Survey of Current Business.

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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The maintenance of commodity, technical, and regional divisions to afford special service to American exporters and manufacturers.

The compilation and distribution of lists of possible buyers and agents for American products in all parts of the world and publication of weekly lists of specific sales opportunities abroad.

The publicity of statistics on imports and exports.

The study of the processes of domestic trade and commerce

BUREAU OF STANDARDS

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Custody, development, and construction of standards of measurement, quality, performance, or practice; comparison of standards used by scientific or other institutions; determination of physical constants and properties of materials; researches and tests on materials and processes; and publication of scientific and technical bulletins reporting results of researches and fundamental technical data.

Preparation of specifications for Government purchases, through the Federal Specifications Board.

Collection and dissemination of information concerning building codes and the planning and construction of houses.

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BUREAU OF MINES

SCOTT TURNER, Director

Technical investigations in the mining, preparation, and utilization of minerals, including the study of mine hazards and safety methods and of improved methods in the production and use of minerals.

Testing of Government fuels and management of the Government Fuel Yard at Washington.

Research on helium and operation of plants producing it. Studies in the economics and marketing of minerals and collection of statistics on mineral resources and mine accidents.

The dissemination of results of technical and economic researches in bulletins, technical papers, mineral resources series, miners' circulars, and miscellaneous publications.

BUREAU OF FISHERIES

HENRY O'MALLEY, Commissioner

The propagation and distribution of food fish and shellfish, in order to prevent the depletion of the fisheries; investigations to promote conservation of fishery resources; the development of commercial fisheries and agriculture; study of fishery methods; improvements in merchandising and collection of fishery statistics; administration of Alaska fisheries and fur seals; and the protection of sponges off the coast of Florida.

BUREAU OF LIGHTHOUSES

GEORGE R. PUTNAM, Commissioner

Maintenance of lighthouses and other aids to water navigation. Establishment and maintenance of aids to navigation along civil airways.

Publication of Light Lists, Buoy Lists, and Notices to Mariners, giving information regarding these aids to navigation.

COAST AND GEODETIC SURVEY

RAYMOND S. PATTON, Director

Survey of the coasts of the United States and publication of charts for the navigation of the adjacent waters, including Alaska, the Philippine Islands, Hawaii, Porto Rico, the Virgin Islands, and the Canal Zone; interior control surveys; magnetic surveys; tide and current observations; and seismological investigations.

Publication of results through charts, coast pilots, tide tables, current tables, and special publications.

BUREAU OF NAVIGATION

ARTHUR J. TYRER, Commissioner

Superintendence of commercial marine and merchant seamen. Supervision of registering, enrolling, licensing, numbering, etc., of vessels under the United States flag, and the annual publication of a list of such vessels.

Enforcement of the navigation and steamboat inspection laws, including imposition of fees, fines, tonnage taxes, etc.

STEAMBOAT INSPECTION SERVICE

DICKERSON N. HOOVER, Supervising Inspector General

The inspection of merchant vessels, including boilers, hulls, and life-saving equipment; licensing of officers of vessels; certification of able seamen and lifeboat men, and the investigation of violations of steamboat inspection laws.

UNITED STATES PATENT OFFICE

THOMAS E. ROBBETSON, Commissioner

The granting of patents and the registration of trade-marks, prints, and labels after technical examination and judicial proceedings.

Maintenance of library with public search room, containing copies of foreign and United States patents and trade-marks; recording bills of sale, assignments, etc., relating to patents and trade-marks. Furnishing copies of records pertaining to patents.

Publication of the weekly Official Gazette, showing the patents and trade-marks issued.

RADIO DIVISION

W. D. TERRELL, Chief

Inspection of radio stations on ships; inspection of radio stations on shore, including broadcasting stations; licensing radio operators; assigning station call letters; enforcing the terms of the International Radiotelegraphic Convention; and examining and settling international radio accounts.