

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

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SURVEY OF  
CURRENT BUSINESS

OCTOBER, 1930

No. 110



ISSUED BY  
BUREAU OF FOREIGN AND DOMESTIC COMMERCE

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**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 reader, the authority and responsibility for which are noted in the "Sources of Data" on pages 140-143 of the August, 1930, 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, 1930 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 August and contains text covering the early weeks of September (page 1), for which the basic figures in table and chart form are represented 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



PUBLISHED BY

UNITED STATES DEPARTMENT OF COMMERCE

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No. 110

WASHINGTON

October, 1930

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### PRELIMINARY SUMMARY FOR SEPTEMBER

Dividend and interest payments paid during September by steam railroads, street railways, and industrial companies were much larger than those paid during August. As compared with a year ago interest payments were greater, while the payments of dividends as a whole were less. Loans and discounts of Federal reserve member banks, although showing but slight difference from the preceding month, were lower than the level at the end of September, 1929. Prices paid for industrial and railroad stocks averaged higher during September than a month ago; however, they were lower than the same period, a year ago. Bond prices on the other hand, were higher than either comparative period. Rates of interest on time loans averaged lower than in August, while call-money rates showed but slight change. Both rates were lower than a year ago. Business failures, although greater in number than the preceding month showed smaller liabilities. Bank debits, outside New York City, declined from both the month of August, 1930, and September, 1929.

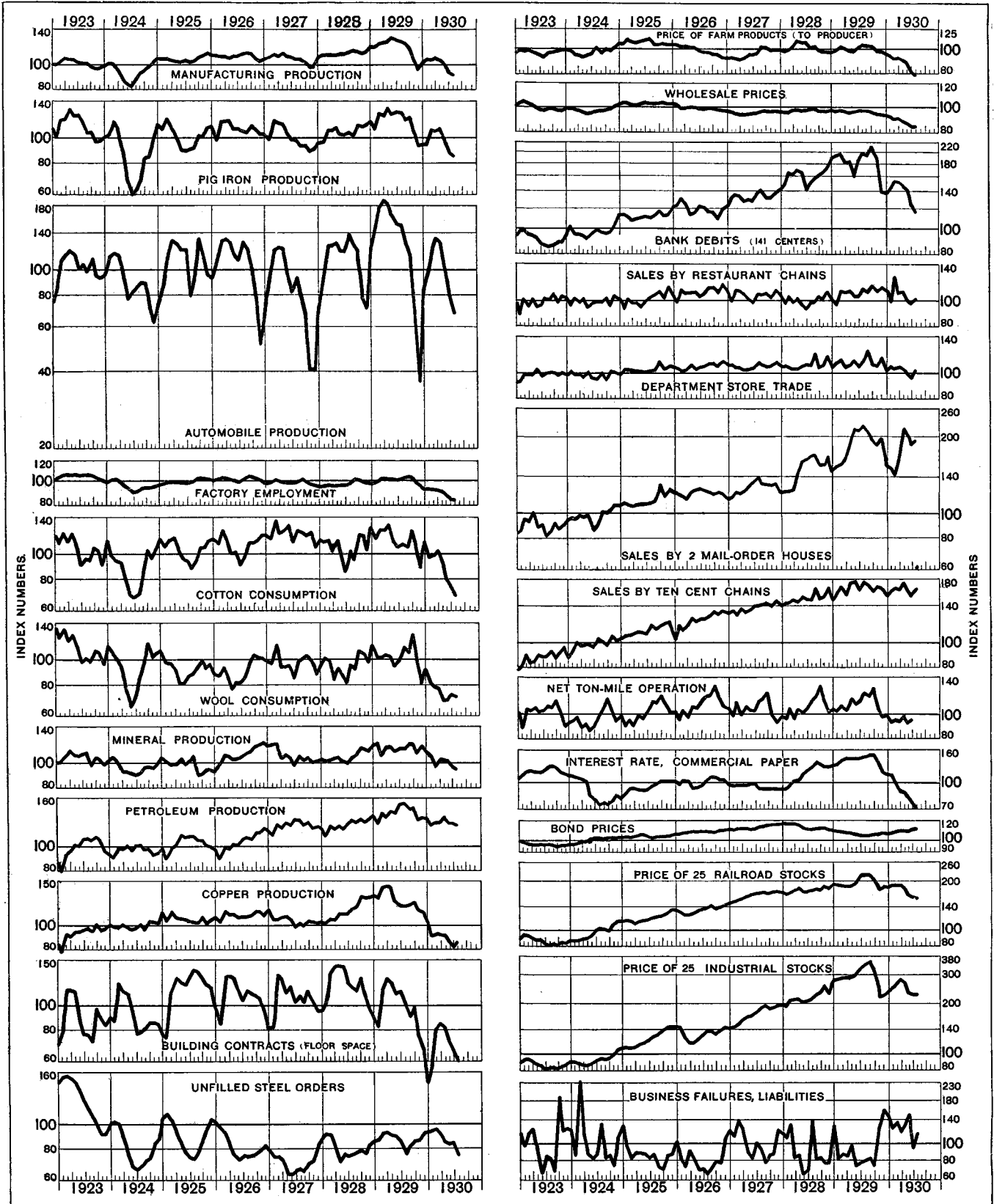
Receipts of both foreign and domestic wool at Boston, declined seasonally from August and were lower than during September, 1929. The activity of steel mills, during the early weeks of the month, showing a steady increase was greater than the corresponding period in August. Detroit employment, usually accepted as an indicator of the automobile industry, indicated slight change from the preceding month, but was about twice what it was during July, two months ago. The distribution of goods by railroads as shown by carloadings for the early weeks of September was smaller than either a month ago or the same period in 1929.

The wholesale price level as measured by Fishers' index, averaged higher during September than a month ago, but was considerably below the level of last year.

Increases were noted in September, 1930, over September, 1928, in loans and discounts of Federal reserve member banks, and the prices of principal bonds.

# MONTHLY BUSINESS INDICATORS, 1923-1930

[Ratio charts—see explanations on inside front cover. The curves on check payments, wholesale trade, 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. 1923-1925 monthly average=100]





## 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				1930				
	1923	1924	1925	1926	1927	1928	1929	May	June	July	Aug.	May	June	July	Aug.	Apr.	May	June	July	Aug.
	1923-1925 monthly average=100																			
<b>Industrial production:</b>																				
* Total manufacturing.....	101.0	94.0	105.0	108.0	106.0	111.0	119.0	109.0	111.0	111.0	113.0	125.0	129.0	126.0	125.0	107.0	104.0	101.0	93.0	91.0
* Total minerals.....	105.0	96.0	99.0	108.0	107.0	106.0	115.0	105.0	101.0	101.0	105.0	116.0	113.0	114.0	115.0	104.0	103.0	100.0	97.0	96.0
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	117.9	109.9	103.1	102.8	105.0	130.5	124.4	126.7	125.7	106.5	108.2	98.2	88.4	84.5
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	130.9	121.7	108.3	110.1	120.9	152.9	141.8	140.3	142.9	120.2	116.4	99.5	84.8	89.5
Automobiles.....	101.7	90.8	107.6	108.4	85.7	109.9	135.1	128.8	120.0	118.6	139.5	182.9	165.1	151.5	150.8	134.0	126.2	101.5	79.4	67.5
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	114.1	139.3	140.8	140.6	150.9	129.9	135.2	139.3	149.5	108.8	138.8	138.7	137.4	143.4
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.7	114.6	112.5	99.5	85.7	102.6	130.3	111.0	106.6	108.9	103.7	92.3	79.0	73.8	68.7
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	103.1	92.7	87.1	80.4	95.2	102.9	93.0	99.8	111.1	77.7	68.9	69.2	73.2	71.3
<b>Raw material output:</b>																				
Animal products.....	100.0	104.0	98.0	96.0	97.0	99.0	99.2	108.1	116.2	108.4	96.7	108.9	111.8	116.0	100.0	100.5	110.5	116.7	111.8	92.6
Crops.....	91.9	104.0	104.0	109.0	113.3	117.0	114.2	72.4	51.8	86.8	115.0	51.1	56.3	91.1	134.5	53.2	55.0	45.3	86.6	111.3
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	85.4	101.0	94.5	87.1	88.6	98.6	89.9	88.3	91.8	79.2	84.9	73.4	68.4	68.9
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.4	136.5	122.6	118.4	123.1	126.7	137.5	135.9	148.8	150.3	125.7	130.6	124.6	125.0	121.9
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	100.5	85.4	83.9	84.6	95.9	93.4	81.7	94.5	102.1	82.3	82.5	77.4	79.7	81.9
Copper.....	93.4	100.2	103.4	110.2	104.9	114.9	127.1	111.8	111.0	111.3	116.7	141.6	124.9	120.1	119.6	91.7	91.3	86.0	82.3	86.1
<b>Power and construction:</b>																				
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	161.8	141.9	139.5	142.4	149.8	161.2	154.9	161.0	166.6	159.5	159.8	154.6	156.9	157.1
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	99.6	143.4	142.2	123.7	118.8	122.4	108.2	113.7	100.5	53.3	81.0	72.6	67.2	60.2
<b>Unfilled orders:</b>																				
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	80.8	73.9	75.3	76.8	74.6	88.4	83.4	81.8	76.0	77.9	75.0	75.9	74.5	69.8
U. S. Steel Corporation.....	126.6	83.6	90.6	82.1	71.1	80.7	87.1	71.6	76.2	74.8	75.9	90.1	89.2	85.6	76.6	91.2	85.0	83.1	84.2	75.0
<b>Stocks:</b>																				
General index.....	94.5	102.0	103.5	114.6	120.8	123.0	136.8	116.8	108.7	105.8	107.9	122.9	120.2	122.0	127.5	134.6	127.7	124.8	125.7	133.0
Manuf. commodities (28).....	93.8	103.2	103.0	106.3	112.5	117.4	120.1	121.0	118.0	119.3	116.3	120.4	121.1	120.7	116.2	124.1	117.7	124.9	124.8	121.9
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.6	126.8	95.5	74.7	58.6	52.4	88.3	70.9	54.2	58.1	141.1	129.5	118.7	108.0	119.1
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	78.4	58.6	52.0	48.5	48.4	62.2	73.4	83.3	92.2	266.2	272.6	270.8	284.5	307.1
<b>Employment:</b>																				
Factories.....	104.2	96.2	99.7	101.4	98.8	97.2	100.4	95.7	96.2	95.7	98.3	101.6	101.2	100.7	102.0	92.1	90.4	88.2	84.6	83.8
<b>Prices:</b>																				
Farm products, to producers.....	97.5	97.1	106.5	98.6	94.9	100.7	100.0	107.2	105.1	105.1	100.7	98.6	97.8	101.4	103.6	92.0	89.9	89.1	80.4	78.3
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	95.8	97.9	96.9	97.6	98.2	95.1	95.7	97.3	97.0	90.1	88.5	86.2	83.2	83.4
Retail food.....	97.6	97.6	104.9	107.6	103.6	102.9	104.6	102.8	102.0	102.1	103.0	102.4	103.4	105.9	107.0	102.9	100.3	98.8	96.2	96.0
Cost of living (including food).....	98.2	99.4	102.4	102.4	100.0	98.7	98.4	98.4	98.0	98.1	98.0	96.8	97.6	98.8	99.4	96.2	95.0	94.4	92.6	92.6
<b>Distribution (values):</b>																				
* Bank debts, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	184.5	168.8	165.4	140.4	149.9	180.5	159.0	184.9	198.2	152.1	145.8	142.2	125.7	117.8
* Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	110.0	104.0	106.0	108.0	106.0	107.0	112.0	106.0	111.0	106.0	104.0	100.0	96.0	103.0
* Mail-order sales, 2 houses.....	89.3	97.2	111.9	120.6	126.2	147.7	188.6	141.9	160.8	163.6	168.7	194.8	215.1	211.2	223.3	164.0	216.0	200.2	190.8	193.2
* 10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	164.0	144.0	153.0	148.0	147.0	172.0	174.0	162.0	174.0	161.0	174.0	160.0	152.0	163.0
Postal receipts.....	93.6	98.5	107.9	114.5	117.3	117.7	121.1	117.9	111.9	99.6	105.0	121.0	109.3	109.1	110.0	122.3	117.3	104.9	101.2	98.1
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	113.5	109.6	98.2	98.4	107.3	123.9	109.4	109.3	114.3	95.3	88.1	77.5	68.2	67.2
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	115.2	111.3	102.4	99.8	99.8	101.4	103.6	106.1	102.9	87.4	84.3	77.7	70.2	79.0
<b>Transportation:</b>																				
Freight, net ton-miles.....	102.2	98.9	101.9	109.1	106.0	106.5	109.9	105.2	100.0	104.9	113.7	112.1	109.2	112.6	120.4	93.5	99.0	92.2	95.4	-----
<b>Finance:</b>																				
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	135.9	126.9	128.4	126.6	125.6	129.3	135.1	136.2	135.3	135.4	134.4	135.4	135.3	134.3
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	135.7	104.4	113.2	119.0	124.8	139.2	139.2	139.2	142.2	90.0	87.0	81.2	75.4	69.6
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	93.4	89.2	84.7	88.9	90.0	96.5	94.4	96.4	97.7	106.9	108.7	104.5	108.2	104.3
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	106.5	115.0	112.3	110.9	109.8	106.7	105.4	104.9	104.1	109.2	109.2	109.1	109.5	111.5
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	194.3	178.9	169.6	170.3	173.8	184.4	192.1	213.4	216.3	187.6	176.7	162.8	102.6	157.8
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	292.6	213.6	202.1	206.1	213.4	290.3	297.8	330.8	344.5	279.2	261.3	227.2	225.8	225.9
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	96.2	95.0	85.2	70.3	69.8	137.3	97.2	74.0	76.5	79.6	115.7	131.0	148.9	93.9	116.0

\* Seasonal adjustments.

## BUSINESS CONDITIONS IN AUGUST

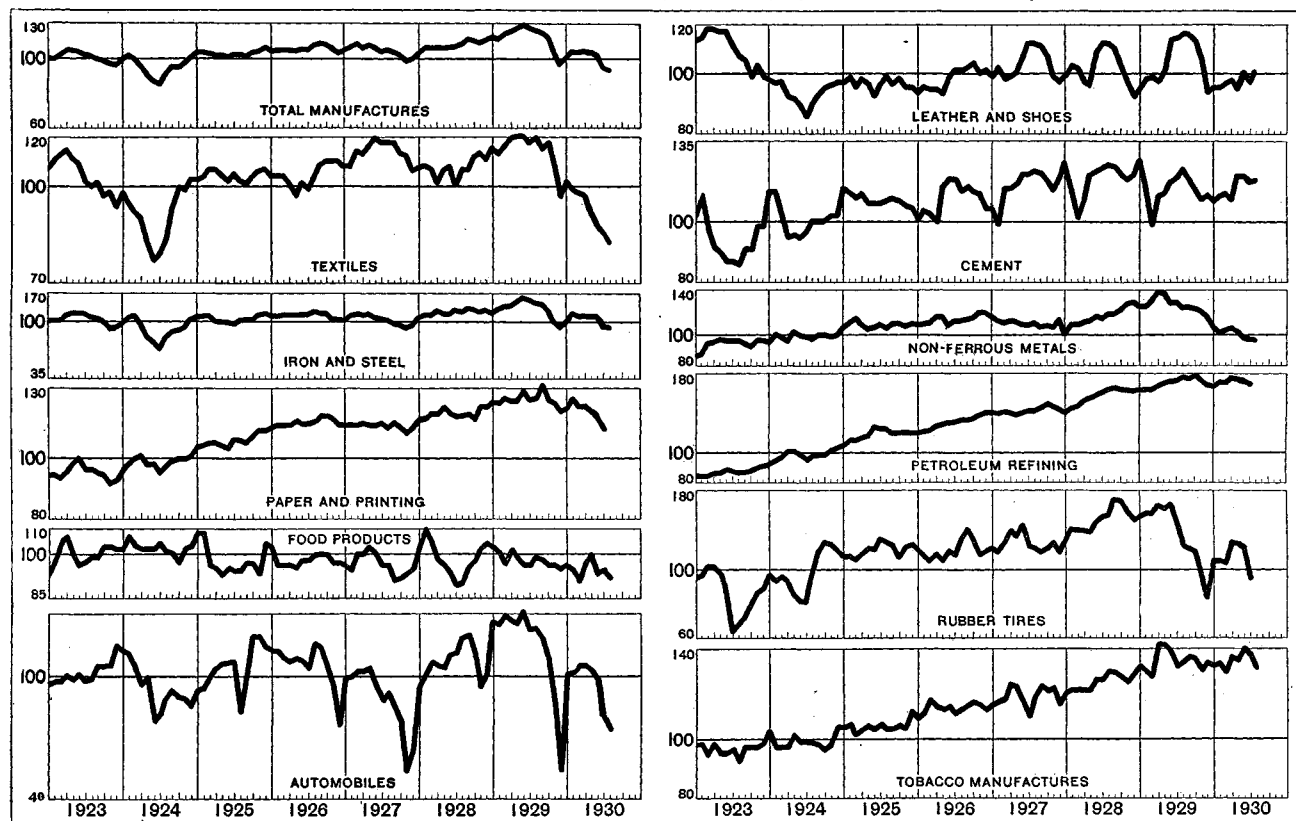
Manufacturing and mineral production in August, 1930, according to the weighted index of the Federal Reserve Board, showed slight declines from the preceding month and were considerably below their respective levels of August, last year. Among the items in the manufacturing group to show increases over July, were leather and shoes, and cement, while iron and steel showed no change. Although the other items recorded declined, the loss in any case did not exceed 2 per cent with the exception of tobacco, where

iron and steel and transportation equipment showed declines, while those for lumber showed no change.

Wholesale trade in August as reported to the Federal Reserve Board by firms selling groceries, dry goods, hardware, and drugs, indicated that sales in these lines were smaller than during August, 1929. The total sales for the year to date also declined from the corresponding period last year. Department store sales of 490 leading establishments in the 12 Federal reserve districts showed a gain of 7 per cent

### MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



the decline was more. In the output of minerals, increases were noted in the production of anthracite coal, iron ore, copper, and zinc.

Automobile production showed a decline from July and was less than a year ago. Steel ingot production was greater than that of the month of July but declined from a year ago, while the output of pig iron was less than either comparative period. Renewed activity was noted in the cotton textile industry by the increased production, shipments, stocks, new and unfilled orders of cotton textiles over the preceding month.

### SALES

Unfilled orders for manufactured goods at the end of August recorded declines from both the preceding month and the month of August a year ago. As compared with the month of July, 1930, orders for

over the month of July, but were somewhat smaller than a year ago.

Sales by leading 5 and 10 cent chains registered gains in almost every case over the preceding month. As compared with the month of August, 1929, sales were lower. Mail-order sales also showed an upward tendency during August, being higher than the sales of July, but, like the sales of 10-cent chains, fell off.

### IMPORTS AND EXPORTS

Total imports of merchandise during August were smaller than during the preceding month and August, 1929. Increases over July occurred in the imports of crude materials and finished manufactured goods, while declines occurred in the foodstuffs and semi-manufactured groups. Total exports showed a considerable gain over the preceding month, gains occurring in all the groups making up the total.

### PRICES

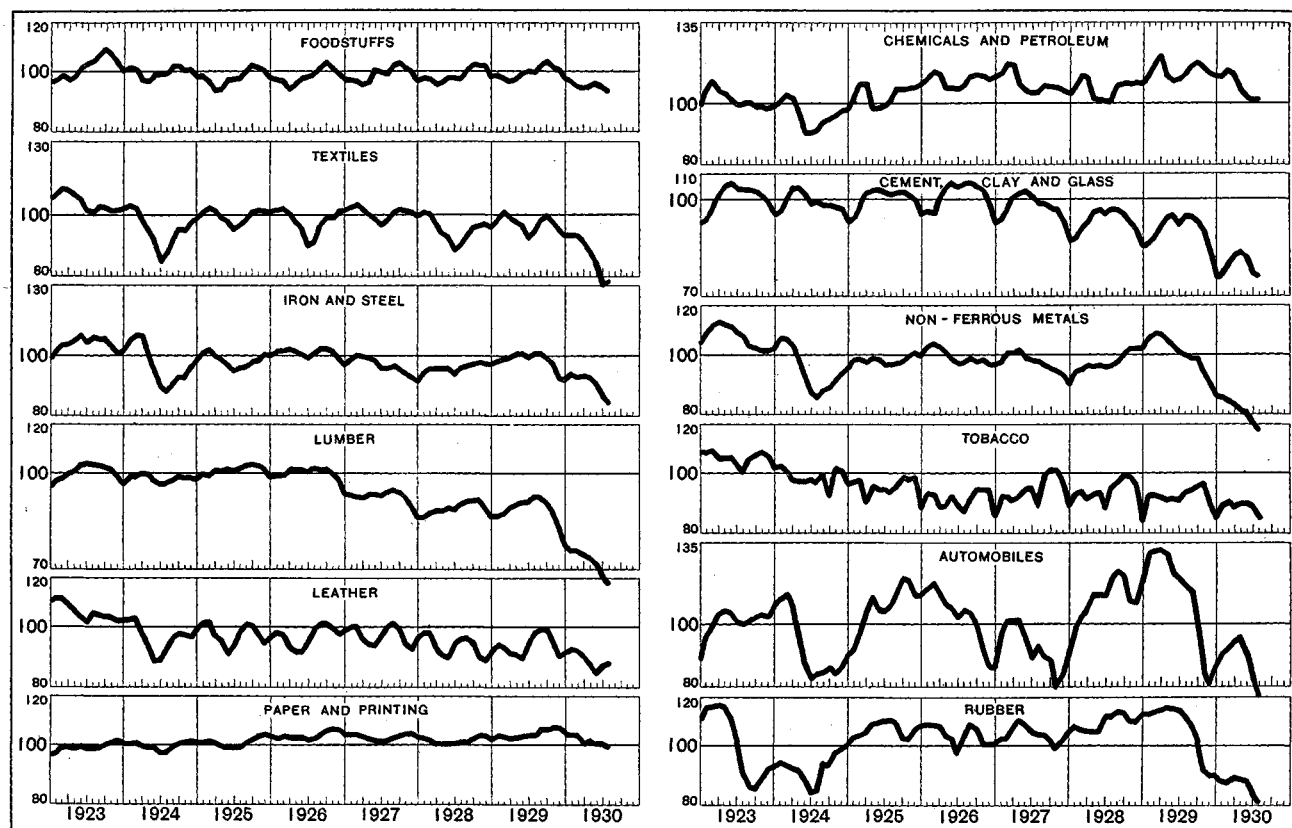
The general index of wholesale prices in August, as compiled by the Department of Labor, showed no change from the month of July, but was considerably lower than August, 1929. While most groups stood at practically the same level of preceding month, increases were noted in foodstuff prices, while fractional losses occurred in the prices for hides and leather products, textiles, metals, building materials, and house furnishing goods. Classified by state of manufacture, prices for all groups showed slightly lower averages from both the preceding month and a year ago. Although the

In comparison with the previous month, increased employment occurred in factories producing textiles, leather goods, and chemicals. The principal declines occurred in factories producing iron and steel, machinery, foodstuffs, lumber, automobiles, and tobacco. As compared with the month of August, 1929, all groups showed decreased employment.

Factory pay rolls, in general, in keeping with decreased employment, were lower than a month ago. Although wage payments were in the main lower than July, increased payments were made by establishments producing textiles and leather and shoes, while no

### FACTORY EMPLOYMENT, BY GROUPS

[1926 monthly average=100. August, 1930, is latest month plotted]



averages were lower than those for July, the decline did not exceed 1 per cent in any case.

The index representing prices received by farmers for their products was 3 per cent lower than in July and 25 per cent lower than a year ago. As compared with the prices that ruled in July, increases occurred in prices received for grains and dairy and poultry products, while declines were noted in the prices for fruits and vegetables, meat animals, cotton and cottonseed and unclassified items. In comparison with August, last year, declines occurred without exception in each case.

### EMPLOYMENT

Factory employment as indicated by the index of the Federal Reserve Board showed but slight change from the month of July but was lower than a year ago.

change in wage payments were noted in the cement and chemical industries. The principal declines from a month ago were indicated in factories producing automobiles and petroleum products, this being due to decreased activity in those industries.

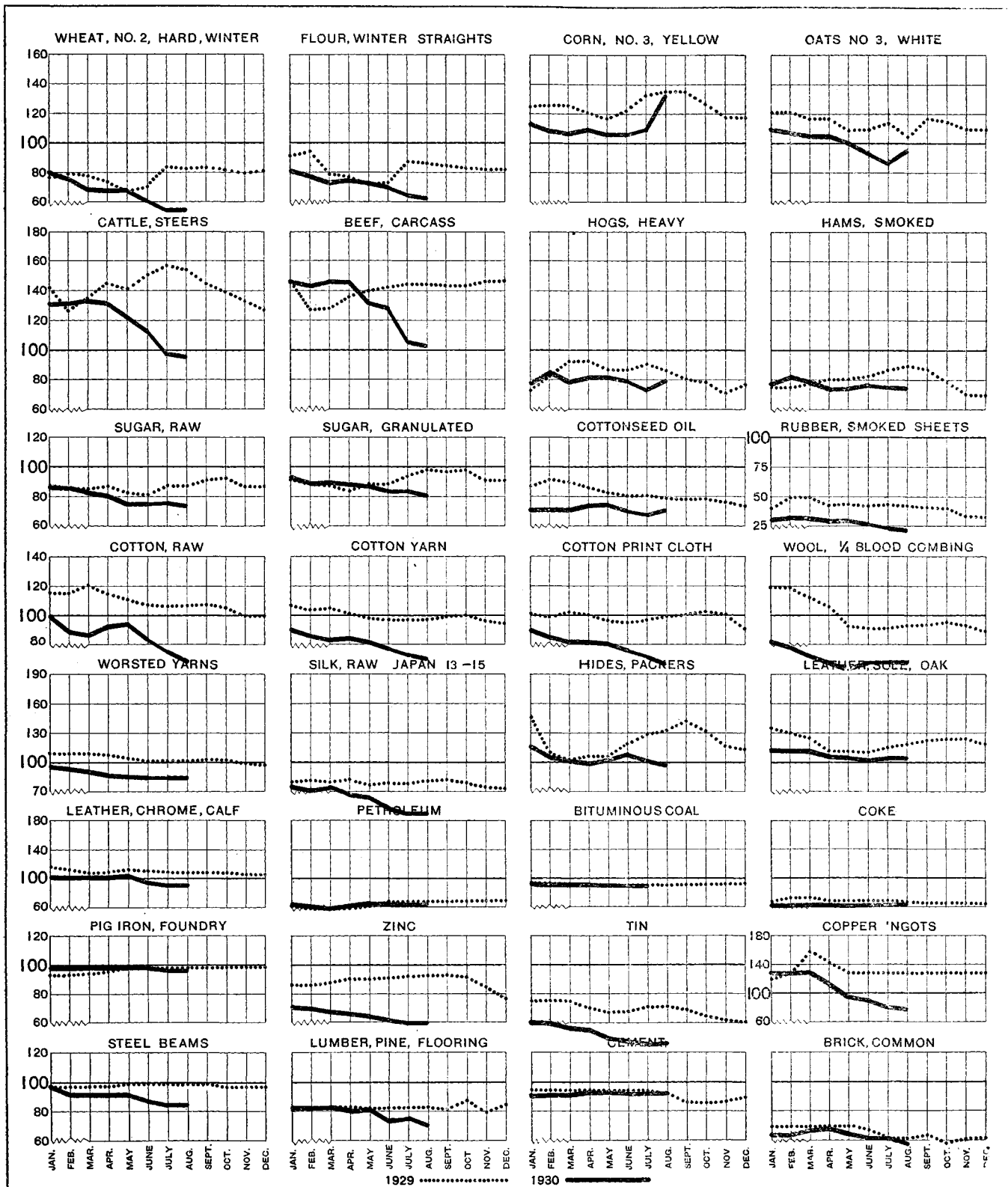
### COST OF LIVING

The general cost-of-living index, as compiled by the National Industrial Board, remained at the same level as a month ago but showed a considerable decline from the month of August, 1929. Declines from July occurred in the shelter, clothing, and the sundries groups, while the foodstuffs group and the group comprising fuel and light showed no change. As compared with August, 1929, all cost-of-living groups registered substantial declines.



## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

[Relative numbers, 1926 monthly average taken as 100. August, 1930, is latest month plotted. Data from which these charts are drawn are given on the opposite page]



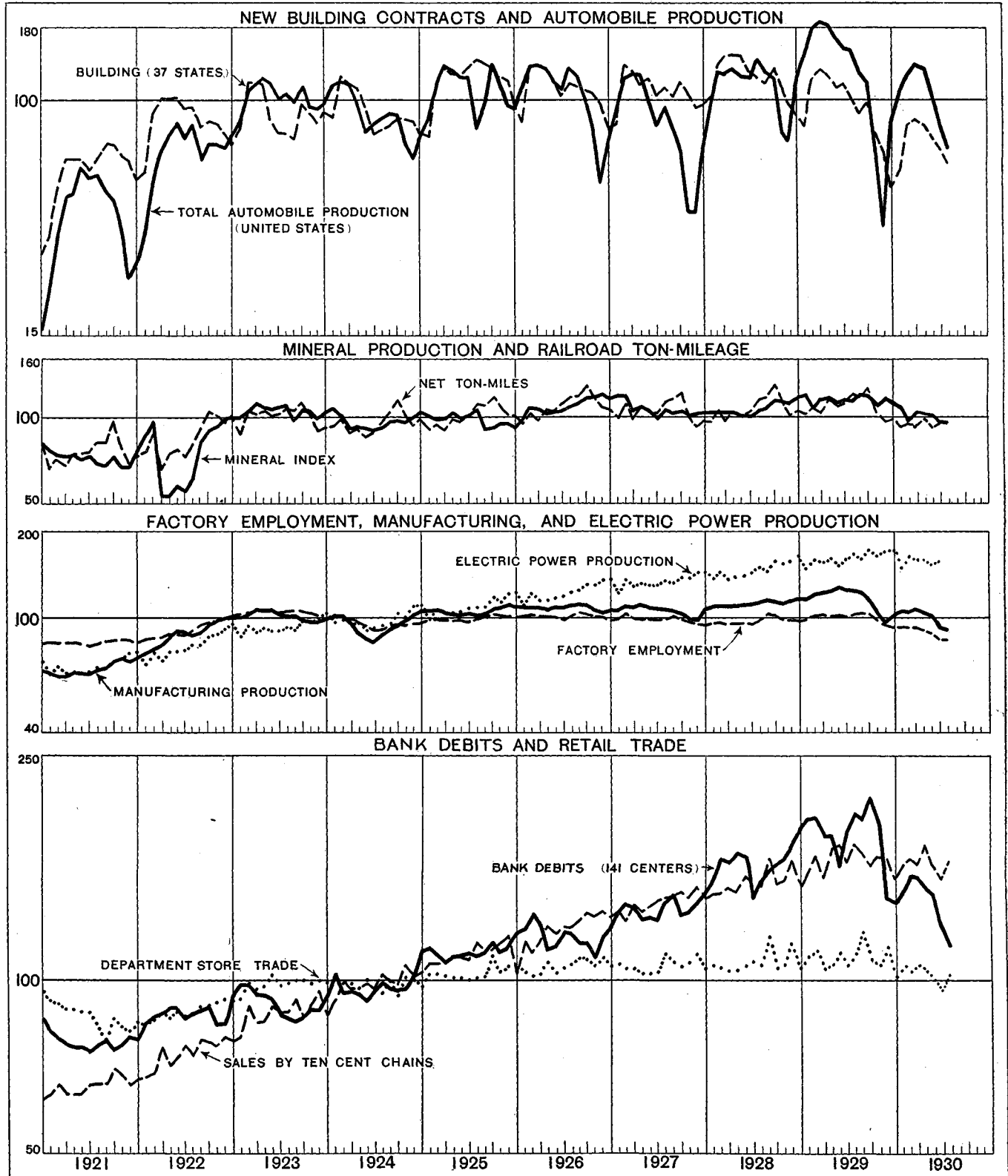
## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

NOTE.—Prices to producer on farm products and market price of wool and grain prices 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					
		July, 1930	August, 1930	August, 1929	1926 average=100					
					June, 1930	July, 1930	August, 1930	July, 1929	August, 1929	
<b>FARM PRODUCTS—AVERAGE PRICE TO PRODUCER</b>										
Wheat.....	Bushel.....	0.706	0.74	1.107	65	52	55	76	82	
Corn.....	Bushel.....	.771	.500	.959	113	110	129	131	137	
Potatoes.....	Bushel.....	1.294	1.088	1.386	80	70	59	47	75	
Cotton.....	Pound.....	.119	.114	.180	93	79	75	119	119	
Cottonseed.....	Ton.....	27.35	23.99	32.69	109	101	88	128	120	
Cattle, beef.....	Pound.....	.0712	.0626	.0962	127	110	97	152	149	
Hogs.....	Pound.....	.0833	.0851	1.028	77	71	72	88	87	
Lambs.....	Pound.....	.0808	.0682	1.146	78	70	59	103	99	
<b>FARM PRODUCTS—MARKET PRICE</b>										
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	.92	.91	.135	63	58	58	91	85	
Wheat, No. 2, red, winter (St. Louis).....	Bushel.....	.85	.89	.132	68	55	57	90	85	
Wheat, No. 2, hard, winter (Kansas City).....	Bushel.....	.80	.81	.123	60	54	54	84	83	
Corn, No. 3, yellow (Chicago).....	Bushel.....	.82	.99	.101	105	109	132	132	135	
Oats, No. 3, white (Chicago).....	Bushel.....	.35	.39	.43	93	85	95	115	105	
Barley, No. 2 (Minneapolis).....	Bushel.....	.47	.52	.61	77	73	81	108	95	
Rye, No. 2 (Minneapolis).....	Bushel.....	.55	.60	.98	62	60	65	116	107	
Cotton, middling upland (New York).....	Pound.....	.132	.121	.187	83	75	69	106	106	
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.31	.31	.43	67	67	67	91	93	
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	9.281	9.138	14.688	113	97	96	157	154	
Hogs, heavy (Chicago).....	Cwt.....	8.944	9.775	10.663	78	73	79	91	86	
Sheep, ewes (Chicago).....	Cwt.....	3.063	3.094	5.156	52	47	47	84	78	
Sheep, lambs (Chicago).....	Cwt.....	8.125	7.719	12.875	71	59	56	101	94	
<b>FOOD</b>										
Flour, standard patents (Minneapolis).....	Barrel.....	5.505	5.344	7.306	69	65	63	91	87	
Flour, winter straights (Kansas City).....	Barrel.....	4.644	4.555	6.235	69	64	63	87	86	
Sugar, 96° centrifugal (New York).....	Pound.....	.033	.032	.038	74	75	73	88	88	
Sugar, granulated, in barrels (New York).....	Pound.....	.046	.044	.054	83	84	80	94	98	
Cottonseed oil, prime yellow (New York).....	Pound.....	.080	.084	.094	70	67	71	81	79	
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.174	.168	.238	119	106	102	145	145	
Beef, fresh, carcass, steers (New York).....	Pound.....	.177	.173	.251	127	104	101	149	147	
Pork, smoked hams (Chicago).....	Pound.....	.230	.229	.275	76	75	74	87	89	
Butter, creamery, 92 score (New York).....	Pound.....	.35	.39	.43	73	78	87	93	96	
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.205	.205	.235	100	90	90	103	103	
<b>TEXTILES</b>										
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.262	.252	.349	76	73	70	97	97	
Cotton-print cloth 64 x 60-3 $\frac{1}{4}$ "-5.35—yards to pound.....	Yard.....	.054	.050	.075	75	72	67	97	100	
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.070	.070	.086	80	75	75	89	92	
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.200	1.200	1.450	84	84	84	101	101	
Women's dress goods, French, 39 inches, at mills, serge.....	Yard.....	.900	.900	.975	87	87	87	94	94	
Suitings, unfinished worsted—13-ounce, mill.....	Yard.....	1.696	1.601	1.901	88	85	80	100	95	
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.806	1.746	1.959	85	83	81	90	90	
Silk, Japan, 13-15.....	Pound.....	2.955	2.955	5.073	53	48	48	79	82	
Hosiery, women's pure silk, mill.....	Dozen pair.....	8.000	7.500	9.250	69	69	65	80	80	
<b>LEATHER</b>										
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.141	.136	.188	108	100	97	129	134	
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.165	.161	.198	101	95	93	115	114	
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.460	.460	.520	100	105	105	115	119	
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	4.850	100	100	100	100	100	
<b>FUEL</b>										
Coal, bituminous, mine-run (composite price).....	Net ton.....	3.891	3.862	3.913	91	90	90	91	91	
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.156	4.180	4.327	85	87	87	89	90	
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.366	12.578	12.848	89	90	91	93	93	
Coke, Connellsville (range of prompt and future), furnace—at ovens.....	Short ton.....	2.520	2.550	2.763	61	61	62	68	67	
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.178	1.178	1.300	63	63	63	69	69	
<b>METALS</b>										
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	19.860	19.760	20.260	98	96	96	98	98	
Pig iron, basic, valley furnace.....	Long ton.....	18.100	18.000	18.500	100	98	97	100	100	
Steel billets, Bessemer (Pittsburgh).....	Long ton.....	31.000	31.000	35.000	89	89	89	100	100	
Copper ingots, electrolytic, early delivery (New York).....	Pound.....	.1102	.1069	.1778	87	86	84	129	129	
Brass, sheets, mill.....	Pound.....	.182	.179	.233	101	96	94	122	122	
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0525	.0549	.0675	64	62	65	81	80	
Tin, straits (New York).....	Pound.....	.2981	.3002	.4665	46	46	46	71	71	
Zinc, slab, western (St. Louis).....	Pound.....	.0435	.0436	.0680	61	59	59	92	93	
<b>BUILDING MATERIAL AND MISCELLANEOUS</b>										
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	33.890	31.720	37.430	73	75	70	83	83	
Brick, common red, domestic building (New York).....	Thousand.....	10.000	9.500	10.125	61	61	58	62	62	
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.600	1.600	1.604	92	92	92	95	92	
Steel beams, mill (Pittsburgh).....	Cwt.....	1.650	1.650	1.950	87	84	84	100	100	
Rubber, smoked sheets (New York).....	Pound.....	.115	.099	.205	26	24	20	44	42	
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	107	107	107	107	107	
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

Imports of wool in August registered an increase over the previous month but declined from August, 1929. Consumption of wool by textile mills, although showing but slight change from a month ago, was lower than last year. The activity of wool machinery indicated by the per cent of active hours was lower in most cases than either prior period. The activity of spindles in worsted spinning was greater and woollen spinning was less than the previous month.

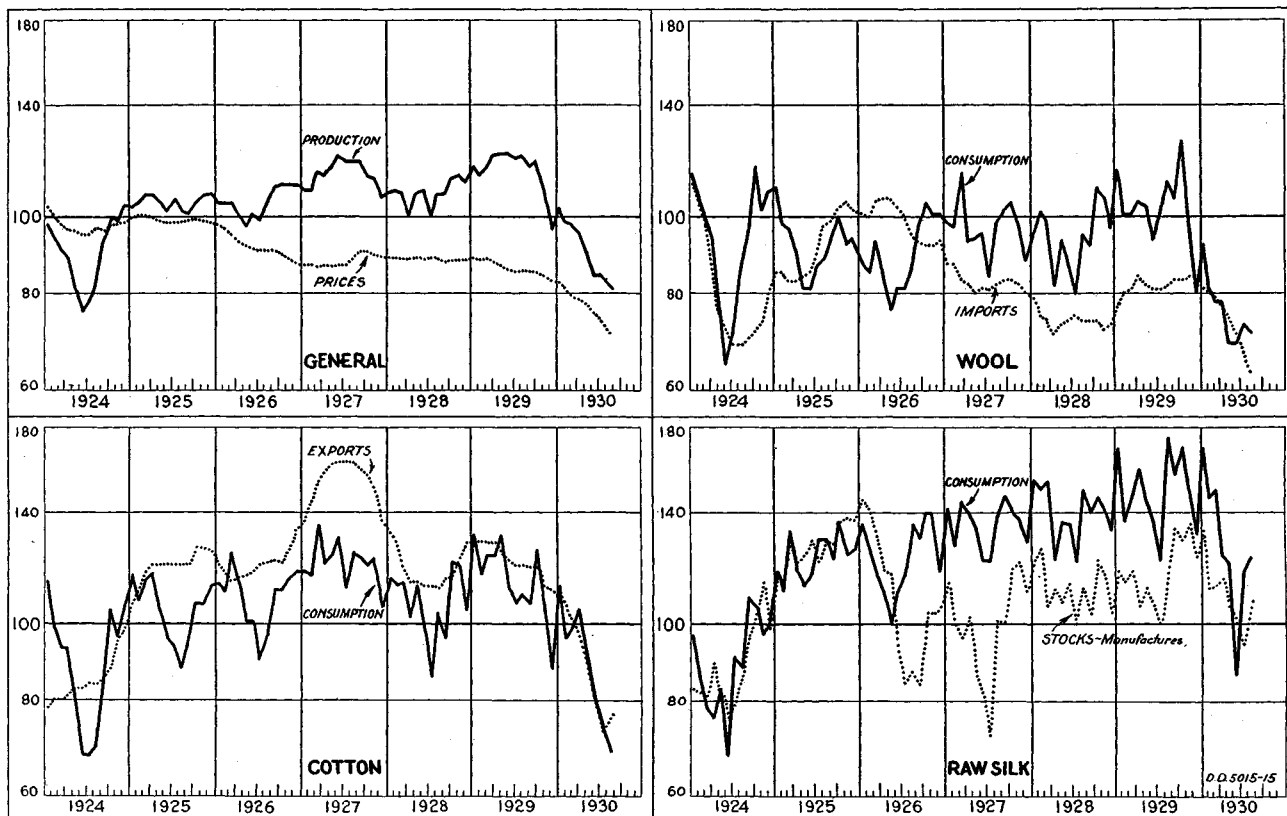
Cotton receipts into sight during August, as reported by the New Orleans Cotton Exchange, registered an increase over both the preceding month and the month of August, 1929. Exports of cotton likewise showed

about half what they were last year. Rayon prices showed no change from the preceding month.

The production of cotton textiles during August presented rather a bright spot in the textile industry, increases over July occurring in the production, shipments, and new and unfilled orders, stocks alone showing a downward trend. Compared with a year ago, all these trends showed a decline with the exception of stocks. Imports of cotton cloth were smaller than during prior comparative periods. Exports showed practically the same level as a month ago. Both imports and exports were less than during August, 1929. Shipments and unfilled orders of finished cotton goods, although greater than during July, were less than dur-

### THE TEXTILE INDUSTRIES

[Relative numbers, monthly average 1923-1925, taken as 100. August, 1930, 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]



gains over both prior periods. The consumption of raw cotton by textile mills was lower than either previous period. For the first eight months of the year cotton consumption was smaller than in the same period of last year.

Imports of silk were greater than the month of July but fell off from the imports of August a year ago. Consumption of silk, as measured by deliveries of the commodity, showed a gain over a month ago, but, like imports, were less than during 1929.

Rayon imports, including yarns, threads, and filaments, were larger than in July, but smaller than a year ago. For the year to date imports of rayon were

ing August, last year. On the other hand, billings, orders for gray yardage, and stocks were less than either prior period. The activity of the industry for the past month was greater than during July.

The production of carded yarns during August, was less than during the preceding month or a year ago. Unfilled orders were greater and stocks less than the previous month. Prices for yarns showed slight losses from a month ago.

Imports of buttons and shells were on the whole greater than either prior period. Vegetable ivory or tagua nuts, however, showed declines from both prior periods.

**METALS**

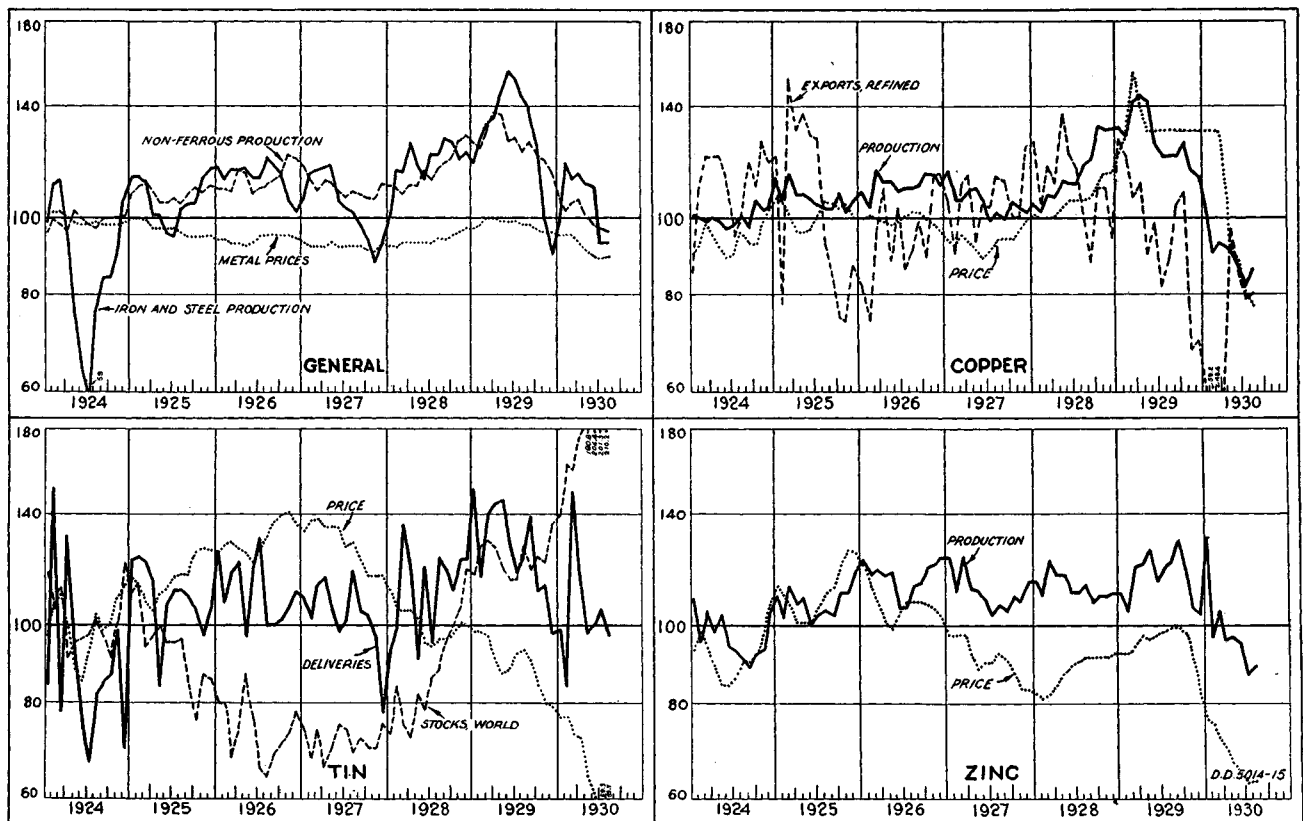
Iron ore shipments from the mines during August were fractionally smaller than in July but showed a falling off from a year ago. Receipts at Lake Erie ports and furnaces showed similar tendencies. Pig-iron production declined from both the preceding month and the same month in 1929. For the year to date less pig iron was produced than during the same period last year. However, it would be well to note that the amount produced this year showed but slight change from the corresponding period in 1928, two years ago.

orders of steel boilers were greater in quantity than a month ago.

Steel furniture shipments in the business group increased over the preceding month, unfilled and new orders of this group being lower. In the shelving class, shipments and new orders declined from July, while unfilled orders increased. As compared with a year ago all trends were lower. Shipments stocks, new and unfilled orders were generally smaller for baths, sinks, and lavatories than the previous month, while shipments and new orders for miscellaneous sanitary ware were greater. The number of patents issued for agri-

**THE METAL INDUSTRIES**

[Relative numbers, monthly average 1923-1925, taken as 100. August, 1930, is latest month plotted]



The output of steel ingots in the United States showed an increase over the preceding month but was lower than in 1929. Unfilled orders of the United States Steel Corporation showed a decline from the preceding month and the same period last year.

New orders and shipments of structural steel showed declines from the preceding month and a year ago. Shipments to date, showing a tonnage of 2,260,000 short tons, indicate a marked gain over the corresponding period two years ago, when the shipments were 1,978,000 tons. The production of steel barrels, steel castings, and fabricated plate registered declines from both prior periods. As compared with the year to date increases were noted in the production and shipments of steel barrels and in the production of steel castings over a similar period in 1928. Unfilled

cultural machinery and internal combustion engines were both less than either the preceding month or in August, 1929.

Mine copper output in the United States and world blister copper production were both higher than a month ago. At the end of August stocks of refined copper at the refineries were greater, while those of blister were less than at the end of July. The stocks of North and South American refined copper at the end of August were greater than a year ago.

Deliveries of tin during August registered declines from both prior periods. Stocks of this commodity showed increases over both July and a year ago. Zinc production and stocks were greater than a month ago. As compared with the previous month production was less while stocks were greater.

## FUELS

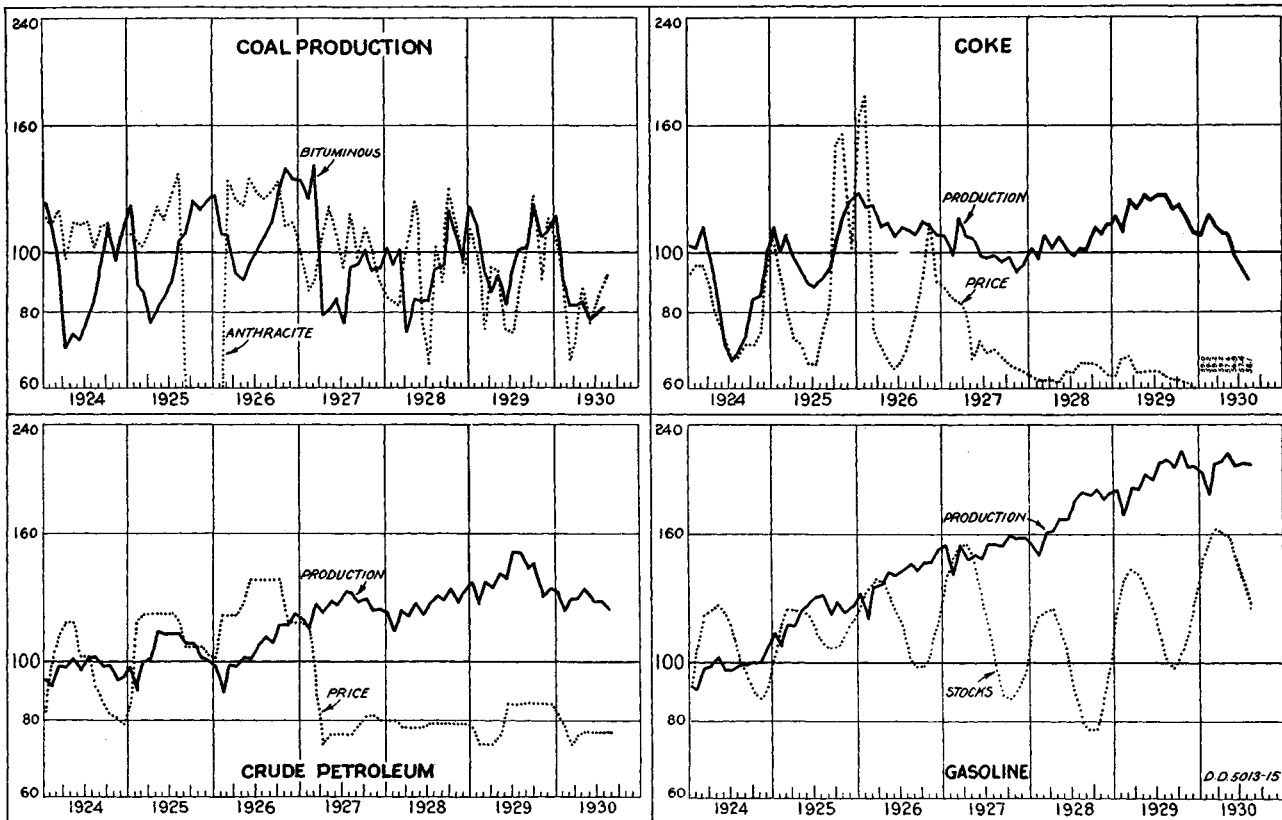
Production of bituminous coal in the United States during August amounted to 35,661,000 tons. This compares with the production of 34,715,000 tons during July and 44,475,000 tons during August a year ago. Canadian production of this fuel was greater than a month ago but less than August, 1929. Anthracite coal output registered increases over both the preceding month and a year ago. The total output of coke recorded declines from both prior periods. For the year to date by-product coke production in the United States was greater than during August, 1928. Canadian coke production was about what it was last month; however, as compared with a year

## HIDES AND LEATHER

Imports of hides and skins from foreign countries during August were generally smaller than during either July, 1930, or August, 1929. For the first eight months of the current year total imports were smaller than during the same period of 1929. Fewer cattle, calves, and swine were slaughtered under Federal inspection in the United States than during either the month of July or a year ago. More sheep and lambs were slaughtered than during either prior month. Prices of cattle, hides, and calfskins averaged lower than either comparative period. Fewer cattle and calves were slaughtered in Canada during the month of August: slaughterings were also smaller

## THE FUEL INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. August, 1930, is latest month plotted where data were available]



ago, a decline was noted. The price of coke was higher than July but lower than August last year.

## AUTOMOBILES AND RUBBER

The total production of automobiles including passenger cars, taxicabs, and trucks declined from both the preceding month and August, 1929. For the year to date the total production was 2,704,957 as against 4,224,911 in 1929 and 3,054,905 in 1928. The Canadian production likewise showed losses from both prior periods. General Motor Co. sales were greater in August than July, in sales to dealers and consumers and for export. Shipments of accessories and parts during August showed increases over July, in original equipment, replacement parts, accessories, and service parts. Imports of rubber, including latex, although greater than the preceding month were less than in August, 1929.

than a year ago. Exports of sole and belting leather showed declines from both prior periods. There were 23,016,999 pairs of shoes manufactured in the United States during the month of August, 1930, by 810 establishments. This compares with 20,220,735 pairs made in July by the same firms.

## PAPER AND PAPER PRODUCTS

The output of newsprint paper both in the United States and Canada was lower than during the month of July, 1930, or August a year ago. Consumption of newsprint by publishers, although showing a fractional change from the preceding month was considerably greater than last year. For the year to date more newsprint was used in the United States than during the same period of 1929 and 1928. Imports of newsprint during August were smaller than either prior period.



### BUILDING CONSTRUCTION

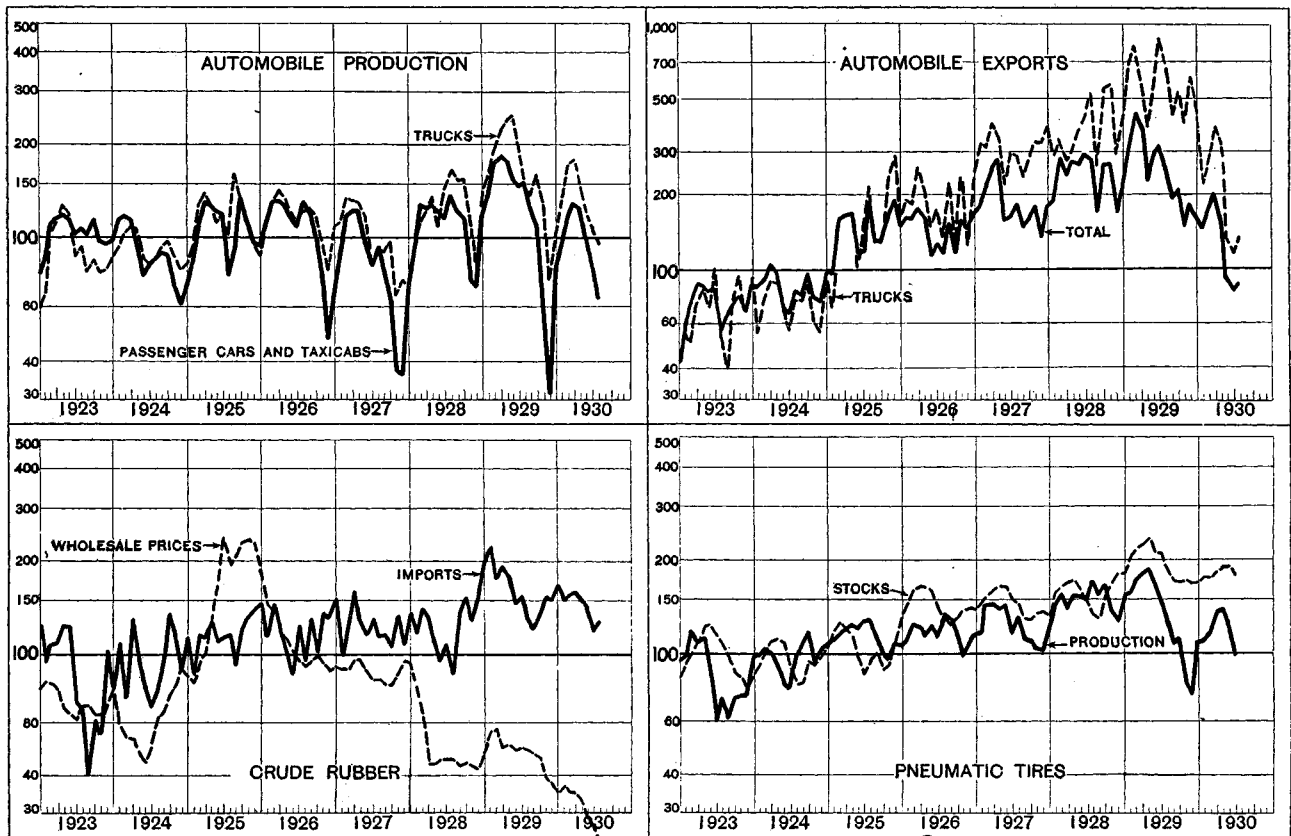
Building costs were generally lower in August than in either the previous month or August of last year. The value of new-building contracts awarded during the month as a whole declined from both July and a year ago. However, increases were noted over July in new construction as measured by contracts awarded for commercial buildings, hospitals, and institutions, social and recreational buildings, and public works and utilities. The valuation of contracts let for the year to date showed marked gains over the years of 1929 and 1928 in hospital and institutional buildings, public buildings, and public works and utilities con-

Maple flooring output, shipments, stocks, and new orders all recorded fractional declines from the month of July. However, the decline in unfilled orders was more noticeable. As compared with the trends of this product in August, 1929, losses occurred in each instance.

The production of wood pulp in August was lower than in July, consumption and stocks showing similar changes. Imports, however, were greater than the previous month. For the first eight months of the present year the production was greater than during a similar period in 1928, two years ago. The production of veneer for use in making shipping containers

### THE AUTOMOBILE AND RUBBER INDUSTRIES

[Relative numbers, monthly average 1923-1925 taken as 100. Where available, August, 1930, is latest month plotted]



struction. Contracts awarded in Canada, although registering an increase over the month of July, were lower than a year ago.

### LUMBER AND LUMBER PRODUCTS

The output of California redwood was greater than July but smaller than a year ago. Northern pine production also showed similar losses; the output of northern pine lath, in keeping with the smaller lumber production, showed declines from both comparative periods. Northern hardwoods and hemlock lumber, in keeping with the other lumber species, were lower both in production and shipments than either prior period.

declined from the preceding month and a year ago. Household-furniture shipments in the North Carolina district registered a gain over shipments in July; unfilled orders, however, fell off. In the Grand Rapids district new orders showed no change from the preceding month; shipments and plant operations were greater.

### STONE AND CLAY PRODUCTS

In the cement industry increases occurred over the month of July in output, shipments, and stocks. As compared with August, a year ago all trends were lower. Common brick also showed increases over July in shipments, unfilled orders, and stocks.

## FOODSTUFFS AND TOBACCO

The latest official estimate of 837,761,000 bushels indicates a larger wheat crop this year than a year ago, when the estimate was 805,790,000 bushels. However, both these estimates are under the estimate for the year of 1928. The visible supply of wheat, both in the United States and Canada, at the end of August was greater than a year ago. Wheat receipts at principal markets in the United States were smaller while shipments were larger during August than the preceding month. Both items were smaller than a year ago. Exports of wheat and flour were larger than July, 1930, and a year ago.

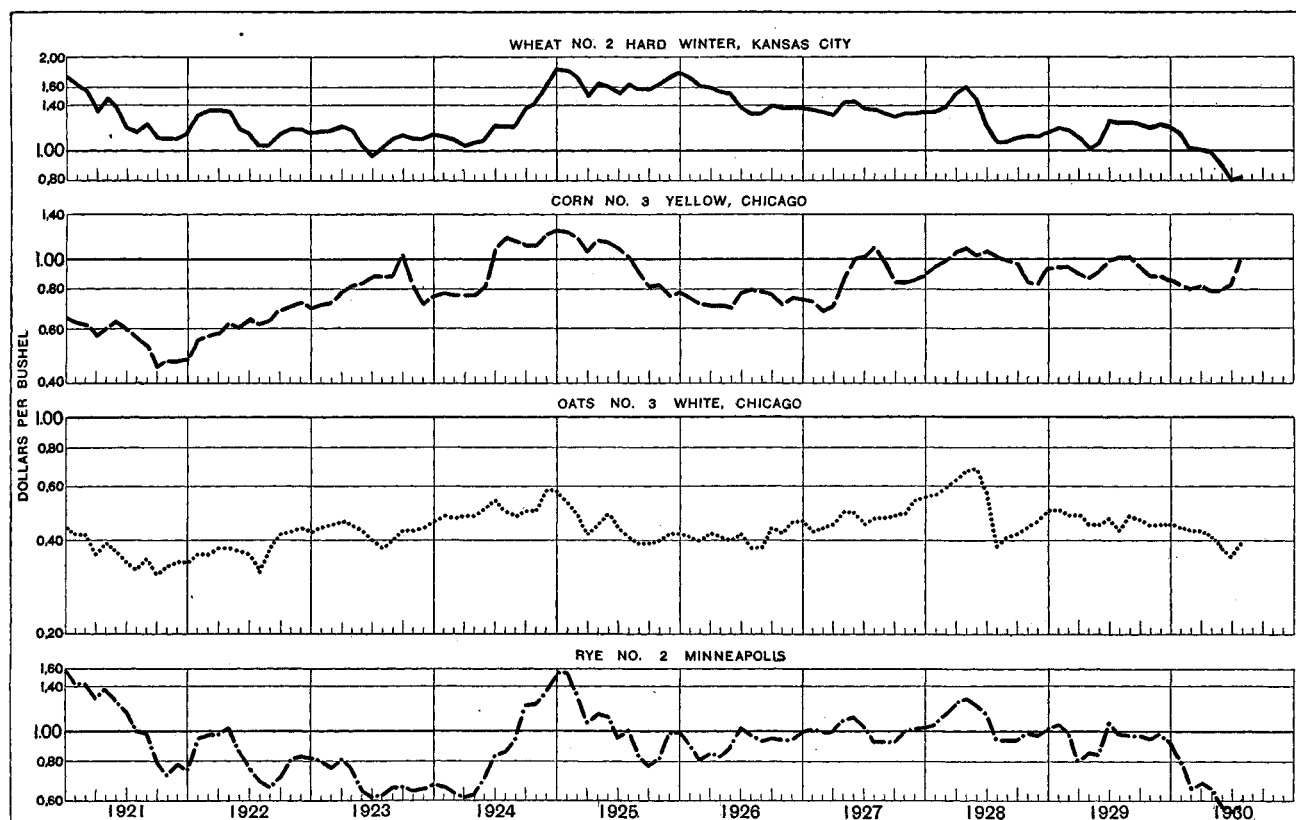
at the end of August last year. Prices for beef averaged higher than in either period.

Receipts and total shipments of hogs at primary markets were smaller than the previous month. Receipts were smaller and shipments greater than a year ago. The production of pork and its products was less than either comparative period. Cold-storage holdings and exports also showed losses from previous periods.

Receipts and shipments of sheep and lambs during August were greater than in the preceding month. Receipts were greater and shipments less than the same month in 1929. The production and consump-

## MOVEMENT OF GRAIN PRICES

[Weighted price per bushel. August is latest month plotted]



Receipts and shipments of corn registered increases over the month of July. The visible supply of corn also was greater than July but less than at the end of August, 1929. Corn prices were uniformly higher in August, due mainly to the drought that existed throughout the summer months. The available stocks of oats were smaller than at the end of August last year, but rye was considerably greater. Receipts of oats, barley, and rye at principal markets also declined from a year ago.

Movements of cattle and calves at primary markets were greater than during July. Both receipts and shipments declined from the levels of a year ago. The production of beef and veal was smaller than in July and a year ago. Holdings in cold storage of these products, while declining from July, were greater than

tion of mutton and lamb were greater than during either the previous month or a year ago. Storage holdings of this product, although smaller than at the end of July, were greater than a year ago. The prices of ewes at Chicago increased while lamb prices declined during August. Poultry receipts at central markets were greater while storage holdings were less than July. Both declined from a year ago. Receipts of butter and cheese were less than either the month of July or a year ago.

Consumption of both cigarettes and cigars fell off from both prior periods. For the year to date the consumption of cigarettes was greater and cigars less than the corresponding period in 1929 and 1928. The official estimate indicates a smaller tobacco crop than a year ago.

### TRANSPORTATION

Car loadings for the 5-week period in August, 1930, registered a decline from the month of August, 1929. Declines occurred in the loadings of all kinds of freight when contrasted with the previous year. Transportation on the Sault Ste. Marie canal declined from the month of July and a year ago. New York canal traffic, although less than the preceding month, was considerably greater than during August, last year. Cape Cod canal traffic returns show gains over both prior periods. Canadian canal traffic was larger than either prior period. River traffic in most cases showed small change from the preceding month or a year ago. Clearances of vessels engaged in foreign trade from United States ports increased over the previous month and the same month in 1929.

Orders for new locomotives increased over both prior periods. Unfilled orders in the hands of manufacturers were less than at the end of either prior period. The number being built by railroad companies, although fewer than at the end of July, were more than a year ago. Orders for new freight cars were fewer than either prior month.

### BANKING AND FINANCE

Bank debits, outside New York City, declined from the month of July, 1930, and August, 1929. Total loans and discounts of Federal reserve member banks fell off slightly from the levels of prior comparative periods. Brokers' loans during August also registered declines from preceding month and August, 1929. The value of new insurance written was less than either prior period. Dividend and interest payments during August, although declining from July, were greater than August, 1929. For the year through August these

payments exceeded payments of similar periods for the years of 1929 and 1928.

Interest rates in general were lower during August than during July or a year ago. Rates charged by the Federal land banks were higher and rates of the intermediate credit banks lower than during August, 1929. Business failures, although numbering fewer firms, showed greater liabilities than during July. Both the number of failing firms and the amount of liabilities exceeded those of August, last year.

### GOLD, SILVER, AND FOREIGN EXCHANGE

Gold receipts at the United States mint declined from the month of July but were larger than a year ago. For the year to date mint receipts of gold exceeded those of both previous years. Exports of gold declined from July but were much larger than last year. Imports of the metal showed similar tendencies. Silver production in the United States and Canada was lower than during August, 1929. Exports and imports, while showing declines, when compared with the preceding month were higher, in each instance, than during the same month last year.

Foreign exchange quotations on the principal countries in August showed but slight change from the preceding month or the same month in 1929. Among the increases over July were rates with the Netherlands and Argentina. Slight declines occurred from July in rates with India and Brazil. Rates with other countries showed no change. Compared with August, 1929, rates with England, Belgium, the Netherlands, Sweden, Switzerland, and Canada, registered increases, while rates with Japan, Argentina, and Brazil declined. Exchange rates with France, Italy, India, and Chile showed no change from a year ago.



## 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			1930		
			June	July	August	June	July	August	June	July	August
<b>PRODUCTION</b>											
<b>TOTAL INDUSTRIAL</b>											
Unadjusted, except for working days.....	125	81	108	105	110	125	119	121	100	91	91
Adjusted for seasonal variations.....	127	83	109	110	112	127	124	123	100	94	92
<b>MANUFACTURING</b>											
Total (adjusted for working days only).....	127	79	109	106	110	126	119	121	99	89	89
Total (adjusted for seasonal variations).....	129	82	111	111	113	129	126	125	101	93	91
Iron and steel.....	155	59	115	124	121	155	152	143	110	93	93
Textiles.....	121	77	108	100	107	121	118	120	84	84	81
Food products.....	110	89	93	89	90	96	96	100	93	94	91
Paper and printing.....	130	91	118	118	117	128	125	125	117	111	-----
Lumber.....	110	78	91	94	87	85	87	88	-----	-----	-----
Automobiles.....	166	47	114	116	133	162	142	143	98	75	67
Leather and shoes.....	134	86	108	112	112	113	114	117	101	100	101
Cement.....	126	99	121	119	126	116	118	122	119	116	117
Glass, plate.....	174	65	137	130	138	154	164	168	114	105	65
Nonferrous metals.....	137	87	115	113	117	126	127	122	98	97	96
Petroleum refining.....	178	84	153	155	160	170	171	176	170	166	-----
Rubber tires.....	169	66	143	149	151	162	141	119	119	93	-----
Tobacco manufactures.....	143	93	125	125	129	139	131	133	141	137	130
<b>MINERALS</b>											
Total (adjusted for working days only).....	128	84	104	103	111	116	118	121	103	100	101
Total (adjusted for seasonal variations).....	120	90	101	101	105	113	114	115	100	97	96
Bituminous coal.....	125	77	91	93	91	102	102	99	89	86	82
Anthracite coal.....	133	1	76	67	94	76	72	78	78	82	88
Crude petroleum.....	147	88	118	119	123	135	143	145	124	120	118
Iron-ore shipments.....	143	0	107	104	104	126	119	121	108	95	96
Copper.....	142	82	110	113	116	124	122	119	86	83	85
Zinc.....	127	91	117	117	120	120	124	127	99	92	94
Lead.....	125	75	100	97	107	112	114	107	-----	-----	-----
Silver.....	123	69	93	76	87	94	88	91	75	69	69
<b>ANIMAL PRODUCTS (Marketing)</b>											
Total.....	124	79	116	108	97	112	116	100	117	112	91
Wool.....	545	14	378	387	195	306	404	268	413	545	361
Livestock.....	131	76	83	78	79	76	83	77	79	77	77
Poultry and eggs.....	148	67	106	92	80	111	96	89	112	91	72
Dairy products.....	164	64	147	138	117	147	144	116	149	132	95
Fish.....	283	44	168	154	170	179	243	247	185	263	202
<b>CROPS (Marketing)</b>											
Total.....	252	45	52	87	115	56	91	135	45	87	114
Grains *.....	214	38	56	147	186	75	179	214	59	178	174
Vegetables *.....	199	60	164	107	83	147	169	88	151	113	82
Fruits *.....	266	43	75	164	165	89	106	130	58	124	133
Cotton products *.....	373	6	25	28	45	18	11	72	14	6	78
Miscellaneous crops *.....	344	3	24	23	119	30	25	155	3	3	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			1930		
			June	July	August	June	July	August	June	July	August
<b>PRODUCTION—Continued</b>											
<b>FOREST PRODUCTS</b>											
Total.....	112	62	95	87	89	90	88	92	73	68	69
Lumber.....	112	59	93	88	88	87	86	91	68	66	67
Pulpwood.....	151	54	96	64	82	99	81	77	106	64	70
Gum (rosin and turpentine)*.....	204	18	172	170	161	177	204	189	171	204	171
Distilled wood.....	148	62	84	80	78	102	97	100	62	47	49
<b>NEW ORDERS</b>											
Total.....	138	60	97	95	98	91	91	92	60	60	57
Textiles.....	179	66	85	77	92	91	82	93	67	56	62
Iron and steel.....	158	71	117	116	118	125	135	128	86	86	75
Lumber.....	141	44	101	100	100	75	83	83	50	53	50
Paper and printing.....	128	85	104	101	108	108	112	119	108	106	103
Stone and clay products.....	129	68	104	97	97	94	90	85	75	60	59
<b>STOCKS</b>											
Grand total.....	158	82	109	106	108	120	122	128	125	126	133
Total manufactured goods.....	128	88	118	119	116	122	121	116	125	125	120
Foodstuffs.....	144	79	118	126	117	125	144	136	118	127	119
Textiles.....	139	78	134	129	125	124	125	122	124	117	114
Iron and steel.....	158	78	140	133	131	145	139	128	148	153	143
Nonferrous metals.....	209	74	120	119	121	118	122	127	200	205	209
Lumber.....	125	78	94	104	105	99	100	103	103	107	107
Stone, clay, etc.....	198	62	160	157	148	178	162	140	192	171	160
Leather.....	123	66	71	71	72	71	71	70	81	81	79
Rubber.....	199	77	162	145	134	199	175	155	156	137	126
Paper.....	156	46	153	155	156	94	90	98	113	112	117
Chemicals and oils.....	141	84	103	96	96	117	111	107	128	121	117
Total raw materials.....	186	68	202	96	102	120	123	136	125	126	141
Foodstuffs.....	230	68	126	123	136	167	188	212	153	163	184
Textiles.....	204	43	81	67	66	80	64	71	112	105	118
Metals.....	136	54	74	87	92	94	96	105	112	119	137
Chemicals and oils.....	146	72	93	91	93	96	94	97	94	93	100
<b>UNFILLED ORDERS</b>											
Total.....	157	67	75	77	75	83	82	76	76	75	70
Textiles.....	154	34	67	68	66	74	70	67	41	36	34
Iron and steel.....	159	63	75	75	75	85	84	76	78	78	71
Transportation equipment.....	204	35	69	68	60	78	73	79	129	119	118
Lumber.....	142	52	84	91	88	95	97	86	79	81	77
<b>RETAIL TRADE</b>											
Mail-order houses (2 houses).....	275	68	137	123	141	176	163	184	166	149	155
<b>CHAIN STORES:</b>											
Ten-cent.....	308	62	139	128	136	153	146	161	141	138	146
Restaurant.....	116	87	96	93	99	104	105	112	100	98	101
<b>DEPARTMENT STORES:</b>											
Sales.....	189	71	104	78	85	106	80	89	95	72	79
Stocks.....	117	83	96	93	97	95	92	96	93	87	87
<b>COST OF LIVING</b>											
<b>National Industrial Conference Board Indexes</b>											
(Relative to July, 1914)											
All items weighted.....	172	152	161	161	161	160	162	163	155	152	152
Food (Department of Labor).....	167	141	153	153	154	155	159	160	148	144	144
Shelter.....	186	153	162	161	161	159	159	159	156	154	153
Clothing.....	177	152	171	174	173	167	166	169	157	155	152
Fuel and light (combined).....	179	156	158	158	159	157	157	158	156	156	156
Fuel.....	208	174	176	177	178	175	176	177	174	175	176
Light.....	123	118	122	121	121	120	120	120	121	119	119
Sundries.....	176	165	171	171	171	168	169	169	167	166	165

\* 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 monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930		
			June	July	August	June	July	August	June	July	August
<b>EMPLOYMENT</b>											
(Relative to 1923-1925 monthly average as 100)											
Number employed, by industries:											
Total, all classes.....	106	84	96	96	98	101	101	102	88	85	84
Iron and steel.....	108	84	96	94	96	101	100	101	90	86	84
Machinery.....	122	88	98	98	100	121	122	119	100	95	91
Textiles.....	111	77	92	88	89	96	92	94	84	77	78
Food products.....	109	93	98	98	97	99	100	100	96	95	93
Paper and printing.....	107	96	101	101	101	103	104	104	102	101	100
Lumber and products.....	104	67	88	88	90	90	91	92	72	68	67
Transportation equipment—											
Group.....	110	72	92	92	94	98	96	96	80	75	72
Automobiles.....	131	76	111	111	118	121	118	115	89	81	76
Leather and products.....	112	85	90	94	96	89	95	98	85	87	87
Cement, clay, and glass.....	107	75	96	95	97	94	92	94	80	76	75
Nonferrous metals.....	113	75	96	95	96	103	101	100	80	78	75
Chemicals—											
Group.....	119	90	101	100	101	108	109	111	102	101	102
Petroleum refining.....	125	95	102	103	104	116	120	122	114	114	112
Rubber products.....	117	81	105	110	112	115	114	112	88	83	81
Tobacco products.....	109	84	93	88	95	91	91	93	89	88	84
Amount of pay roll, by industries:											
Total, all classes.....	112	81	101	98	103	109	105	109	90	82	81
Iron and steel.....	114	77	100	94	100	110	104	109	91	79	78
Machinery.....	132	83	106	103	105	132	128	128	103	91	86
Textiles.....	111	69	91	86	90	98	90	97	78	69	73
Food products.....	109	94	103	103	102	106	106	105	102	100	98
Paper and printing.....	118	92	109	107	108	90	111	113	112	107	107
Lumber and products.....	107	62	91	88	92	93	94	95	71	63	62
Transportation equipment—											
Group.....	117	72	99	95	100	108	97	107	84	72	66
Automobiles.....	152	58	118	115	128	131	110	128	89	72	58
Leather and products.....	116	79	87	94	100	90	98	105	74	79	80
Cement, clay, and glass.....	108	66	94	91	95	93	86	91	76	66	66
Nonferrous metals.....	128	76	105	101	107	117	113	113	85	76	72
Chemicals—											
Group.....	118	90	103	103	104	111	111	113	105	101	101
Petroleum refining.....	129	90	104	107	109	120	123	125	122	118	117
Rubber products.....	150	78	113	115	118	121	115	111	88	81	78
Tobacco products.....	111	76	90	85	89	89	88	91	84	82	77
<b>WHOLESALE PRICES</b>											
Department of Labor Indexes											
(Relative to 1926 monthly average as 100)											
All commodities.....	105	84	98	98	99	96	98	98	87	- 84	84
Farm products.....	114	83	107	107	107	103	108	107	89	83	85
Food, etc.....	107	86	100	102	104	99	103	103	91	86	87
Hides and leather products.....	127	98	124	124	121	108	109	110	102	101	99
Textile products.....	114	78	96	97	96	93	93	93	82	80	78
Fuel and lighting.....	112	75	82	83	85	83	82	81	76	75	75
Metals and metal products.....	113	93	99	99	100	105	105	104	95	94	93
Building materials.....	116	87	94	94	95	96	97	97	90	89	87
Chemicals.....	104	87	95	95	95	93	93	94	89	88	87
House-furnishing goods.....	111	96	97	97	97	97	97	97	96	96	96
Miscellaneous.....	127	71	82	81	79	80	81	81	75	72	71
Classified by condition of manufacture:											
Semimanufactured articles.....	128	78	98	98	97	94	96	96	82	80	78
Finished products.....	103	86	97	98	99	97	98	97	89	87	86
Raw materials.....	109	81	99	100	99	97	99	99	85	81	82
All commodities except farm and food products.....	111	83	93	93	94	93	93	93	86	84	83
<b>Commercial Indexes</b>											
(Relative to 1926 monthly average as 100)											
Dun's.....	106	85	104	103	103	100	102	102	91	90	91
Bradstreet's.....	112	81	102	102	103	97	98	198	82	81	81

## INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930		
			June	July	August	June	July	August	June	July	August
<b>PRICE INDEX NUMBERS</b>											
<b>FARM PRICES</b>											
(Relative to 1909-1914 average as 100)											
All groups.....	152	108	145	145	139	135	140	143	123	111	108
Grains.....	178	92	152	142	120	111	122	129	106	92	101
Fruits and vegetables.....	253	108	168	156	137	120	136	160	193	173	149
Meat animals.....	167	98	150	157	162	163	167	165	141	127	119
Dairy and poultry.....	166	120	132	134	136	137	137	141	114	111	115
Cotton and cottonseed.....	252	81	162	170	153	146	145	146	115	99	94
Unclassified.....	108	70	87	88	87	85	85	86	79	75	70

SALES OF THE GREAT ATLANTIC & PACIFIC TEA CO.<sup>1</sup>

YEAR AND MONTH	SALES (Thousands of dollars)			TONNAGE SALES		YEAR AND MONTH	SALES (Thousands of dollars)			TONNAGE SALES	
	Total	Number of weeks	Weekly average	Total	Weekly average		Total	Number of weeks	Weekly average	Total	Weekly average
<b>1928</b>						<b>1929</b>					
September.....	\$69,336	4	\$17,334	309,451	77,363	September.....	\$75,246	4	\$18,811	336,309	84,077
October.....	93,429	5	18,686	419,079	83,816	October.....	105,995	5	21,199	472,644	94,529
November.....	73,844	4	18,461	358,704	84,676	November.....	83,714	4	20,928	351,106	95,276
December.....	74,911	4	18,728	345,595	86,399	December.....	87,260	4	21,815	407,339	101,835
<b>1929</b>						<b>1930</b>					
January.....	91,983	5	18,397	425,590	85,118	January.....	104,271	5	20,854	492,425	98,485
February.....	85,846	4	21,462	396,225	99,056	February.....	86,122	4	21,530	400,568	100,146
March.....	77,712	4	19,428	363,786	90,947	March.....	83,976	4	20,994	395,331	98,834
April.....	77,324	4	19,331	359,129	89,782	April.....	86,138	4	21,534	404,319	101,080
May.....	97,319	5	19,464	451,680	90,336	May.....	104,671	5	20,934	503,976	100,795
June.....	76,653	4	19,163	353,289	88,322	June.....	82,882	4	20,721	407,085	101,771
July.....	93,671	5	18,734	427,431	85,486	July.....	96,724	5	19,345	488,682	97,736
August.....	75,191	4	18,798	335,628	83,907	August.....	78,363	4	19,591	389,113	97,278

<sup>1</sup> Compiled by the *Atlantic & Pacific Tea Co.*, and represent the sales of identical stores for the periods shown.

PLASTIC PAINTS, COLD WATER PAINTS, AND CALCIMINES<sup>1</sup>

Month, 1930	PAINTS AND CALCIMINES				PLASTIC PAINTS			
	Cold-water paint		Calcimines		In paste form		In dry powder form	
	Pounds	Value	Pounds	Value	Pounds	Value	Pounds	Value
January.....	1,081,791	\$58,646	3,603,984	\$160,012	283,750	\$39,166	578,573	\$62,915
February.....	1,034,568	59,698	3,920,903	172,350	372,284	52,784	649,825	74,481
March.....	1,240,891	61,172	4,386,944	188,396	432,437	58,694	856,752	96,046
April.....	1,627,771	85,286	4,674,330	203,612	419,616	57,285	796,944	89,446
May.....	1,446,182	82,251	4,755,317	215,842	331,830	46,067	656,313	70,738
June.....	1,456,385	82,654	4,042,721	175,960	284,825	40,515	496,007	57,873
July.....	1,135,120	63,017	3,751,129	163,448	280,191	36,275	634,575	71,036
August.....	1,363,774	79,276	3,630,966	154,529	289,475	37,201	582,719	67,997
Total (8 mos.).....	10,386,482	572,000	32,766,294	1,434,149	2,694,408	367,987	5,251,708	590,532

<sup>1</sup> Compiled by the *Bureau of the Census, Department of Commerce*, and represent the sales of plastic paints, cold-water paints, and calcimines, as reported by 28 leading manufacturers.

MOVEMENT OF GRAIN PRICES<sup>1</sup>

Dollars per bushel

MONTH	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
	<b>Wheat No. 1, Northern Spring, Minneapolis</b>																				
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	1.27
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	1.25
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	1.12
April	1.11	.96	1.10	.88	.91	1.58	1.22	2.38	2.17	2.56	3.06	1.53	1.58	1.30	1.21	1.50	1.64	1.38	1.53	1.20	1.11
May	1.10	.99	1.16	.91	.94	1.58	1.22	2.66	2.17	2.59	3.09	1.57	1.61	1.28	1.22	1.67	1.62	1.47	1.57	1.11	1.07
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	1.00
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	.92
August	1.13	1.05	.98	.88	1.10	1.18	1.64	2.47	2.23	2.59	2.56	1.48	1.11	1.18	1.31	1.64	1.49	1.43	1.19	1.35	.91
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	1.60	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	1.34	1.16	1.31	-----
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	1.28	-----
December	1.03	1.02	.82	.86	1.20	1.14	1.74	2.17	2.22	3.07	1.66	1.31	1.25	1.16	1.66	1.69	1.46	1.32	1.15	1.31	-----
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	1.27	-----
<b>Wheat No. 2, Red Winter, St. Louis</b>																					
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	1.34
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	1.48	2.02	1.85	1.35	1.56	1.40	1.13
March	1.23	.93	1.04	1.08	.98	1.50	1.17	2.05	2.15	2.58	2.58	1.66	1.42	1.36	1.14	1.86	1.70	1.30	1.60	1.35	1.18
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	1.17
May	1.16	.94	1.21	1.04	.96	1.50	1.20	3.04	2.15	2.60	2.99	1.58	1.35	1.33	1.12	1.86	1.62	1.42	1.96	1.17	1.14
June	1.02	.88	1.11	.99	.84	1.19	1.10	2.65	2.15	2.41	2.89	1.60	1.18	1.23	1.16	1.89	1.47	1.50	1.79	1.21	1.05
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	1.69	1.42	1.41	1.47	1.39	.85
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	.89
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	1.00	1.09	.93	1.10	1.21	1.73	2.15	2.22	2.24	2.26	1.26	1.23	1.16	1.56	1.70	1.40	1.45	1.44	1.32	-----
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	1.29	-----
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	1.35	-----
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	1.32	-----
<b>Wheat No. 2, Hard Winter, Kansas City</b>																					
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	1.19
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	1.13
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	1.02
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	1.01
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	.99
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	1.53	1.44	1.47	1.05	.89
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	1.35	1.20	1.25	.80
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	.81
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	1.22	-----
November	.91	1.00	.83	.83	1.03	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	1.19	-----
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	1.21	-----
Monthly average	1.03	.93	.97	.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	1.17	-----
<b>Corn No. 3, Yellow, Chicago</b>																					
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	.85
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	.82
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	.80
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	.82
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	.79
June	.59	.55	.75	.60	.72	.74	.74	1.70	1.62	1.78	1.89	.63	.61	.84	.82	1.13	.70	.99	1.03	.91	.79
July	.62	.63	.68	.62	.71	.78	.81	1.99	1.70	1.92	1.58	.60	.64	.88	1.09	1.08	.78	1.02	1.06	.99	.82
August	.64	.65	.79	.74	.82	.81	.85	2.06	1.72	1.95	1.58	.56	.62	.88	1.17	1.02	.80	1.09	1.02	1.01	.99
September	.58	.67	.74	.75	.79	.74	.86	2.10	1.58	1.55	1.31	.53	.64	.89	1.14	.91	.79	.97	1.00	1.01	-----
October	.50	.73	.65	.70	.73	.65	.96	2.03	1.41	1.41	.91	.45	.69	1.04	1.10	.82	.77	.84	.96	.95	-----
November	.49	.68	.52	.72	.67	.63	.98	2.21	1.33	1.46	.77	.47	.71	.82	1.11	.83	.71	.84	.84	.88	-----
December	.45	.61	.46	.66	.64	.69	.92	1.77	1.45	1.47	.74	.47	.73	.71	1.29	.76	.75	.86	.83	.88	-----
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	.93	-----
<b>Corn No. 3, Yellow, Kansas City</b>																					
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	.82
February	.61	.42	.65	.47	.63	.73	.71	.99	1.74	1.34	1.45	.58	.53	.71	.73	1.15	.70	.72	.86	.87	.78
March	.59	.44	.71	.50	.66	.71	.68	1.16	1.66	1.48	1.56	.57	.54	.73	.72	1.11	.67	.73	.91	.88	.76
April	.55	.47	.81	.66	.69	.75	.72	1.41	1.59	1.66	1.71	.52	.57	.82	.76	1.01	.69	.73	.97	.85	.80
May	.62	.52	.80	.58	.73	.75	.72	1.58	1.61	1.74	1.91	.56	.59	.85	.75	1.10	.71	.91	1.05	.85	.78
June	.60	.55	.75	.59	.71	.74	.72	1.68	1.54	1.79	1.82	.56	.59	.85	.86	1.08	.72	.97	1.02	.88	.80
July	.62	.67	.75	.62	.70	.76	.78	2.01	1.63	1.92	1.58	.51	.60	.84	1.04	1.08	.81	1.03	1.00	.93	.80
August	.62	.62	.76	.75	.81	.76	.82	1.78	1.76	1.93	1.57	.46	.58	.83	1.09	1.02	.83	1.05	.94	.99	.92
September	.55	.66	.71	.75	.78	.70	.84	1.96	1.66	1.64	1.28	.49	.59	.86	1.10	.91	.80	.96	.94	.99	-----
October	.49	.71	.64	.72	.70	.59	.91	1.91	1.45	1.42	.88	.38	.64	.95	1.08	.82	.77	.83	.86	.92	-----
November	.47	.67	.45	.72	.64	.62	.95	2.02	1.47	1.51	.67	.43	.73	.78	1.07	.75	.				

MOVEMENT OF GRAIN PRICES<sup>1</sup>—Continued

Dollars per bushel

MONTH	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
<b>Corn No. 3, white, Chicago</b>																					
January											1.48	0.65	0.48	0.70	0.78	1.22	0.79	0.76	0.88	0.95	0.86
February											1.48	.63	.54	.72	.78	1.19	.74	.72	.94	.95	.84
March											1.58	.62	.58	.73	.77	1.15	.72	.69	.97	.94	.81
April											1.70	.57	.58	.79	.77	1.04	.72	.71	1.04	.91	.84
May											2.02	.60	.62	.81	.77	1.14	.72	.85	1.06	.89	.80
June											1.93	.62	.61	.83	.82	1.12	.70	.99	1.03	.94	.81
July											1.54	.61	.64	.86	1.09	1.05	.81	1.01	1.06	1.00	.84
August											1.57	.56	.62	.87	1.17	1.01	.80	1.09	1.02	1.01	.99
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	.96	-----
November											.73	.46	.71	.81	1.10	.82	.71	.84	.84	.87	-----
December											.71	.47	.73	.71	1.21	.76	.75	.88	.83	.88	-----
Monthly average											1.41	.57	.62	.81	.96	1.02	.75	.86	.97	.94	-----
<b>Oats No. 3, white, Chicago</b>																					
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	0.45
February	.47	.31	.52	.33	.39	.58	.45	.56	.89	.58	.86	.42	.36	.44	.48	.53	.41	.43	.56	.50	.44
March	.44	.31	.53	.32	.39	.57	.42	.61	.93	.63	.93	.42	.36	.45	.47	.48	.40	.44	.59	.48	.43
April	.42	.32	.57	.35	.39	.57	.44	.69	.89	.70	1.01	.36	.38	.46	.48	.42	.42	.45	.63	.48	.43
May	.40	.34	.55	.38	.40	.54	.43	.70	.77	.69	1.09	.39	.38	.45	.48	.45	.41	.50	.67	.45	.41
June	.38	.39	.53	.40	.40	.49	.39	.67	.77	.70	1.13	.37	.37	.43	.51	.49	.40	.49	.68	.45	.38
July	.41	.44	.49	.40	.37	.53	.41	.78	.77	.78	.91	.34	.36	.40	.54	.44	.42	.45	.56	.47	.35
August	.35	.41	.33	.42	.42	.41	.44	.61	.70	.73	.70	.32	.32	.38	.50	.41	.38	.47	.38	.43	.39
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	.47	-----
November	.32	.48	.32	.40	.48	.36	.55	.65	.72	.73	.51	.33	.43	.43	.50	.40	.42	.49	.44	.45	-----
December	.32	.47	.33	.40	.49	.42	.53	.77	.72	.82	.48	.34	.44	.44	.58	.42	.46	.54	.46	.45	-----
Monthly average	.39	.39	.44	.38	.42	.48	.46	.65	.78	.70	.80	.37	.38	.43	.50	.45	.41	.47	.53	.47	-----
<b>Barley No. 2, Minneapolis</b>																					
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	0.58
February	.60	.74	1.00	.48	.50	.75	.66	1.17	1.88	.87	1.37	.75	.56	.60	.68	.94	.62	.71	.87	.70	.57
March	.58	.81	.95	.46	.48	.70	.65	1.21	2.12	.93	1.51	.67	.58	.59	.70	.88	.62	.72	.90	.67	.55
April	.54	.88	1.01	.46	.47	.70	.68	1.36	1.82	1.09	1.60	1.61	.61	.64	.75	.81	.63	.77	.92	.65	.56
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	.55
June	.53	.77	.76	.52	.47	.66	.68	1.38	1.23	1.12	1.49	.87	.56	.58	.73	.84	.64	.88	.94	.60	.49
July	.60	.87	.60	.48	.45	.68	.69	1.49	1.18	1.21	1.16	.62	.56	.59	.76	.84	.67	.81	.85	.69	.47
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	.52
September	.63	.94	.49	.61	.58	.48	.81	1.33	.95	1.27	.99	.54	.54	.81	.81	.66	.62	.63	.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	.59	-----
November	.66	.98	.47	.53	.59	.56	1.11	1.27	.94	1.33	.82	.54	.60	.61	.81	.63	.64	.77	.62	.60	-----
December	.70	.91	.45	.50	.57	.61	1.07	1.49	.92	1.52	.74	.47	.61	.62	.87	.65	.67	.83	.62	.59	-----
Monthly average	.60	.86	.73	.51	.52	.64	.80	1.33	1.33	1.17	1.24	.59	.57	.60	.76	.78	.64	.77	.78	.63	-----
<b>Rye No. 2, Minneapolis</b>																					
January	0.77	0.79	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	0.91
February	.76	.78	.88	.57	.56	.24	.95	1.42	2.24	1.34	1.53	1.44	.95	.80	.66	1.54	.91	1.02	1.06	1.05	.78
March	.74	.84	.89	.56	.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	.66
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	.68
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	.65
June	.69	.87	.79	.56	.59	1.12	.94	2.37	1.85	1.45	2.14	1.26	.86	.64	.70	1.11	.89	1.11	1.23	.84	.57
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	1.07	.55
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	.60
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	.97	-----
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	.95	-----
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	.93	-----
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	.96	-----
<b>Flaxseed No. 1, Minneapolis</b>																					
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	3.08
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	3.05
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	2.92
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	2.92
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	2.50	2.34	2.46	2.45	2.68
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	2.71
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	2.32
August	2.47	2.34	1.86	1.47	1.64	1.67	2.15	3.46	4.39	5.87	3.28	2.01	2.59	2.34	2.44	2.44	2.18	2.22	2.05	2.79	2.60
September	2.66	2.47	1.76	1.45	1.51	1.70	2.11	3.38	4.69	4.92	3.23	2.03	2.28	2.38	2.26	2.19	2.33	2.21	2.09	3.23	-----
October	2.62	2.35	1.60	1.38	1.33	1.86	2.54	3.16	3.59	4.32	2.83	1.81	2.38	2.48	2.40	2.18	2.21	2.13	2.28	3.32	-----
November	2.61	2.04	1.35	1.35	1.45	1.99	2.78	3.29	3.77	4.83	2.27	1.81	2.48	2.42	2.68	2.16	2.22	2.13	2.35	3.24	-----
December	2.42	2.06	1.25	1.44	1.54	2.07	2.84	3.40	3.54	4.99	2.66	1.89	2.62	2.46	2.84	2.61	2.24	2.15	2.39	3.22	-----
Monthly average	2.36	2.38	1.89	1.36	1.54	1.85	2.26	3.16	3.92	4.53	3.79	1.86	2.48	2.74	2.49	2.74	2.34	2.22	2.18	-----	-----

<sup>1</sup> See footnote on p. 19 and also chart on p. 13 of this issue.



## PROSPECTIVE CAR LOADINGS, FOURTH QUARTER OF 1930

Commodity loadings by railroads in carload lots for the fourth quarter of 1930 are estimated by the regional advisory boards set up by the American Railway Association at somewhat more than 7 per cent below the corresponding period of 1929. These estimates are compiled from detailed reports of committees representing shippers of the various commodities as first described in the August, 1927, issue of the SURVEY OF CURRENT BUSINESS, page 20, and are comparable with similar data published currently since that time. The boundaries of the various economic districts set up by these boards are shown in the accompanying chart.

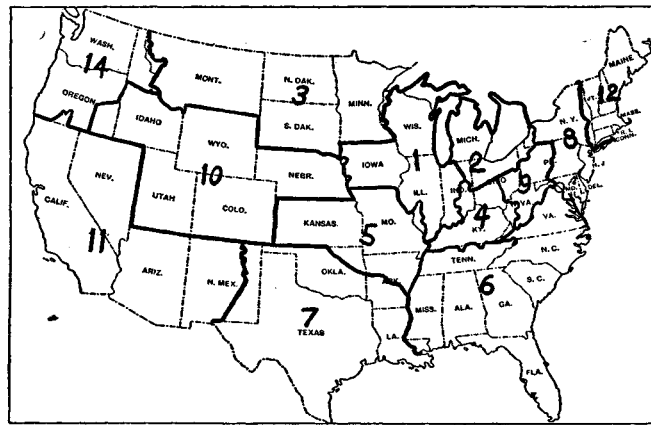
The estimated decline from a year ago is largely due to the decrease in the loadings of cotton, ore and concentrates, lumber and forest products, brick and clay products, agricultural implements, and automobiles. Large decreases are also anticipated in the loadings of citrus fruits, and machinery and boilers, each of these groups showing prospective declines of 10 per cent or more. Included among the principal increases are flour, meal, and other mill products, fresh fruits other than citrus, potatoes, fresh vegetables, petroleum and its products, sugar and sirup, and molasses.

Although declines were estimated for the country as a whole for the fourth quarter of this year, in comparison with a year ago material gains were estimated

over the loadings of a year ago in the loadings of automobiles in the Allegheny district, grain in the Great Lakes, trans-Missouri and northwest districts.

In the southeast district, comprising the States of Tennessee, Mississippi, Alabama, Florida, Georgia, and North and South Carolina, although as a whole showing a decline of 7 per cent from a year ago, many marked increases in loadings will occur. Among those that stand out are anticipated loadings of hay, cottonseed and cottonseed oil, live stock, fresh vegetables, gravel, and stone.

REGIONAL ADVISORY BOARD DISTRICTS



## PROSPECTIVE CAR LOADINGS, FOURTH QUARTER OF 1930

### COMPARED WITH ACTUAL LOADINGS, SAME QUARTER OF 1929

[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. (-)							
		Actual 1929		Estimated 1930		Actual 1929		Estimated 1930		Actual 1929		Estimated 1930								
		Actual 1929	Estimated 1930	Actual 1929		Estimated 1930	Actual 1929	Estimated 1930		Actual 1929	Estimated 1930									
ALL DISTRICTS												District No. 12 NEW ENGLAND			District No. 8 ATLANTIC STATES			District No. 9 ALLEGHENY		
1	Grain, all.....	315,939	312,751	-1.0	3,310	3,310	-----	4,479	4,372	-2.4	538	404	-24.9							
2	Flour, meal, and other mill products.....	245,937	255,393	+3.8	4,811	5,292	+10.0	12,899	14,163	+9.8	1,519	1,367	-10.0							
3	Hay, straw, and alfalfa.....	74,160	69,404	-6.4	1,231	1,231	-----	8,726	9,223	+5.7	888	533	-40.0							
4	Cotton.....	166,902	135,621	-18.7	1,060	1,060	-----	-----	-----	-----	-----	-----	-----							
5	Cottonseed and products, except oil.....	94,490	92,522	-2.1	3	3	-----	-----	-----	-----	-----	-----	-----							
6	Citrus fruits.....	30,669	27,545	-10.2	97	97	-----	-----	-----	-----	-----	-----	-----							
7	Other fresh fruits.....	114,216	119,408	+4.5	4,347	4,347	-----	13,285	15,277	+15.0	4,426	4,426	-----							
8	Potatoes.....	73,569	74,595	+1.4	19,959	18,462	-7.5	9,243	10,352	+12.0	206	165	-19.9							
9	Other fresh vegetables.....	59,806	61,718	+3.2	359	359	-----	12,457	13,951	+12.0	96	72	-25.0							
10	Livestock.....	398,440	389,739	-2.2	1,162	1,046	-10.0	-----	-----	-----	1,541	1,541	-----							
11	Poultry and dairy products.....	35,949	35,123	-2.3	132	132	-----	1,470	1,397	-5.0	-----	-----	-----							
12	Coal and coke.....	2,790,470	2,606,386	-6.6	26,729	29,402	+10.0	421,733	460,994	+9.3	646,434	598,598	-7.4							
13	Ore and concentrates.....	428,144	341,725	-20.2	335	335	-----	23,915	21,261	-11.1	-----	-----	-----							
14	Gravel, sand, and stone.....	667,019	602,673	-9.6	9,694	9,694	-----	73,044	75,965	+4.0	51,887	49,760	-4.1							
15	Salt.....	31,308	29,511	-5.7	38	38	-----	8,531	7,422	-13.0	-----	-----	-----							
16	Lumber and forest products.....	801,455	675,672	-15.7	28,565	25,137	-12.0	30,619	30,619	-----	17,435	13,076	-25.0							
17	Petroleum and petroleum products.....	601,631	613,073	+1.9	27,121	31,189	+15.0	70,421	74,646	+6.0	25,378	25,930	+0.2							
18	Sugar, sirup, and molasses.....	51,374	51,548	+0.3	2,052	1,796	-12.5	10,159	11,530	+13.5	-----	-----	-----							
19	Iron and steel.....	460,805	433,883	-5.8	6,214	5,593	-10.0	77,485	77,485	-----	205,161	197,160	-3.9							
20	Machinery and boilers.....	55,146	46,944	-14.9	5,179	3,625	-30.0	13,975	11,879	-15.0	5,270	5,017	-4.8							
21	Cement.....	159,949	153,359	-4.1	3,778	4,042	+7.0	48,140	43,326	-10.0	7,821	7,516	-3.9							
22	Brick and clay products.....	134,093	113,511	-15.3	2,697	1,888	-30.0	11,073	9,413	-15.0	39,377	32,289	-18.0							
23	Lime and plaster.....	45,570	42,061	-7.7	2,643	2,379	-10.0	8,250	8,423	+2.1	3,175	2,673	-15.8							
24	Agricultural implements and vehicles, other than automobiles.....	21,611	17,859	-17.4	148	148	-----	-----	-----	-----	48	40	-16.7							
25	Automobiles, trucks, and parts.....	143,718	112,133	-22.0	1,160	986	-15.0	5,560	4,954	-10.9	826	1,306	+58.1							
26	Fertilizers, all kinds.....	62,069	60,074	-3.2	2,799	2,799	-----	6,824	6,613	-3.1	4,586	3,210	-30.0							
27	Paper, paper board, and prepared roofing.....	96,808	91,230	-5.8	21,333	20,514	-3.8	19,644	18,073	-8.0	4,815	4,507	-6.4							
28	Chemicals and explosives.....	30,364	28,121	-7.4	522	471	-9.8	8,446	8,261	-2.2	6,387	5,276	-17.4							
29	Canned goods.....	64,311	62,120	-3.3	2,380	2,390	-----	15,940	14,346	-10.0	1,398	1,309	-6.4							
	Total, all commodities listed.....	8,255,912	7,655,792	-7.3	179,868	177,765	-1.2	916,318	953,945	+4.1	1,029,712	956,175	-7.1							

<sup>1</sup> All canned-food products, including catsup, jams, jellies, olives, pickles, preserves, etc.

PROSPECTIVE CAR LOADINGS, FOURTH QUARTER OF 1930—Continued

COMPARED WITH ACTUAL LOADINGS, SAME QUARTER OF 1929—Continued

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

Item No.	Commodity Groups	District No. 2 GREAT LAKES			District No. 6 SOUTHEAST			District No. 4 OHIO VALLEY			District No. 1 MID-WEST			District No. 3 NORTHWEST		
		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. (-)	Number of cars		Per cent inc. (+) or dec. (-)
		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930	
1	Grain, all.....	16,827	28,000	+66.4	6,613	6,282	-5.0	11,298	3,955	-65.0	71,965	68,367	-5.0	66,414	66,000	-0.6
2	Flour, meal, and other mill products.....	38,632	42,000	+8.7	18,253	17,340	-5.0	9,686	4,843	-50.0	31,820	33,000	+3.7	34,112	39,250	+15.1
3	Hay, straw, and alfalfa.....	9,147	9,300	+1.7	3,103	3,413	+10.0	4,867	1,704	-65.0	9,334	7,000	-25.0	3,675	3,700	+0.7
4	Cotton.....				73,374	58,699	-20.0	2,682	2,682							
5	Cottonseed and products, except oil.....				51,920	59,708	+15.0	1,635	1,635							
6	Citrus fruits.....				14,451	13,006	-10.0	15	15							
7	Other fresh fruits.....	5,743	4,500	-21.6	8,958	6,271	-30.0	1,325	1,000	-20.0	3,452	2,762	-20.0	567	567	
8	Potatoes.....	1,284	1,284		606	485	-20.0	245	122	-50.0	5,176	4,917	-5.0	12,502	11,000	-12.0
9	Other fresh vegetables.....	3,926	3,800	-3.2	3,797	4,177	+10.0	723	326	-54.9	6,071	5,889	-3.0	2,710	2,710	
10	Livestock.....	11,925	10,800	-9.4	13,454	14,799	+10.0	17,348	13,011	-25.0	107,241	105,200	-1.9	64,031	65,311	+2.0
11	Poultry and dairy products.....				1,053	1,053		1,487	1,190	-20.0	12,341	12,341		5,668	5,442	-4.0
12	Coal and coke.....	13,509	15,500	+6.1	116,408	98,947	-15.0	733,627	660,265	-10.0	500,000	509,000	+9.0	58,855	52,970	-10.0
13	Ore and concentrates.....	104,970	82,000	-21.9	11,831	10,648	-10.0	856	856		54,239	45,500	-16.0	164,226	127,500	-22.4
14	Gravel, sand, and stone.....	73,448	49,211	-33.0	79,553	87,508	+10.0	62,249	56,025	-10.0	117,957	82,570	-30.0	9,219	8,758	-5.0
15	Salt.....	9,434	8,935	-5.3	196	199		779	779		35	350				
16	Lumber and forest products.....	7,942	6,538	-17.7	267,671	237,156	-11.4	21,886	17,501	-20.0	66,743	46,920	-29.7	22,223	18,000	-16.3
17	Petroleum and petroleum products.....	23,422	23,400		56,434	58,127	+3.0	18,282	16,271	-11.0	57,356	63,100	+10.0	2,952	2,657	-10.0
18	Sugar, sirup, and molasses.....	2,072	2,000	-3.5	6,558	6,558		759	759		5,706	5,278	-7.5	1,668	1,800	+7.9
19	Iron and steel.....	49,464	44,464	-10.1	25,600	20,500	-20.0	20,270	21,283	+5.0	57,361	48,759	-15.0	2,340	2,575	+10.0
20	Machinery and boilers.....	8,125	7,053	-13.2	1,870	2,001	+7.0	7,099	6,390	-10.0	10,109	8,087	-20.0	747	600	-19.7
21	Cement.....	9,303	8,400	-9.7	15,485	15,650	+3.0	9,494	8,830	-7.0	18,096	16,581	-8.4	3,167	3,167	
22	Brick and clay products.....	7,843	6,493	-17.2	16,172	13,746	-15.0	12,487	11,239	-10.0	22,404	18,371	-18.0	1,772	1,330	-24.9
23	Lime and plaster.....	9,934	9,100	-8.4	5,533	4,998	-10.0	1,942	1,942		6,041	4,833	-20.0	465	385	-17.2
24	Agricultural implements and vehicles, other than automobiles.....	1,178	953	-19.1	876	876		1,194	1,153	-2.9	15,551	12,440	-20.0	861	861	
25	Automobiles, trucks, and parts.....	85,105	64,954	-23.7	6,675	6,675		7,193	5,395	-25.0	16,095	13,680	-15.0	1,572	1,400	-10.9
26	Fertilizers, all kinds.....	2,046	2,046		30,898	30,898		2,389	2,318	-3.0	5,643	5,300	-6.1	720	720	
27	Paper, paper board, and prepared roofing.....	10,587	10,243	-3.2	7,116	7,472	+5.0	9,148	8,508	-7.0	13,001	10,609	-22.0	2,851	3,455	+21.2
28	Chemicals and explosives.....				3,815	3,815		1,374	1,374		5,161	4,129	-20.0	178	178	
29	Canned goods <sup>1</sup> .....	4,676	4,676		2,586	2,327	-10.0	5,379	4,035	-25.0	14,019	14,720	+5.0	1,664	1,550	-6.9
	Total, all commodities listed.....	513,545	445,650	-13.2	850,899	793,621	-6.7	567,718	355,472	-37.3	1,293,842	1,150,363	-11.1	465,159	422,486	-9.2

Item No.	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 NORTHWEST		
		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. (-)	Number of cars		Per cent inc. (+) or dec. (-)
		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930		Actual 1929	Estimated 1930	
1	Grain, all.....	43,265	45,000	+4.0	33,541	33,541		44,158	39,095	-10.3	4,463	4,620	+3.5	9,068	9,295	+2.5
2	Flour, meal, and other mill products.....	47,948	50,681	+5.7	19,769	20,757	+5.0	13,100	12,900	-1.5	7,375	7,680	+3.9	5,993	6,120	+2.1
3	Hay, straw, and alfalfa.....	9,246	9,250	+0.0	4,459	4,459		9,589	9,730	+1.5	4,945	4,800	-2.9	4,950	5,061	+2.2
4	Cotton.....				83,028	66,422	-20.0				6,758	6,758				
5	Cottonseed and products, except oil.....				39,024	29,268	-25.0				1,908	1,908				
6	Citrus fruit.....				1,427	1,427					14,679	13,000	-11.4			
7	Other fresh fruits.....	1,257	817	-35.0	2,564	2,564		10,523	12,400	+17.8	33,135	36,000	+8.6	24,634	28,417	+15.4
8	Potatoes.....	359	370	+3.0	422	422		17,461	20,550	+17.9	2,453	2,000	-6.0	3,653	3,836	+5.0
9	Other fresh vegetables.....	335	224	-33.1	1,155	1,178	+2.0				25,900	26,400	+1.7	2,217	2,132	-3.8
10	Livestock.....	55,318	55,000	-0.6	34,506	34,506		69,455	65,740	-5.3	18,004	18,004		3,855	4,181	+8.5
11	Poultry and dairy products.....	5,782	5,390	-6.8	2,648	2,648		3,791	3,800	+0.3	645	730	+13.2	924	1,000	+8.2
12	Coal and coke.....	59,331	59,147	-0.3	22,200	20,648	-7.0	107,344	82,015	-23.6	8,755	6,750	-22.9	12,543	11,550	-7.9
13	Ore and concentrates.....	7,856	5,583	-29.2	2,717	2,717		15,179	13,240	-12.8	36,136	27,100	-25.0	5,850	4,425	-24.5
14	Gravel, sand, and stone.....	64,772	64,772		57,975	52,175	-10.0	23,426	23,409	-0.1	40,816	40,816		2,982	2,010	-32.6
15	Salt.....	5,750	5,658	-1.7	5,483	5,483		741	650	-12.3						
16	Lumber and forest products.....	32,167	24,126	-25.6	74,581	65,980	-12.0	6,152	4,800	-22.0	46,226	44,000	-4.8	178,827	141,209	-21.0
17	Petroleum and petroleum products.....	57,821	59,556	+3.0	181,340	176,807	-2.5	22,415	22,400	-0.1	43,412	43,500	+0.2	14,767	15,400	+4.9
18	Sugar, sirup, and molasses.....	1,500	1,475	-1.7	7,411	7,043	-5.0	7,388	7,270	-1.6	5,996	6,000	+0.1	42	39	-7.1
19	Iron and steel.....	4,832	4,209	-13.1	4,570	4,570		1,787	1,725	-3.6	4,921	4,921		748	628	-16.0
20	Machinery and boilers.....	1,124	810	-27.9	855	855		268	210	-20.5				415	417	+0.5
21	Cement.....	15,633	17,337	+10.9	9,422	9,422		4,611	5,200	+12.8	12,040	10,000	-16.9	2,956	3,588	+21.4
22	Brick and clay products.....	8,600	6,844	-20.4	6,556	6,556		1,153	1,330	+15.4	3,193	3,300	+3.4	766	712	-7.0
23	Lime and plaster.....	3,580	3,400	-5.0	3,766	3,769							218	159	-27.1	
24	Agricultural implements and vehicles, other than automobiles.....	839	755	-10.0	348	209	-40.0	500	368	-26.4				68	50	-26.5
25	Automobiles, trucks, and parts.....	11,316	5,040	-55.6	4,024	3,219	-20.0	665	800	+20.3	2,843	3,000	+26.6	684	124	-81.9
26	Fertilizers, all kinds.....				5,520	5,520							674	680	+0.9	
27	Paper, paper board, and prepared roofing.....				2,310	2,310					2,575	2,575		2,828	2,964	+4.8
28	Chemicals and explosives.....				1,651	1,651		80	75	-6.2	2,468	2,000	-20.9	282	291	+3.2
29	Canned goods <sup>2</sup> .....				1,188	1,129	-5.0	1,771	2,105	+22.2	9,996	10,000	+0.1	3,304	3,563	+7.8
	Total, all commodities listed.....	438,731	425,425	-3.0	614,873	567,265	-7.7	361,597	330,422	-8.6	340,322	328,262	-3.5	283,328	248,941	-12.1

<sup>1</sup> Heavy decrease due to extended drought conditions.

<sup>2</sup> All canned food products, including catsups, jams, jellies, olives, pickles, preserves, etc.

## 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, 1930), in which monthly figures for 1929 and 1930 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.

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>TEXTILES</b>												
<b>Wool</b>												
Receipts at Boston:												
Total.....thous. of lbs.	57,665	76,915	51,672	47,795	56,981	40,476	55,841	54,907	29,720	275,044	244,921	255,217
Domestic.....thous. of lbs.	54,729	72,813	47,826	40,596	53,652	35,594	50,082	51,346	25,802	219,446	164,498	182,152
Foreign.....thous. of lbs.	2,936	4,602	3,846	7,199	3,329	4,882	5,759	3,561	3,918	55,598	80,423	73,065
ports:												
In condition imported.....thous. of lbs.	8,896	8,900	10,145	16,592	18,815	17,068	19,671	18,289	14,472	126,252	203,090	73,478
Grease equivalent.....thous. of lbs.	10,223	10,084	10,084	17,903	21,931	19,015	21,381	18,975	16,025	127,638	207,656	178,070
consumption by textile mills, grease equivalent.....thous. of lbs.	32,772	34,682	33,761	44,066	47,296	52,644	41,282	38,005	45,103	289,802	391,955	347,418
Machinery activity, hourly:												
Looms—												
Wide.....per ct. of hours active	53	48	44	65	62	60	59	53	55	-----	-----	-----
Narrow.....per ct. of hours active	48	42	43	61	60	62	58	49	48	-----	-----	-----
Carpet and rug.....per ct. of hours active	36	31	34	69	61	66	62	55	63	-----	-----	-----
Set of cards.....per ct. of hours active	60	51	48	85	80	80	81	78	77	-----	-----	-----
Combs.....per ct. of hours active	72	71	75	78	86	93	63	59	65	-----	-----	-----
Spinning spindles—												
Woolen.....per ct. of hours active	62	52	48	82	78	77	78	75	74	-----	-----	-----
Worsted.....per ct. of hours active	56	53	55	65	62	69	49	50	58	-----	-----	-----
Prices:												
Raw, territory, fine, scoured.....dolls. per lb.	.76	.76	.76	.97	.93	.93	1.18	1.17	1.14	-----	-----	-----
Raw, Ohio and Pa. fleeces, 1/4 blood, combing, grease.....dolls. per lb.	.31	.31	.31	.42	.42	.43	.55	.55	.54	-----	-----	-----
Worsted yarns.....dolls. per lb.	1.20	1.20	1.20	1.45	1.45	1.45	15.8	1.60	1.60	-----	-----	-----
Women's dress goods, French serge, 39 in.....dolls. per yd.	.90	.90	.90	.98	.98	.98	1.03	1.03	1.03	-----	-----	-----
Suiting, 13-oz.....dolls. per yd.	1.756	1.696	1.601	2.008	1.996	1.901	2.008	2.008	2.068	-----	-----	-----
<b>Cotton</b>												
Production, crop estimate.....thous. of bales	-----	-----	<sup>1</sup> 14,340	-----	-----	<sup>2</sup> 14,825	-----	-----	<sup>3</sup> 14,478	-----	-----	-----
Ginnings.....thous. of bales	-----	-----	<sup>4</sup> 3,730	-----	-----	<sup>5</sup> 3,352	-----	-----	<sup>6</sup> 2,501	-----	-----	-----
Receipts into sight.....thous. of bales	160	64	865	222	126	823	223	281	527	3,611	4,569	4,177
Imports, unmanufactured.....bales	9,551	4,161	5,901	26,113	21,369	24,793	14,587	18,473	25,258	243,734	331,070	217,805
Exports, unmanufactured (excl. linters).....bales	185,053	176,435	366,036	209,136	237,507	226,018	444,168	331,452	252,627	2,894,571	3,481,477	4,608,453
Consumption by textile mills.....bales	405,181	378,835	352,335	569,414	547,165	558,754	510,399	439,821	526,340	3,723,665	4,870,460	4,319,051
Stocks, domestic, end of month:												
Totals, mills and warehouses.....thous. of bales	4,462	4,061	4,476	2,664	2,037	<sup>7</sup> 2,183	2,808	2,201	1,970	-----	-----	-----
Mills.....thous. of bales	1,357	1,183	1,011	1,288	1,052	<sup>8</sup> 801	1,161	1,011	782	-----	-----	-----
Warehouses.....thous. of bales	3,105	2,878	3,465	1,376	985	<sup>9</sup> 1,382	1,647	1,190	1,188	-----	-----	-----
Stocks, world visible, end of month:												
Total.....thous. of bales	5,951	5,230	5,190	4,476	3,651	3,458	4,962	4,056	3,480	-----	-----	-----
American.....thous. of bales	3,352	2,917	3,159	2,302	1,693	1,629	2,910	2,165	1,790	-----	-----	-----
Machinery activity of spindles:												
Active spindles.....thousands	27,642	26,464	25,874	30,632	30,397	<sup>10</sup> 30,230	28,628	28,160	28,217	-----	-----	-----
Total activity.....millions of hours	5,779	5,297	5,134	8,160	7,757	8,130	7,252	6,251	7,424	-----	-----	-----
Activity per spindle.....hours	169	156	151	232	222	234	203	176	269	-----	-----	-----
Ratio to capacity.....per cent.	76.3	67.4	65.2	104.8	100.3	<sup>11</sup> 97.3	88.4	79.7	87.1	-----	-----	-----
Prices:												
To producer.....dolls. per lb.	.140	.119	.114	.179	.178	.180	.197	.210	.188	-----	-----	-----
In New York, middling.....dolls. per lb.	.145	.132	.121	.188	.186	.187	.214	.215	.193	-----	-----	-----
<b>Cotton Yarn</b>												
Carded sales yarn:												
Production.....thous. of lbs.	10,968	11,049	10,031	20,272	13,211	19,639	19,415	12,522	14,046	163,575	149,734	139,252
Stocks, end of month.....thous. of lbs.	13,559	13,742	13,633	8,785	8,601	8,185	12,539	12,350	11,574	-----	-----	-----
Unfilled orders, end of mo.....thous. of lbs.	27,132	26,469	29,103	32,650	32,472	32,175	25,435	24,619	27,044	-----	-----	-----
Prices:												
22/1 cones, Boston.....dolls. per lb.	.273	.262	.252	.348	.348	.349	.374	.384	.369	-----	-----	-----
40/lb. southern spinning.....dolls. per lb.	.461	.447	.435	.499	.505	.510	.489	.515	.514	-----	-----	-----
<b>Cotton Goods</b>												
Cotton textiles:												
Production.....thous. of yds.	198,539	165,850	218,815	285,928	234,439	307,538	287,818	221,826	302,470	1,967,787	2,386,826	2,403,461
New orders.....thous. of yds.	129,947	180,147	235,272	228,244	212,889	312,635	267,025	187,439	340,810	1,781,208	2,300,743	2,200,533
Shipments.....thous. of yds.	182,652	176,689	231,348	252,008	252,771	326,398	270,342	217,540	324,073	1,985,804	2,414,501	2,268,295
Stocks, end of month.....thous. of yds.	466,368	455,523	442,996	401,240	382,620	364,000	458,984	413,270	441,667	-----	-----	-----
Unfilled orders, end of mo.....thous. of yds.	219,040	222,498	226,422	358,748	368,858	355,095	302,328	272,227	288,964	-----	-----	-----
Cotton cloth:												
Imports.....thous. of sq. yds.	3,019	2,434	1,664	4,880	5,175	3,927	4,657	3,490	3,754	28,233	41,674	44,250
Exports.....thous. of sq. yds.	35,868	35,367	34,285	44,730	50,412	42,359	47,773	46,218	44,913	288,263	398,147	339,841
Fabric for tire manufacture:												
Consumption.....thous. of lbs.	15,034	13,399	13,223	20,359	18,126	15,803	19,646	20,947	21,854	116,336	162,554	151,743
Elastic webbing, shipments.....thous. of dolls.	1,169	1,088	1,127	1,473	1,357	1,399	1,384	1,211	1,399	10,362	12,573	10,901
Prices:												
Print cloth, 64 x 60.....dolls. per yd.	.056	.054	.050	.072	.073	.075	.077	.079	.075	-----	-----	-----
Sheeting, brown.....dolls. per yd.	.075	.070	.070	.084	.083	.086	.091	.092	.091	-----	-----	-----
Cotton goods (Fairchild).....rel. to 1911-1913	134	-----	-----	159	159	160	162	165	163	-----	-----	-----

<sup>1</sup> As of Sept. 1.<sup>2</sup> Final estimate for 1929.<sup>3</sup> Final estimate for 1928.<sup>4</sup> As of Sept. 16.<sup>5</sup> Revised.<sup>6</sup> Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>TEXTILES—Continued</b>												
<b>Cotton Finishing</b>												
White, dyed and printed (outside mills):												
Billings, finished goods...thous. of yds.	50,933	41,473	37,907	78,964	75,582	75,845	70,029	58,685	70,748	449,035	677,394	585,642
New orders, gray yardage...thous. of yds.	39,249	37,349	35,576	65,462	69,475	69,168	61,347	62,310	71,743	407,597	643,436	572,854
Shipments, finished goods...cases	32,986	28,559	28,843	45,674	44,809	45,238	42,357	40,500	46,283	282,265	419,697	365,276
Stocks, finished goods, end mo...cases	34,477	31,901	27,198	35,487	37,299	36,320	38,907	37,958	35,819			
Operating activity...per ct. of capacity	41	34	39	60	57	60	53	51	54			
Unfilled orders, end of month...days	2.0	1.9	2.1	5.1	4.9	4.9	3.6	3.8	4.4			
Printed only (mills and outside):												
Production...thous. of yds.	47,608	38,799	42,185	72,808	60,902	69,315	63,796	49,996	54,495	453,565	630,664	500,751
Stocks, end of month...thous. of yds.	82,856	82,297	70,395	78,492	87,397	87,918	79,416	75,977	74,682			
<b>Silk</b>												
Imports, raw...thous. of lbs.	4,622	5,712	8,244	7,596	7,858	9,620	6,174	5,832	9,320	48,340	62,566	57,701
Deliveries (consumption)...bales	29,396	39,948	41,734	46,504	51,624	59,704	46,051	40,931	50,821	351,883	414,263	380,538
Stocks, end of month:												
At warehouses...bales	28,450	35,565	44,978	47,425	42,596	48,408	41,127	38,866	50,975			
At manufacturing plants...bales	22,489	20,734	23,633	23,162	20,985	25,854	24,746	22,185	24,429			
Silk machinery activity:												
Broad looms...per cent of normal	79.0	79.2	73.1	100.7	99.7	101.9	97.4	93.0	89.8			
Narrow looms...per cent of normal	61.1	29.7	35.4	67.8	65.1	65.5	55.4	52.1	54.1			
Spinning spindles...per cent of normal	58.0	52.1	49.1	63.1	63.8	65.2	57.1	62.7	52.1			
Prices:												
Raw, Japanese, 13-15, N. Y...dolls. per lb.	3.251	2.955	2.955	4.925	4.876	5.073	4.851	4.851	4.851			
Silk goods, composite...dolls. per lb.	1.09	1.08	1.06	1.19	1.18	1.18	1.18	1.17	1.16			
<b>Rayon</b>												
Imports...thous. of lbs.	383	133	171	1,582	858	990	821	651	1,001	5,116	11,577	7,818
Price, 150 denier, A grade, N. Y...dolls. per lb.	1.15	.95	.95	1.23	1.15	1.15	1.50	1.50	1.50			
<b>Clothing</b>												
Men's and boy's garments cut:												
Suits...thous. of garments	1,792	1,811	1,878	2,560	2,645	2,616				16,537	21,171	
Separate trousers...thous. of garments	1,976	1,926	1,891	2,691	2,647	2,637				17,093	21,102	
Overcoats...thous. of garments	329	441	437	591	756	901				2,620	4,311	
Overalls:												
Cut...thous. of dozen garments	231	244	288	313	335	374	314	295	245	2,274	2,767	2,454
Net shipments...thous. of dozen garments	218	223	250	285	317	360	275	289	319	2,102	2,533	2,361
Unfilled orders, end of mo...thous. of dozen garments	67	60	74	120	185	113	151	161	153			
Hosiery:												
Production...thous. of dozen pairs	2,823	2,300	2,408	3,548	3,245	3,552	3,292	2,786	3,474	23,015	28,401	27,307
Net shipments...thous. of dozen pairs	2,822	2,356	2,766	3,571	3,234	3,673	3,386	2,963	3,735	21,986	27,696	26,733
Stocks, end of month...thous. of dozen pairs	10,418	9,015	8,647	8,434	8,420	8,356	9,011	8,916	8,656			
New orders...thous. of dozen pairs	2,941	2,229	2,633	3,516	2,974	3,586	3,573	2,836	3,207	21,723	28,245	26,325
Unfilled orders, end of month...thous. of dozen pairs	2,781	2,322	2,096	4,847	4,480	4,299	4,900	4,711	4,079			
Knit underwear:												
Production...thous. of dozen garments	1,023	869	830	1,187	1,091	1,152	1,113	881	1,098	8,324	9,397	8,760
Net shipments...thous. of dozen garments	875	902	1,031	1,126	1,064	1,382	998	942	1,306	7,778	8,961	8,833
Stocks, end of month...thous. of dozen garments	1,846	1,880	1,760	1,735	1,797	1,689	1,761	1,658	1,570			
New orders...thous. of dozen garments	911	781	916	1,157	891	1,149	894	852	1,236	7,850	9,489	8,486
Unfilled orders, end of month...thous. of dozen garments	1,634	1,524	1,403	2,293	2,103	1,870	2,053	1,947	1,896			
<b>Burlaps and Fibers</b>												
Imports:												
Burlaps...thous. of lbs.	43,235	57,553	39,038	51,216	41,526	74,698	56,920	58,541	47,766	439,393	450,270	462,325
Fibers (unmanufactured)...long tons	24,163	16,857	13,941	21,182	20,469	25,048	19,606	18,448	20,657	184,623	227,676	204,087
<b>Pyroxylin-Coated Textiles</b>												
Pyroxylin spread...thous. of lbs.	3,932	2,840	2,733	4,615	4,331	4,294	5,150	5,040	5,596	26,896	42,130	40,449
Shipments billed...thous. of linear yards	2,820	2,212	2,109	4,007	3,509	3,540	4,317	3,757	4,241	22,418	34,985	31,288
Unfilled orders, end of month...thous. of linear yards	2,323	1,779	1,179	2,910	2,805	2,468	4,227	4,182	3,853			
<b>Fur</b>												
Sales by dealers...thous. of dollars	5,455	4,348	5,425	8,546	8,135	11,335	13,840	12,215	12,110	50,244	99,105	97,755
<b>Buttons</b>												
Fresh-water pearl buttons:												
Production...ratio to capacity	41.1	23.1	25.7	50.3	40.9	45.5	46.8	29.7	44.5			
Stocks, end of month...thous. of gross	10,056	9,781	9,182	11,336	11,170	10,051	11,277	10,847	10,667			
Imports:												
Buttons—												
Product of Philip-pines...thous. of gross	107	63	69	51	50	52	102	55	72	540	418	704
All other...thous. of gross	18	12	14	13	16	9	9	15	2	337	270	88
Shells—												
Mother of pearl...thous. of pounds	271	476	844	390	832	632	265	398	392	4,172	4,432	3,560
All other...thous. of pounds	377	72	56	506	86	212	79	46	156	2,151	1,447	1,884
Tagua nuts...thous. of pounds	1,242	1,213	708	1,407	1,537	3,053	1,665	1,799	1,356	8,899	17,674	15,306

<sup>6</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>IRON AND STEEL</b>												
<b>Iron</b>												
Manganese ore, imports.....thous. of long tons..	31	16	8	51	48	33	13	21	26	201	246	130
Iron ore:												
Imports.....thous. of long tons..	292	251	178	244	301	298	189	183	226	2,122	2,068	1,644
Shipments from mines.....thous. of long tons..	8,651	8,587	8,252	10,174	10,671	10,807	8,926	8,980	9,243	32,576	43,717	32,518
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..	5,755	6,346	5,586	6,985	7,509	7,518	6,199	6,078	6,390	21,684	29,956	21,515
Other ports.....thous. of long tons..	2,697	2,515	2,492	2,805	3,127	3,284	2,613	2,655	2,819	9,804	12,129	9,610
Consumption.....thous. of long tons..	4,289	3,838	3,673	5,677	5,808	5,779	4,667	4,633	4,761	33,881	44,140	37,296
Stocks, end of month—												
Total.....thous. of long tons..	25,700	30,515	34,938	23,701	28,697	33,831	22,981	27,209	31,754			
At furnaces.....thous. of long tons..	21,087	25,493	29,397	19,619	24,245	28,720	17,913	21,824	26,036			
On Lake Erie docks.....thous. of long tons..	4,613	5,022	5,541	4,082	4,452	5,111	5,068	5,385	5,718			
Pig-iron production:												
Total, United States.....thous. of long tons..	2,934	2,640	2,524	3,717	3,785	3,756	3,082	3,072	3,137	23,425	29,182	24,730
Merchant furnaces.....thous. of long tons..	630	564	513	717	746	690	633	607	575	4,756	6,036	5,027
Canada.....thous. of long tons..	66	66	57	90	100	113	97	95	92	574	731	655
Furnaces in blast, end of month:												
Furnaces.....number.....	160	144	136	218	216	210	189	185	183			
Capacity.....long tons per day.....	92,590	83,645	80,620	122,590	121,965	119,130	100,855	98,445	98,730			
Ohio gray-iron foundries:												
Meltings—												
Actual.....long tons.....				21,214	19,508	18,670	19,382	19,967	12,632		170,092	127,809
Normal.....long tons.....				19,164	18,535	17,104	18,454	19,365	12,497		156,510	124,794
Ratio to normal.....per cent of normal.....				110.6	105.3	103.1	105.0	103.0	103.4			
Stocks, end of month.....per cent of normal.....				131	131	120	147	127	129			
Receipts.....per cent of normal.....				105	99	113	99	107	99			
Malleable castings:												
Production.....short tons.....	6 39,334	6 30,741	25,207	72,232	70,600	69,173	67,090	60,290	68,606	401,554	607,755	523,770
Operating activity per ct. of capacity.....	40.0	30.8	25.6	74.9	73.5	70.6	69.9	63.1	72.1			
Shipments.....short tons.....	6 43,933	6 32,548	31,954	72,346	69,618	69,824	66,737	60,084	66,962	407,876	602,670	512,274
New orders.....short tons.....	6 33,850	6 30,064	25,085	65,315	61,358	62,541	61,071	60,964	66,128	371,147	588,447	511,101
Wholesale prices:												
Foundry, No. 2, northern.....dolls. per long ton..	20.26	19.86	19.76	20.26	20.26	20.26	18.51	18.41	18.26			
Basic (valley furnace).....dolls. per long ton..	18.50	18.10	18.00	18.50	18.50	18.50	15.45	16.00	16.00			
Composite pig iron.....dolls. per long ton..	18.50	18.20	17.96	19.35	19.27	19.18	17.97	17.79	17.78			
<b>Cast-iron Boilers and Radiators</b>												
Round boilers:												
Production.....thous. of lbs..	7,103	4,703	4,603	10,578	8,997	12,189	12,094	10,581	12,881	65,614	89,144	100,249
Shipments.....thous. of lbs..	6,342	7,266	8,736	10,171	13,553	15,092	13,071	12,302	14,422	51,850	81,590	93,277
New orders.....thous. of lbs..	6,874	6,977	7,392	9,059	14,490	13,916	14,765	12,950	12,551	47,926	75,974	98,023
Stocks, end of month.....thous. of lbs..	79,605	76,865	72,967	89,437	84,027	81,162	89,728	87,993	86,141			
Square boilers:												
Production.....thous. of lbs..	14,493	11,376	10,066	16,119	11,598	19,014	31,238	19,541	38,693	135,886	179,153	243,611
Shipments.....thous. of lbs..	14,384	18,266	24,178	17,458	22,927	28,757	25,165	28,247	36,212	110,394	139,985	179,544
New orders.....thous. of lbs..	16,044	17,496	22,271	18,421	26,039	27,242	29,779	32,164	31,809	110,154	141,173	193,057
Stocks, end of month.....thous. of lbs..	177,376	170,941	155,184	179,900	169,044	159,661	188,078	179,539	182,367			
Radiators:												
Production.....thous. sq. ft. heating surface..	5,873	4,997	5,366	9,364	6,756	10,365	13,363	11,388	15,914	58,766	89,827	116,223
Shipments.....thous. sq. ft. heating surface..	6,154	7,447	9,520	9,226	11,729	13,665	11,665	13,285	16,951	46,819	71,802	87,184
New orders.....thous. sq. ft. heating surface..	7,296	7,232	8,933	9,603	13,621	14,267	12,394	14,844	15,753	49,409	76,282	96,412
Stocks, end of month.....thous. sq. ft. heating surface..	65,034	62,662	57,560	74,189	69,277	65,792	79,549	78,279	77,267			
Gas-fired boilers:												
Shipments.....dollars.....	312,950	185,484	430,365	285,223	315,696	486,659	230,250	266,627	288,954	1,842,759	2,025,732	1,513,246
Shipments.....thous. B. t. u.....	260,123	160,347	364,861	213,780	254,856	365,280	182,195	224,098	239,048	1,543,109	1,546,228	1,225,525
Production.....thous. B. t. u.....	367,022	283,750	268,664	271,330	248,993	235,877	135,711	125,000	168,547	1,926,515	1,971,623	1,271,028
Stocks, end of month.....thous. B. t. u.....	933,478	1,031,838	948,557	1,197,768	1,115,865	951,598	960,656	852,822	778,337			
<b>Crude Steel</b>												
Steel ingots, production:												
United States, total.....thous. of long tons..	3,440	2,933	3,095	4,903	4,851	4,939	3,744	3,806	4,179	29,821	38,826	32,782
Ratio to capacity.....per cent.....	69	56	59	100	95	93	76	81	82			
Canada.....thous. of long tons..	95	68	58	120	130	120	117	83	89	755	988	821
U. S. Steel Corporation:												
Unfilled orders, end of month.....thous. of long tons..	3,968	4,022	3,580	4,257	4,088	3,658	3,637	3,571	3,624			
Steel castings:												
Production—												
Total.....short tons.....	90,985	6 79,181	64,403	116,221	118,100	121,238	91,746	78,648	87,742	781,644	910,833	693,655
Ratio to capacity.....per cent.....	63	55	45	80	81	83	62	53	60			
Railroad specialties.....short tons.....	32,793	6 26,061	20,728	54,154	51,989	53,328	30,742	27,501	27,157	309,143	397,098	259,499
Miscellaneous.....short tons.....	58,192	6 53,120	43,675	62,067	66,111	67,910	61,004	51,147	60,585	472,501	513,735	434,156
New orders—												
Total.....short tons.....	61,358	6 58,069	51,464	95,201	103,356	101,777	72,107	66,992	81,286	694,511	929,067	657,546
Ratio to capacity.....per cent.....	43	40	36	65	71	70	49	45	55			
Railroad specialties.....short tons.....	13,714	6 14,710	15,285	34,947	37,731	38,956	22,597	20,483	25,171	273,092	416,663	249,420
Miscellaneous.....short tons.....	47,644	6 43,359	36,179	60,254	65,625	62,791	49,510	46,509	56,115	421,419	512,404	408,126

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## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>IRON AND STEEL—Continued</b>												
<b>Crude Steel—Continued</b>												
Sheets, black, blue, galvanized, and full finished:												
Production—												
Total.....net tons..	205,675	186,206	173,956	337,841	323,905	366,734	311,629	267,685	329,396	1,876,184	2,879,240	2,599,219
Ratio to capacity.....per cent..	58.8	50.4	48.6	110.4	98.1	109.7	94.3	82.2	92.8			
Stocks, end of month—												
Total.....net tons..	200,589	202,682	182,240	163,607	154,854	143,323	151,606	161,933	154,461			
Unsold.....net tons..	83,988	82,708	82,315	52,274	47,103	34,436	50,702	55,280	51,636			
Shipments.....net tons..	212,930	194,767	205,774	347,989	344,676	365,642	308,741	278,310	324,691	1,829,861	2,879,649	2,497,818
New orders.....net tons..	187,412	207,400	148,969	307,911	337,222	282,107	318,902	333,357	254,397	1,933,717	2,897,412	2,409,614
Unfilled orders, end of month.....net tons..	431,324	432,298	373,148	676,568	658,155	570,613	526,798	550,468	498,023			
Wholesale prices:												
Steel billets.....dolls. per long ton..	31.00	31.00	31.00	35.25	35.00	35.00	32.25	32.00	32.00			
Iron and steel comp.....dolls. per long ton..	33.53	33.25	33.01	37.01	36.72	36.57	35.34	34.91	34.93			
Structural steel beams.....dolls. per 100 lbs..	1.70	1.65	1.65	1.95	1.95	1.95	1.85	1.85	1.85			
Composite finished steel.....dolls. per 100 lbs..	2.33	2.29	2.26	2.56	2.56	2.55	2.48	2.48	2.48			
<b>Fabricated Steel Products</b>												
Steel barrels:												
Production.....barrels..	651,559	617,426	553,842	774,853	790,175	806,574	712,779	647,844	677,313	5,464,628	5,847,773	5,633,749
Ratio to capacity.....per cent..	46.4	* 44.0	39.6	61.8	64.2	65.2	61.4	55.5	57.8			
Shipments.....barrels..	638,358	* 621,091	552,295	779,567	782,411	809,860	717,486	645,881	675,600	5,457,373	5,837,538	5,628,811
Stocks, end of month.....barrels..	76,232	* 72,561	74,138	52,222	59,986	56,700	53,868	55,831	57,544			
Unfilled orders, end of month.....barrels..	1,288,612	1,295,854	1,114,080	1,548,999	1,372,697	1,205,659	1,159,756	1,232,412	1,064,358			
Track work, production.....short tons..	10,553	8,774	6,812	14,838	13,844	14,818	13,716	11,776	11,040	89,896	114,699	99,945
Iron, steel, and heavy hardware, sales.....rel. to Jan., 1921..	167	162	-----	220	223	240	204	187	215			
Lock washers, shipments.....thous. of dolls..	228	161	173	397	391	320	287	257	282	2,059	2,811	2,126
Steel plate, fabricated, new orders:												
Total.....short tons..	* 35,367	* 31,440	29,235	45,918	48,968	39,702	35,202	35,959	47,245	282,244	373,483	343,687
Ratio to capacity.....per cent..	46	-----	58	62	51	44	47	60	-----			
Oil storage tanks.....short tons..	8,841	10,850	9,388	6,890	14,963	11,150	12,204	16,881	24,807	68,651	102,173	152,698
Steel bars, cold finished, shipments.....short tons..	27,388	19,241	19,086	51,181	49,910	46,747	39,542	39,943	42,993	247,359	432,481	323,201
Steel boilers, new orders:												
Quantity.....number..	1,360	1,309	1,371	1,685	2,052	1,859	1,887	1,932	2,018	9,127	12,636	13,117
Area.....thous. of sq. ft..	1,589	1,410	1,371	1,823	2,075	1,782	1,666	1,738	1,691	10,039	13,600	11,964
Iron and steel:												
Exports.....long tons..	159,392	131,772	151,235	247,811	270,532	242,856	262,052	253,336	287,297	1,508,008	2,105,227	1,899,375
Imports.....long tons..	34,755	31,849	27,408	46,397	51,275	61,547	56,601	33,467	54,062	305,275	388,394	399,677
<b>Machinery</b>												
Shipments:												
Water softening apparatus.....units..	752	782	774	1,228	1,177	1,581	1,235	1,218	1,402	8,913	11,130	11,444
Water systems.....units..	10,953	10,189	9,661	13,031	12,268	14,200	11,487	10,935	11,248	77,623	86,584	78,400
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units..	29,820	41,439	43,026	39,838	39,586	52,451	46,281	40,316	50,685	325,681	364,711	384,502
Power, horizontal type.....units..	3,040	2,535	2,476	2,989	2,768	2,902	2,355	2,254	2,531	19,051	20,366	17,524
Steam, power, and centrifugal—												
New orders.....thous. of dolls..	1,291	1,359	1,362	2,014	1,778	1,819	1,505	1,460	1,573	11,278	14,563	11,377
Shipments.....thous. of dolls..	1,644	1,338	1,367	1,715	1,845	1,978	1,640	1,553	1,520	11,771	13,835	11,274
Unfilled orders, end of mo.....thous. of dolls..	3,250	3,257	3,259	4,364	4,282	4,115	3,088	2,984	3,023			
Foundry equipment:												
New orders.....rel. to 1922-24..	102.1	90.6	85.2	177.3	219.5	229.5	149.1	94.8	278.0			
Shipments.....rel. to 1922-24..	160.5	116.1	82.6	172.7	182.1	150.8	129.4	124.8	154.1			
Unfilled orders, end of mo.....rel. to 1922-24..	166.7	139.1	140.2	300.8	368.7	441.1	359.3	332.1	467.2			
Stokers, mechanical, sales:												
Quantity.....number..	151	150	115	203	186	199	162	186	162	835	1,197	1,011
Power.....horsepower..	47,803	37,761	29,988	67,322	65,197	54,929	42,628	58,670	51,572	251,660	413,347	336,259
Machine tools:												
New orders.....rel. to 1922-24..	126	91	114	292	256	298	215	204	241			
Shipments.....rel. to 1922-24..	176	128	120	296	278	277	193	181	208			
Unfilled orders, end of mo.....rel. to 1922-24..	282	235	223	722	694	693	348	420	428			
Electric hoists:												
New orders—												
Quantity.....number..	295	217	233	600	504	437	442	394	402	2,647	4,468	3,396
Value.....dollars..	128,197	122,978	100,456	283,170	249,447	264,888	181,205	204,636	180,365	1,330,367	2,197,690	1,562,306
Shipments.....dollars..	181,049	147,503	121,698	269,978	290,141	339,881	195,807	177,404	193,248	1,523,701	2,057,539	1,460,442
Electric overhead cranes:												
Shipments.....thous. of dolls..	956	1,005	729	1,091	1,146	1,060	600	463	564	7,204	7,378	4,532
New orders.....thous. of dolls..	741	601	522	1,189	1,157	1,165	573	733	821	5,431	10,637	4,826
Unfilled orders, end of mo.....thous. of dolls..	3,249	2,706	2,527	5,047	5,118	5,193	1,688	1,800	1,952	7,624	7,120	7,941
Woodworking machinery:												
New orders.....thous. of dolls..	836	733	-----	1,678	1,691	1,748	1,173	1,247	1,641	7,674	7,117	7,846
Shipments.....thous. of dolls..	913	821	-----	1,612	1,767	1,974	1,319	1,264	1,436	7,547	7,812	7,680
Shipments.....number of machines..	615	-----	-----	1,056	1,232	1,386	871	932	1,170	7,201	7,251	7,195
Cancellations.....thous. of dolls..	10	27	-----	27	18	25	44	32	6			
Unfilled orders, end of mo.....thous. of dolls..	705	593	-----	2,445	2,369	2,130	1,873	1,838	2,058			
Electric industrial trucks and tractors:												
Shipments, domestic—												
Total.....number of vehicles..	63	99	81	185	163	144	102	92	90	807	1,340	832
Exports.....number of vehicles..	32	9	11	16	5	10	14	15	6	114	85	97
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number..	106	118	118	120	131	116	97	105	125	789	867	807
Hand types.....number..	49,763	43,911	35,926	51,929	62,266	63,806	48,123	48,897	47,490	382,242	439,404	382,446

\* Revised.

† Cumulative through July 31.



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>IRON AND STEEL—Continued</b>												
<b>Machinery—Continued</b>												
Oil burners:												
Shipments, total, number of burners..	5,174	7,241	7,918	5,146	6,520	10,663				39,956	40,993	
Stocks, end of mo., number of burners..	8,520	10,171	8,963	6,496	7,739	8,403						
New orders, number of burners..	5,170	6,790	7,892	6,962	6,854	11,081				41,606	45,241	
Unfilled orders, end of mo., number of burners..	2,446	1,995	1,969	4,347	4,681	5,099						
Patents issued:												
Total, all classes, number..	7,670	3,452	2,423	3,591	4,054	3,533	4,275	3,107	3,390	28,210	29,625	32,226
Agricultural implements, number..	109	51	27	51	53	51	24	44	29	324	409	430
Internal-combustion engines, number..	144	52	30	39	92	55	42	59	43	414	439	538
Pulverized fuel equipment:												
New orders, central system—												
Water-tube boilers, no. of pulverizers..	1	2										
Furnaces and kilns, no. of pulverizers..		3	1									
New orders, unit system—												
Water-tube boilers, no. of pulverizers..	15	12	4							189		
Fire-tube boilers, no. of pulverizers..			3									
Marine boilers, no. of pulverizers..	6											
Furnaces and kilns, no. of pulverizers..	5	1	3								27	
<b>NONFERROUS METALS</b>												
<b>Copper</b>												
Production:												
Mines, short tons..	56,743	54,249	56,770	52,354	79,229	78,885	73,224	73,426	76,952	476,709	693,520	573,271
Smelter, short tons..	69,155	67,638	66,698	95,339	94,650	91,735	88,398	83,875	88,517	593,263	804,676	667,056
Refined (N. and S. America), short tons..	124,821	123,179	120,778	156,447	153,513	148,648	131,024	135,092	143,560	1,006,125	1,241,695	1,038,279
World production, blister, short tons..	145,797	143,615	148,321	174,586	174,607	173,430	159,474	156,190	161,838	1,176,591	1,450,597	1,219,277
Domestic shipments, refined, short tons..	71,887	75,436	56,810	95,258	98,720	96,970	81,436	82,245	83,398	535,365	788,508	609,671
Exports, short tons..	34,960	32,421	33,141	40,852	33,876	36,811	50,261	47,855	41,186	234,773	340,494	385,022
Stocks (North and South America), end of mo.:												
Refined, short tons..	316,762	322,039	347,688	83,140	97,729	104,372	58,809	54,871	54,793			
Blister, short tons..	253,834	242,212	234,135	251,481	239,470	241,678	235,363	241,131	238,923			
Wholesale price, electrolytic, dolls. per lb..	.1205	.1102	.1069	.1778	.1778	.1778	.1453	.1453	.1453			
<b>Tin</b>												
Deliveries (consumption), long tons..	5,885	6,130	5,695	7,455	6,865	7,185	6,950	5,545	7,200	49,630	62,140	51,205
Stocks, end of month:												
World visible supply, long tons..	42,611	41,950	43,805	23,751	23,789	26,400	16,231	18,022	18,456			
United States, long tons..	7,728	6,786	7,533	3,820	3,087	2,858	2,148	2,878	1,718			
Imports, long tons..	6,793	5,259	5,979	7,150	5,521	9,737	5,050	4,772	6,584	56,197	64,406	50,229
Wholesale price, pig tin, dolls. per lb..	.3030	.2981	.3002	.4426	.4640	.4665	.4796	.4710	.4808			
<b>Zinc</b>												
Retorts in operation, end of mo., number..	52,425	46,030	50,404	69,703	69,911	59,408	65,680	62,384	66,428			
Production, short tons..	43,473	40,038	41,029	52,532	54,447	55,708	50,825	50,890	52,157	358,375	428,607	419,124
Stocks, end of month, short tons..	109,578	117,381	122,635	38,832	45,336	49,064	44,468	42,210	44,416			
Ore, Joplin district:												
Shipments, short tons..	41,819	24,974	37,994	60,119	48,995	63,127	64,531	43,227	43,466	309,192	436,854	386,234
Stocks, mines, end of mo., short tons..	19,553	28,729	38,565	47,458	39,813	42,876	32,266	31,679	39,303			
Price, slab, prime western, dolls. per lb..	.0444	.0435	.0436	.0669	.0677	.0680	.0616	.0620	.0625			
<b>Lead</b>												
Production, short tons..				57,579	56,924	53,316	51,501	48,671	53,403		458,573	422,599
Ore shipments:												
Joplin district, short tons..	5,975	2,570	3,673	8,491	5,373	7,808	13,277	6,623	6,125	32,862	70,066	59,367
Utah, short tons..	55,801	45,194	60,978	76,003	66,083	92,668	77,074	56,395	78,211	527,842	651,834	557,644
Receipts in U. S. ore, short tons..	47,692	44,433		53,542	54,365	54,365	54,185	49,305	53,575	7345,355	7386,028	7385,672
Price, pig, desilvered, N. Y., dolls. per lb..	.0541	.0525	.0549	.0700	.0680	.0675	.0630	.0622	.0625			
<b>Other Metal Products</b>												
Babbitt metal, consumption:												
Total apparent, thous. of lbs..	3,763	2,908	2,737	5,928	5,361	5,433	4,731	4,693	4,756	39,035	46,526	37,957
Direct by producers, thous. of lbs..	1,156	886	954	1,107	1,313	1,435	1,106	900	932	7,811	9,862	8,037
Sale to consumers, thous. of lbs..	2,547	2,022	1,783	4,821	4,048	3,997	3,625	3,793	3,817	22,164	36,664	29,919
Copper-wire cloth:												
Production, thous. of sq. ft..	370	373	387	456	438	498	400	367	430	3,276	3,782	3,509
Shipments, thous. of sq. ft..	395	347	353	404	461	434	364	365	387	3,632	3,414	3,258
Stocks, end of month, thous. of sq. ft..	1,107	1,118	1,117	1,084	1,049	978	1,157	1,124	1,120			
New orders, thous. of sq. ft..	360	378	336	244	345	302	310	346	408	3,105	3,358	3,047
Unfilled orders, end of month, thous. of sq. ft..	232	279	264	249	405	211	185	247	285			
Make and hold orders, end of month, thous. of sq. ft..	565	525	516	568	507	480	414	405	457			
Pails and tubs, galvanized:												
Production, dozens..	89,982	91,879	163,050	98,857	105,454	107,004	141,448	114,343	127,797	630,076	1,166,469	1,246,252
Shipments, dozens..	82,956	104,096	163,354	104,762	108,841	108,461	144,385	121,415	142,487	638,640	1,193,361	1,265,868
Other galvanized ware:												
Production, dozens..	40,646	42,056	46,730	37,479	42,384	53,250	48,038	61,688	37,846	324,661	383,436	333,514
Shipments, dozens..	33,140	33,874	43,827	35,334	44,117	54,860	44,833	47,856	44,377	291,461	358,314	318,640
Enameled sheet-metal ware:												
Shipments, dozen pieces..	247,861	213,420	309,645	337,375	290,532	385,162	299,078	277,684	358,811	2,385,407	3,097,404	2,770,676
<b>Electrical Equipment</b>												
Electrical porcelain, shipments:												
Standard, dollars..	72,825	68,483	69,656	101,013	139,240	97,631	66,968	106,503	111,803	653,516	607,066	606,424
Special, dollars..	116,935	133,654	111,029	172,704	168,066	165,385	128,243	132,762	129,813	982,339	1,224,452	99,097
Glazed nail knobs, thous. of pieces..	2,464	2,233	2,218	3,794	8,301	2,794	2,597	4,079	4,328	23,448	34,66	22,484
Unglazed nail knobs, thous. of pieces..	1,524	1,120	1,605	1,998	2,426	1,968	1,349	2,065	2,401	13,264	15,63	11,67
Tubes, thous. of pieces..	1,140	782	1,146	1,746	3,330	1,870	1,239	3,237	2,542	9,273	15,075	12,235

\* Revised.

† Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The "cumulatives" shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>NONFERROUS METALS—Continued</b>												
<b>Electrical Equipment—Continued</b>												
Laminated phenolic products, shipments.....dollars..	925,006	721,807	788,671	1,456,335	1,732,023	1,915,381	1,020,948	1,125,767	1,356,179	6,766,881	11,910,629	7,471,634
Motors (direct current):												
New orders.....dollars..	935,040	677,348	719,846	1,098,864	811,575	1,082,845	896,638	804,226	920,083	6,628,613	7,797,931	6,384,377
Billings (shipments).....dollars..	673,415	644,252	708,095	883,821	854,986	853,961	761,630	778,787	894,690	6,065,837	6,761,202	6,020,178
Power switching equipment, new orders:												
Indoor.....dollars..	172,186	136,559	121,930	133,418	208,495	169,384	144,940	124,345	148,156	1,200,732	1,403,986	1,163,857
Outdoor.....dollars..	366,584	451,051	319,668	598,645	520,058	605,273	385,428	380,416	413,435	3,338,269	3,802,728	3,201,815
Outlet boxes and covers, shipments, pieces..	1,702,958	1,516,689	1,490,756	2,114,582	2,587,786	2,719,688	2,779,032	2,769,866	3,049,567	14,759,348	21,489,695	21,900,267
Vulcanized fiber:												
Shipments, total.....thous. of dolls..	541	450	430	814	878	1,029	626	561	591	4,510	6,714	5,071
Consumption.....thous. of lbs..	1,967	2,121	1,828	3,470	3,489	3,803	3,098	2,606	2,805	18,486	27,110	22,063
Industrial reflectors, sales.....units..	134,783	135,687	127,608	130,413	124,466	157,473	117,104	115,929	122,124	959,695	1,114,104	965,644
Power cables, shipments.....thous. of ft..	2,033	1,980	2,260	2,112	2,366	2,411	1,947	1,738	2,138	16,692	16,855	14,904
Welding sets, new orders:												
Single operator.....units..	228	207	221	296	282	296	206	294	228	1,978	2,684	1,790
Multiple operator.....units..	7	10	8	9	5	7	2	10	8	46	58	118
Nonmetallic conduits, shipments.....thous. of ft..	4,021	3,564	3,397	6,684	7,320	6,364	7,645	6,373	6,960	41,661	54,359	60,887
Electric furnaces, new orders.....kilowatts..	3,665	5,899	5,012	6,237	6,932	5,114	4,958	4,861	6,493	58,361	69,466	39,907
Manufactured mica:												
Shipments.....thous. of dolls..	162	156	122	252	254	274	270	265	283	1,508	2,284	-----
Unfilled orders, end of mo.....thous. of dolls..	137	88	109	294	326	275	305	304	290	-----	-----	-----
Delinquent accounts, electrical trade:												
Amount.....dollars..	157,821	141,162	127,006	168,724	146,166	174,436	164,693	150,243	165,138	-----	-----	-----
Delinquent firms.....number..	1,091	1,106	1,155	1,223	1,027	1,176	1,277	1,176	1,367	-----	-----	-----
<b>AUTOMOBILES</b>												
Production:												
United States--												
Total.....number of cars..	335,477	262,363	223,046	545,932	500,840	498,628	396,796	392,086	461,298	2,704,957	4,224,911	3,054,905
Passenger cars.....number of cars..	289,245	222,459	187,037	451,371	424,944	440,780	355,277	337,151	398,253	2,304,502	3,629,021	2,694,693
Taxicabs.....number of cars..	459	241	251	1,378	1,054	1,040	408	409	469	5,013	12,727	4,042
Trucks.....number of cars..	45,773	39,663	35,758	93,183	74,842	56,808	41,111	54,526	62,576	395,442	583,163	356,170
Canada--												
Total.....number of cars..	15,090	10,188	9,792	21,492	17,461	14,214	28,390	25,226	31,245	130,665	220,036	181,459
Passenger cars.....number of cars..	12,194	8,556	6,946	16,511	13,600	11,037	25,341	20,122	24,274	108,861	176,250	152,265
Trucks.....number of cars..	2,896	1,632	2,846	4,981	3,861	3,177	3,058	5,104	6,971	21,804	43,786	29,194
Exports (assembled):												
From United States--												
Total.....number of cars..	15,437	11,870	13,274	50,976	55,545	42,829	47,171	51,670	49,007	187,102	422,805	354,015
Passenger cars.....number of cars..	10,101	7,828	7,956	34,106	29,082	22,123	36,038	38,880	32,815	122,692	272,848	265,999
Trucks.....number of cars..	5,336	4,042	5,318	16,870	26,463	20,706	11,133	12,790	16,192	64,410	149,957	88,016
From Canada--												
Total.....number of cars..	3,670	3,521	3,922	8,219	7,319	7,629	5,589	8,021	11,011	30,907	74,662	45,944
Passenger cars.....number of cars..	2,240	2,471	2,552	5,346	4,732	4,901	4,431	6,545	7,985	20,542	48,398	33,581
Trucks.....number of cars..	1,430	1,050	1,370	2,873	2,587	2,721	1,158	1,476	3,026	10,365	26,257	12,363
Sales (General Motors Co.):												
Total to dealers, incl. Canadian and overseas.....number of cars..	97,440	79,976	85,610	200,754	189,428	168,185	186,160	169,473	186,653	929,805	1,529,481	1,439,442
To consumers, U. S.....number of cars..	97,318	80,147	86,426	154,437	147,079	151,722	-----	-----	-----	824,402	1,146,552	-----
To dealers, U. S.....number of cars..	87,595	70,716	76,140	163,704	157,111	147,351	-----	-----	-----	826,428	1,233,846	-----
Accessories and parts, shipments:												
Original equipment...rel. to Jan., 1925..	119	83	87	231	205	193	200	203	230	-----	-----	-----
Replacement parts...rel. to Jan., 1925..	131	127	132	150	152	169	150	148	176	-----	-----	-----
Accessories.....rel. to Jan., 1925..	71	65	60	90	92	88	110	112	147	-----	-----	-----
Service parts.....rel. to Jan., 1925..	128	115	104	186	170	170	140	120	148	-----	-----	-----
Rim production.....thous. of rims..	1,338	1,419	1,504	2,181	1,897	1,570	2,429	2,210	2,319	13,957	17,669	17,499
New passenger-car registrations:												
Total.....number of cars..	260,861	254,098	203,737	386,398	432,503	* 376,886	317,069	324,120	329,674	2,111,434	2,964,746	2,210,191
<b>FUELS</b>												
<b>Coal and Coke</b>												
Bituminous:												
Production--												
United States.....thous. of short tons..	33,714	34,715	35,661	35,580	41,175	44,475	36,546	36,864	41,774	301,010	338,542	316,727
Canada.....thous. of short tons..	1,128	1,061	1,101	1,348	1,290	1,344	1,351	1,341	1,552	9,257	11,281	11,162
Exports.....thous. of long tons..	1,394	1,586	1,433	1,721	1,735	1,441	1,277	1,503	1,606	9,273	9,944	8,646
Consumption--												
By vessels.....thous. of long tons..	276	284	261	314	352	339	322	314	356	2,215	2,538	2,553
By electric-power plants.....thous. of short tons..	* 3,201	* 3,451	3,650	3,403	3,603	3,929	3,037	3,169	3,438	27,719	29,155	26,498
By railroads.....thous. of short tons..	6,177	6,228	-----	7,073	* 7,160	7,500	6,936	7,010	7,409	748,602	754,329	753,270
By coke plants--												
United States												
thous. of short tons..	6,155	5,824	5,559	7,442	7,588	7,571	6,167	6,046	6,194	50,432	58,515	49,806
Canada.....thous. of short tons..	268	248	244	308	317	315	271	279	269	2,247	2,458	2,069
Prices--												
Mine aver. (spot)												
dolls. per short ton..	1.67	1.71	1.72	1.67	1.70	1.77	1.73	1.71	1.74	-----	-----	-----
Wholesale, composite												
dolls. per short ton..	3.892	3.891	3.892	3.905	3.906	3.913	4.001	3.984	4.009	-----	-----	-----
Retail, composite												
dolls. per short ton..	8.54	8.65	8.70	8.50	8.62	8.69	8.72	8.69	8.74	-----	-----	-----
Anthracite:												
Production.....thous. of short tons..	5,183	5,658	6,190	5,069	4,993	5,735	5,205	4,394	6,759	45,640	47,597	47,585
Exports.....thous. of long tons..	144	129	205	189	203	222	209	167	278	1,469	1,743	1,746
Prices--												
Wholesale, composite												
dolls. per long ton..	12.251	12.366	12.578	12.628	12.754	12.848	12.949	12.965	12.853	-----	-----	-----
Retail, composite												
dolls. per short ton..	14.32	14.53	14.57	14.48	14.63	14.67	14.61	14.63	14.76	-----	-----	-----

\* Revised.

† Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>FUEL—Continued</b>												
<b>Coal and Coke—Continued</b>												
Coke:												
Production, U. S.—												
Beehive.....thous. of short tons..	262	215	170	602	600	562	311	280	297	2,071	4,282	2,905
By-product.....thous. of short tons..	3,954	3,770	3,637	4,510	4,614	4,643	3,970	3,920	4,004	32,467	35,951	31,648
Production, Canada												
.....thous. of short tons..	193	182	182	221	225	227	195	200	191	1,633	1,775	1,486
Exports.....thous. of long tons..	68	93	64	92	84	86	69	79	70	610	672	584
Price, furnace, Connellsville.....dolls. per short ton..	2.50	2.52	2.55	2.80	2.80	2.76	2.80	2.79	2.88			
<b>Petroleum</b>												
Crude petroleum:												
Production.....thous. of bbls..	76,513	76,743	74,853	83,403	91,327	92,288	72,676	75,584	77,807	616,724	671,730	589,623
Stocks at end of month—												
Total (comparable).....thous. of bbls..	377,822	378,264	381,640	379,089	383,343	386,677	371,475	369,474	368,707			
Tank farms and pipe lines.....thous. of bbls..	331,050	331,124	328,355	331,736	335,232	339,679	328,357	326,399	326,290			
Refineries.....thous. of bbls..	46,772	47,140	46,785	47,303	48,111	46,998	43,118	43,075	42,417			
California—												
Light.....thous. of bbls..	41,045	41,071	40,671	32,667	34,430	37,685	19,197	18,215	18,310	340,684	231,861	154,233
Heavy.....thous. of bbls..	105,276	104,550	103,701	103,660	105,646	108,362	94,234	95,663	95,057	846,999	820,216	756,865
Imports.....thous. of bbls..	5,767	5,877	5,059	6,591	6,122	5,800	6,553	7,878	6,141	42,066	55,774	52,210
Consumption (run to stills).....thous. of bbls..	80,747	78,644	79,289	84,400	85,919	86,732	75,958	80,602	81,581	635,591	653,495	597,069
Refinery operations per ct. of capacity..	73	69	70	83	81	81	81	82	83			
Price, Kansas—												
Oklahoma.....dolls. per bbl..	1.178	1.178	1.178	1.300	1.300	1.300	1.190	1.195	1.210			
Oil wells completed.....number..	1,197	1,051	992	1,318	1,426	1,669	1,060	1,093	1,233	8,743	10,058	7,878
Venezuela—												
Production.....thous. of bbls..	11,361	11,624	11,378	12,101	10,793	11,394	8,339	9,398	9,031	90,342	90,218	64,540
Exports.....thous. of bbls..	11,221			10,564	10,731	10,897	8,231	8,808	8,933		80,580	63,049
Gasoline:												
Production—												
Raw (at refineries).....thous. of bbls..	37,537	38,061	37,844	35,606	37,855	38,510	30,793	32,959	33,937	299,222	283,305	241,861
Natural gas (at plants).....thous. of bbls..	4,269	4,231	4,212	4,250	4,417	4,507	3,304	3,436	3,438	34,891	33,924	27,409
Exports.....thous. of bbls..	6,955	5,497	6,375	5,699	5,975	5,609	4,686	5,155	4,452	45,188	39,830	34,855
Consumption.....thous. of bbls..	35,902	38,352	37,433	33,163	36,860	37,759	29,566	32,527	33,173	266,002	247,116	215,510
Stocks, end of month—												
Raw (at refineries).....thous. of bbls..	50,225	46,077	41,624	41,991	37,880	33,788	34,862	30,394	27,075			
Natural gas (at plants).....thous. of bbls..	928	741	744	1,356	1,156	893	648	476	414			
Prices—												
Wholesale, New York.....dolls. per gal..	.163	.163	.163	.190	.190	.188	.170	.173	.180			
Kerosene:												
Production.....thous. of bbls..	4,026	3,929	3,975	4,928	4,406	5,111	4,848	4,894	5,339	34,321	37,431	39,545
Exports.....thous. of bbls..	1,782	1,021	1,687	1,761	1,281	2,034	1,632	1,826	1,659	11,701	13,500	14,719
Consumption.....thous. of bbls..	2,323	2,953	2,573	2,547	2,684	3,189	2,324	3,042	3,246	23,570	24,227	23,638
Stocks at refineries, end of month.....thous. of bbls..	8,352	8,319	8,030	8,348	8,797	8,689	8,432	8,470	8,887			
Price, 150° water white.....dolls. per gal..	.055	.052	.050	.074	.069	.068	.073	.072	.072			
Gas and fuel oils:												
Production.....thous. of bbls..	31,092	31,023	29,862	37,338	37,980	39,011	35,766	36,934	37,517	254,683	299,057	277,740
Consumption—												
By vessels.....thous. of bbls..	4,041	4,316	4,702	4,544	4,593	4,734	4,307	4,116	4,564	34,315	35,105	34,192
By electric power plants.....thous. of bbls..	617	709	771	616	794	820	498	554	614	5,729	6,019	4,449
By railroads.....thous. of bbls..	3,750	3,924		4,170	4,477	4,326	3,819	4,071	4,087		34,654	32,145
Stocks at refineries, end month.....thous. of bbls..	38,302	39,027	39,729	37,332	40,075	39,316	36,085	36,410	39,236			
Price, Okla. 24-26, refineries.....dolls. per bbl..	.675	.625	.600	.675	.695	.744	.719	.670	.650			
Lubricating oil:												
Production.....thous. of bbls..	2,920	3,018	2,971	2,928	2,936	3,143	3,009	2,828	2,891	24,014	23,302	23,106
Consumption.....thous. of bbls..	1,772	1,887	1,940	2,446	2,167	2,268	2,144	1,932	2,035	14,044	14,498	15,358
Stocks at refineries, end month.....thous. of bbls..	9,742	9,953	10,161	7,869	7,524	7,478	7,832	7,667	7,711			
Price, cylinder oil.....dolls. per gal..	.284	.210	.193	.400	.388	.238	.220	.226	.229			
Asphalt:												
Production.....thous. of short tons..	337	334	346	327	386	379	332	331	316	2,209	2,314	2,258
Stocks, end of month.....thous. of short tons..	312	311	316	247	243	247	271	251	247			
Imports.....thous. of short tons..	6	6	3	14	3	20	3	12	14	35	72	79
Coke:												
Production.....thous. of short tons..	163	161	172	154	158	169	118	127	136	1,264	1,148	918
Stocks, end of month.....thous. of short tons..	891	942	994	498	564	608	344	385	402			
Wax:												
Production.....thous. of lbs..	43,680	45,640	39,760	52,714	46,171	53,377	50,792	45,273	54,429	393,680	429,285	413,820
Stocks, end of month.....thous. of lbs..	249,748	254,999	254,990	188,764	191,298	190,878	91,989	84,476	79,622			
<b>RUBBER</b>												
<b>Crude Rubber</b>												
World shipments, plantation.....long tons..	53,494			61,390	71,562	70,532	40,927	52,831	58,345		568,508	375,706
Imports (including latex).....long tons..	40,382	35,424	36,657	41,828	44,338	37,851	27,764	31,258	31,204	337,261	403,415	272,603
Consumption by tire mfrs.....thous. of lbs..												
World stocks, end of month:												
World total.....long tons..	6 379,688	6 394,687		6 249,838	6 255,183	6 261,721	6 207,296	6 201,464	6 193,896			
United States.....long tons..	6 155,000	6 158,445		6 96,347	6 95,472	6 92,686	6 84,967	6 75,917	6 61,815			
Europe.....long tons..	6 109,908	111,751		37,135	37,168	45,016	42,365	39,269	35,755			
Producing countries.....long tons..	6 39,300	40,362		36,336	39,131	36,802	20,664	21,578	21,828			
Afloat.....long tons..	6 75,480	84,129		80,020	83,412	87,217	59,300	64,700	74,500			
Wholesale price, smoked sheets, New York.....dolls. per pound..	.124	.115	.099	.206	.213	.206	.194	.192	.193			

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## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>RUBBER—Continued</b>												
<b>Tires and Tubes</b>												
Pneumatic tires:												
Production.....thousands..	4,098	3,193	3,332	5,478	4,856	4,354	5,030	4,881	5,607	30,840	42,575	39,183
Stocks, end of month.....thousands..	10,622	9,449	8,678	13,468	11,872	10,669	9,150	8,396	7,539			
Shipments—												
Domestic.....thousands..	4,050	4,229	3,976	5,288	5,723	5,667	5,162	5,811	6,131	30,186	40,380	37,754
Export.....thousands..	185	129	164	153	163	217	184	121	179	1,447	1,658	1,212
Inner tubes:												
Production.....thousands..	3,960	3,151	3,837	5,234	4,634	4,385	5,222	5,009	6,264	31,129	41,289	41,565
Stocks, end of month.....thousands..	10,889	9,326	8,589	14,056	12,249	10,613	12,892	11,248	10,466			
Shipments—												
Domestic.....thousands..	4,082	4,504	3,492	5,115	5,993	6,028	5,254	6,469	6,856	30,681	41,477	40,107
Export.....thousands..	131	90	118	98	91	109	105	83	132	899	1,051	875
Solid and cushion:												
Production.....thousands..	17	13	16	40	39	32	49	46	52	146	288	356
Stocks, end of month.....thousands..	107	101	90	133	129	118	156	152	149			
Shipments—												
Domestic.....thousands..	18	19	22	38	39	40	45	45	49	166	296	331
Exports.....thousands..	2	1	1	3	2	3	5	4	5	13	20	32
<b>Other Rubber Products</b>												
Rubber-proofed fabrics, production:												
Total.....thous. of yds..	3,379	2,940	3,458	4,409	4,260	5,085	2,953	3,447	4,613	27,695	32,422	24,068
Auto fabrics.....thous. of yds..	851	608	678	1,199	1,188	1,349	895	763	764	7,322	7,947	6,434
All other.....thous. of yds..	1,042	917	975	1,262	1,208	1,317	707	733	1,251	11,975	10,131	6,621
Raincoat fabrics.....thous. of yds..	1,486	1,415	1,805	1,948	1,864	2,419	1,351	1,951	2,598	8,398	14,344	11,013
Rubber heels:												
Production.....thous. of pairs..	15,795	15,117		20,007	19,315	23,095	18,763	17,620	21,289		155,394	157,290
Shipments—												
To shoe manufac-												
turers.....thous. of pairs..	10,287	11,668		12,262	13,785	14,942	9,166	12,070	11,642		96,430	82,085
To repair trade.....thous. of pairs..	5,186	5,053		8,256	6,377	8,025	9,022	7,372	9,244		58,199	61,845
For export.....thous. of pairs..	829	938		926	794	1,098	864	457	729		8,654	6,842
Stocks, end of month.....thous. of pairs..	38,852	36,220		44,581	44,243	43,960	50,569	49,679	49,511			
Rubber soles:												
Production.....thous. of pairs..	2,734	2,663		2,502	1,295	2,948	3,321	3,168	3,461		21,753	27,203
Shipments—												
To shoe manufac-												
turers.....thous. of pairs..	2,549	2,627		2,185	1,372	2,548	1,077	1,897	2,209		17,446	15,484
To repair trade.....thous. of pairs..	309	364		522	163	517	948	808	917		4,781	7,449
For export.....thous. of pairs..	31	34		17	70	78	41	55	46		434	1,889
Stocks, end of month.....thous. of pairs..	3,307	2,876		3,843	2,895	3,319	4,687	5,067	5,633			
Mechanical rubber goods, shipments:												
Total.....thous. of dolls..	5,318	4,910	4,552	6,792	6,306	6,792	6,126	5,157	6,306	43,458	53,294	47,402
Belting.....thous. of dolls..	1,238	1,364	1,248	1,613	1,645	1,940	1,568	1,396	1,888	10,279	12,928	11,678
Hose.....thous. of dolls..	2,199	1,856	1,682	2,658	2,355	2,196	2,298	1,795	2,098	17,757	19,964	18,041
All other.....thous. of dolls..	1,881	1,690	1,622	2,521	2,305	2,656	2,260	1,966	2,360	15,420	20,403	17,702
Rubber bands, shipments.....thous. of lbs..	177	174	164	187	192	196	192	173	193	1,627	1,758	1,533
Rubber flooring, shipments.....thous. of sq. ft..	634	507	559	523	506	598	717	477	583	4,367	4,471	4,506
Calendered rubber clothing:												
Production.....no. coats and sundries..	55,411	38,582	44,952	87,530	89,871	96,281	100,802	59,685	74,509	501,876	651,276	819,751
Net orders.....no. coats and sundries..	21,249	28,767	26,348	98,444	60,921	37,906	80,145	37,512	64,695	445,564	473,423	525,300
<b>HIDES AND LEATHER</b>												
<b>Hides</b>												
Imports:												
Total hides and skins.....thous. of lbs..	37,407	27,960	26,681	41,509	49,910	47,956	58,091	50,175	47,056	312,221	322,184	380,372
Calfskins.....thous. of lbs..	3,505	1,295	234	6,559	5,636	4,900	5,537	4,134	4,033	21,248	31,591	31,334
Cattle hides.....thous. of lbs..	13,992	11,504	214	17,450	24,259	23,137	34,163	2,133	26,540	142,551	153,135	215,833
Goatskins.....thous. of lbs..	10,016	7,455	4,646	8,309	9,361	7,692	8,383	7,873	7,951	64,700	68,633	63,734
Sheepskins.....thous. of lbs..	7,626	6,219	1,886	6,824	6,849	4,405	7,323	6,171	6,773	40,360	44,522	45,945
Stocks, end of month:												
Total hides and skins.....thous. of lbs..	286,696	279,114	276,225	250,025	248,549	253,415	244,746	239,877	243,591			
Cattle hides.....thous. of lbs..	224,209	217,302	212,980	196,202	194,453	202,564	196,561	194,668	197,086			
Calf and kip skins.....thous. of lbs..	30,034	27,725	27,166	32,525	30,951	28,141	29,159	25,551	25,758			
Sheep and lamb skins.....thous. of lbs..	32,423	34,087	36,079	21,298	23,145	22,710	19,026	19,658	20,747			
Prices:												
Green salted, packers' heavy native steers.....dolls. per lb..	.152	.141	.136	.168	.181	.188	.224	.239	.236			
Calfskins country, No. 1.....dolls. per lb..	.175	.165	.161	.186	.199	.198	.266	.278	.275			
Inspected slaughter of livestock:												
United States—												
Cattle.....thous. of animals..	654	710	700	636	706	726	706	662	717	5,278	5,343	5,473
Calves.....thous. of animals..	356	375	363	344	363	388	398	362	399	3,061	3,071	3,204
Swine.....thous. of animals..	3,689	3,187	2,724	3,756	3,597	3,130	4,078	2,984	2,545	29,330	31,903	33,265
Sheep.....thous. of animals..	1,295	1,411	1,413	1,108	1,255	1,298	1,109	1,076	1,196	10,646	9,091	6,529
Canada—												
Cattle and calves.....thous. of animals..	81	81	75	93	105	99	99	100	105	644	714	731
Swine.....thous. of animals..	159	127	124	161	159	160	205	164	140	1,289	1,547	1,716
Sheep.....thous. of animals..	36	56	79	25	55	77	25	45	62	296	270	226
<b>Leather</b>												
Sole and belting leather:												
Production—												
Sole only.....thous. of backs, bends, sides..	* 1,310	* 1,365	1,316	1,244	1,176	1,300	1,399	1,436	1,463	10,552	9,575	10,889
Sole and belting.....thous. of lbs..	23,542	23,894	23,223	25,103	24,161	25,101	24,971	25,070	25,701	193,415	187,434	197,392
Stocks, end of month—												
In process of tanning.....thous. of lbs..	74,799	76,863	80,018	79,153	80,641	80,587	91,781	90,949	89,508			
Finished.....thous. of lbs..	77,946	85,953	84,367	70,616	68,538	66,276	63,921	69,557	72,439			
Exports.....thous. of sq. ft..	849	640	374	758	832	782	538	531	996	4,748	7,720	6,758
Price oak, scoured backs.....dolls. per lb..	.44	.46	.46	.49	.51	.52	.68	.67	.67			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>HIDES AND LEATHER—Continued</b>												
<b>Hides—Continued</b>												
Upper leather:												
Production.....thous. of sq. ft.	60,544	62,016	61,477	66,425	71,323	82,954	66,047	66,464	73,150	508,276	545,017	546,434
Stocks, end of month—												
In process of tanning												
.....thous. of sq. ft.	141,506	150,287	143,063	135,198	141,207	147,678	143,099	147,443	147,692	-----	-----	-----
Finished.....thous. of sq. ft.	262,621	259,561	254,020	235,156	230,871	216,406	262,667	254,563	253,854	-----	-----	-----
Exports.....thous. of lbs.	8,765	7,287	8,367	8,491	9,267	7,736	8,949	8,403	9,000	72,042	78,873	93,994
Chrome, calf, black "B" grade, composite price, 6 centers, dolls. per sq. ft.	.371	.371	.371	.388	.393	.393	.447	.442	.442	-----	-----	-----
<b>Leather Products</b>												
Shoes:												
Production.....thous. of pairs	23,904	24,121	27,842	28,120	30,223	36,445	27,284	28,154	34,974	210,437	239,182	231,607
Exports.....thous. of pairs	257	256	263	357	320	291	318	344	331	2,026	2,898	2,958
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	6.75	6.75	-----	-----	-----
Men's dress welt, tan calf												
oxford, St. Louis, dolls. per pair	4.85	4.85	4.85	4.85	4.85	4.85	5.00	5.00	5.00	-----	-----	-----
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	4.25	4.25	-----	-----	-----
Gloves, cut.....dozen pairs	237,377	209,873	241,146	252,703	255,711	292,545	228,039	202,051	237,053	1,989,953	2,034,826	1,698,228
<b>PAPER AND PRINTING</b>												
<b>Wood Pulp</b>												
Ground wood:												
Production.....short tons	140,603	104,997	97,895	142,915	122,946	111,878	133,854	112,403	114,668	1,108,022	1,129,739	1,085,290
Consumption and shipments.....short tons	124,903	122,709	116,886	136,669	136,695	145,432	135,917	125,465	138,309	1,044,795	1,116,650	1,096,982
Stocks, end of month.....short tons	160,766	143,054	124,063	185,209	171,535	137,982	184,314	171,098	147,611	-----	-----	-----
Imports.....short tons	18,534	17,156	21,261	24,014	18,724	24,731	20,528	14,553	17,233	-----	168,368	158,244
Sulphite, unbleached:												
Production.....short tons	19,464	18,860	19,430	19,962	20,726	20,116	21,374	17,568	20,904	164,836	160,132	162,546
Consumption and shipments.....short tons	19,398	18,530	18,880	20,462	20,368	20,090	20,776	16,968	20,882	163,392	161,642	161,774
Stocks, end of month.....short tons	9,976	5,306	5,856	2,216	2,574	2,600	9,918	9,564	9,442	-----	-----	-----
Imports.....short tons	64,636	57,317	60,198	71,450	83,101	-----	-----	-----	-----	-----	-----	-----
Sulphite, bleached—												
Production.....short tons	50,096	42,136	47,542	48,540	49,030	53,028	49,378	46,270	50,880	413,806	415,554	399,180
Consumption and ship.....short tons	47,892	42,986	47,154	48,632	48,764	53,634	48,250	46,278	49,854	411,402	415,958	398,056
Stocks, end of month.....short tons	9,200	8,250	8,738	5,514	5,780	5,174	5,582	5,574	6,000	-----	-----	-----
Imports.....short tons	30,956	28,255	26,880	33,382	31,151	-----	-----	-----	-----	-----	-----	-----
Total sulphite—												
Production.....short tons	137,768	123,718	130,710	145,246	143,250	153,250	146,292	133,768	151,326	1,145,410	1,192,155	1,165,170
Consumption and ship.....short tons	136,578	124,326	130,196	145,172	143,790	152,912	143,370	136,230	152,010	1,140,148	1,199,194	1,166,934
Stocks, end of month.....short tons	29,858	29,250	29,764	23,078	22,538	22,876	31,620	27,138	28,454	-----	-----	-----
Sulphate:												
Production.....short tons	41,290	40,562	44,374	41,842	40,754	44,056	34,234	32,316	34,740	345,090	340,810	273,322
Consumption and shipments.....short tons	39,066	38,754	41,970	41,372	40,172	43,184	34,100	33,418	35,088	330,959	342,358	275,480
Stocks, end of month.....short tons	9,998	9,088	8,498	5,672	6,642	7,884	7,054	6,476	6,430	-----	-----	-----
Soda:												
Production.....short tons	32,366	30,326	29,962	38,780	37,384	40,300	36,774	34,420	35,488	281,544	305,866	282,242
Consumption and shipments.....short tons	30,004	28,984	28,868	36,322	36,722	39,108	36,502	34,676	34,018	283,504	297,418	280,578
Stocks, end of month.....short tons	5,426	5,420	5,166	7,420	6,722	6,506	6,950	6,734	8,336	-----	-----	-----
Other grades:												
Production.....short tons	196	160	188	72	58	156	156	150	112	1,196	592	818
Consumption and shipments.....short tons	214	160	174	150	38	106	96	166	96	1,202	606	984
Stocks, end of month.....short tons	24	24	38	18	38	88	246	230	246	-----	-----	-----
Total (all grades):												
Production.....short tons	211,020	194,766	205,234	256,392	250,992	269,688	217,456	200,654	222,116	1,773,240	1,902,144	1,721,548
Consumption and shipments.....short tons	205,862	192,224	201,108	253,496	250,858	267,600	214,068	204,512	221,008	1,735,712	1,900,230	1,725,124
Stocks, end of month.....short tons	45,306	43,782	43,466	41,554	41,688	43,776	45,870	42,580	44,682	-----	-----	-----
<b>Newsprint Paper</b>												
Production:												
United States, total.....short tons	108,398	102,840	101,601	113,407	111,578	120,868	119,673	109,861	116,120	891,472	930,088	944,781
Ratio to capacity.....per cent.	80	73	72	81	77	80	83	82	77	-----	-----	-----
Canada.....short tons	213,634	216,978	202,043	225,055	229,045	225,873	190,757	187,434	200,480	1,701,328	1,764,939	1,546,167
Consumption by publishers.....short tons	229,910	201,036	200,005	192,424	173,375	172,239	170,892	152,763	162,184	1,614,729	1,481,938	1,312,820
Shipments:												
United States.....short tons	106,883	103,018	99,236	114,558	112,616	118,789	116,901	109,849	114,768	877,847	940,902	923,796
Canada.....short tons	212,670	209,511	197,870	233,920	227,502	224,254	185,086	185,069	19,224	1,669,463	1,668,549	1,530,891
Imports.....short tons	206,927	193,595	169,280	202,395	210,497	209,901	163,807	174,667	173,872	1,503,713	1,551,915	1,380,777
Exports.....short tons	194,322	199,060	170,107	219,895	199,692	217,638	174,031	167,456	179,334	1,536,771	1,627,631	1,412,170
Price, roll, f. o. b. mill, dolls. per 100 lbs.	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	-----	-----	-----
Stocks, end of month:												
At mills—												
United States.....short tons	29,507	29,284	30,691	24,602	23,603	25,656	39,979	40,386	40,838	-----	-----	-----
Canada.....short tons	45,229	52,862	59,007	24,199	28,993	29,785	47,937	48,270	52,108	-----	-----	-----
At publishers.....short tons	200,651	221,368	227,443	161,318	191,647	205,532	186,307	199,214	209,044	-----	-----	-----
In transit to publishers.....short tons	36,274	32,422	38,885	48,716	44,781	44,676	42,767	44,266	39,744	-----	-----	-----
<b>Box Board</b>												
Operation.....thous. of inch hours	7,842	7,856	7,927	9,013	9,228	9,806	8,630	8,335	9,564	66,971	75,036	64,469
Operation.....per ct. of capacity	69.1	67.4	67.2	76.9	75.7	77.5	71.1	71.4	75.4	-----	-----	-----
Production.....short tons	221,525	221,696	222,372	233,164	244,318	265,063	236,099	206,246	237,776	1,840,284	2,019,779	1,811,051
New orders.....short tons	221,526	229,792	223,006	223,723	244,510	269,951	236,077	211,152	241,228	1,846,134	1,996,065	1,813,682
Unfilled orders, end of month.....short tons	58,866	65,819	64,457	73,330	76,091	80,634	80,834	82,325	84,726	-----	-----	-----

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>PAPER AND PRINTING—Continued</b>												
<b>Box Board—Continued</b>												
Consumption of waste paper... short tons..	210,793	206,547	213,015	232,060	214,574	256,339	211,107	194,261	218,429	1,763,843	1,901,086	1,673,539
Shipments... short tons..	225,336	222,341	223,943	236,147	242,696	267,039	229,901	209,412	238,885	1,836,041	2,010,322	1,804,062
Stocks, end of month... short tons..	70,904	71,601	71,233	61,747	62,779	61,268	55,818	51,044	50,150			
Stocks of waste paper, end of month:												
On hand... short tons..	184,451	173,387	175,653	156,352	170,745	171,218	134,577	137,068	121,529			
In transit and unshipped purchases... tons..	38,241	43,393	38,665	55,543	62,967	59,480	43,490	62,066	48,118			
<b>Other Paper</b>												
Binder's board, production... short tons..	1,592	1,400	1,620	3,092	2,828	3,443	2,705	2,153	3,092	14,385	24,518	25,675
Book paper:												
Production... short tons..	112,096	105,370	104,316	129,743	130,768	138,614	122,387	117,492	130,416	986,668	1,065,844	1,008,705
Ratio to capacity... per cent..	87	78	75	94	91	93	84	80	89			
Shipments... short tons..	107,612	110,737	106,089	130,132	130,245	136,951	120,551	118,314	133,024	967,568	1,072,096	998,024
Stocks, end of month... short tons..	120,169	117,766	115,411	74,255	74,998	77,248	89,385	88,491	85,836			
New orders—												
Coated												
... p. ct. of normal production..	81	71	70	84	82	85	75	77	77			
Uncoated												
... p. ct. of normal production..	87	78	79	82	81	77	73	80	79			
Unfilled orders, end of month—												
Coated												
... p. ct. of normal production..	10	7	7	9	10	9	9	10	8			
Uncoated												
... p. ct. of normal production..	6	6	6	8	9	8	7	8	7			
Wrapping paper:												
Production... short tons..	77,138	73,915	77,476	87,191	84,093	91,849	90,577	88,477	100,779	650,989	729,153	760,460
Ratio to capacity... per cent..	84	77	81	85	79	83	84	86	89			
Shipments... short tons..	79,375	79,976	74,687	86,406	85,775	90,655	89,309	94,228	100,174	657,076	730,128	750,741
Stocks, end of month... short tons..	79,207	73,149	75,949	88,091	86,233	87,104	98,344	92,467	93,340			
Fine paper:												
Production... short tons..	33,854	33,290	31,616	38,513	37,624	38,943	38,225	33,984	39,331	301,546	315,924	311,472
Ratio to capacity... per cent..	74	70	67	90	85	84	84	80	84			
Shipments... short tons..	29,995	32,657	30,826	37,897	36,008	39,644	38,875	34,562	38,938	290,049	320,276	308,082
Stocks, end of month... short tons..	64,091	64,730	65,524	50,103	47,583	46,840	53,155	53,156	53,535			
All other grades:												
Production... short tons..	93,149	78,272	81,660	100,897	100,503	105,055	104,725	95,469	110,677	726,179	832,992	819,903
Shipments... short tons..	88,119	82,814	83,735	100,098	101,783	104,638	104,977	96,056	109,154	724,442	723,611	812,281
Stocks, end of month... short tons..	71,803	66,367	65,186	59,875	57,592	58,009	71,006	70,578	72,438			
Total paper (inc. newsprint and box board):												
Production... short tons..	649,896	615,383	619,041	710,713	751,102	760,392	711,686	651,529	735,099	5,419,199	5,882,381	5,656,272
Ratio to capacity... per cent..	78	71	72	84	83	86	82	77	83			
Shipments... short tons..	641,370	639,475	618,516	705,238	709,723	757,761	700,514	674,352	734,943	5,367,054	5,899,561	5,608,917
Stocks, end of month... short tons..	435,681	423,708	423,994	358,673	352,788	356,125	407,687	396,122	396,137			
<b>Paper-board Shipping Boxes</b>												
Operating activity:												
Total... per cent of normal..	73	72	70	85	80	89	76	72	79			
Corrugated... per cent of normal..	74	73	72	87	82	91	74	71	77			
Solid fiber... per cent of normal..	69	68	63	74	82	82	83	75	84			
Production:												
Total... thous. of sq. ft..	498,165	461,148	473,354	506,830	481,762	550,170	447,118	424,551	464,255	3,854,108	3,977,108	3,380,878
Corrugated... thous. of sq. ft..	393,130	374,709	388,030	406,908	384,885	448,920	341,291	335,732	364,756	3,104,960	3,148,539	2,595,632
Solid fiber... thous. of sq. ft..	97,474	86,439	85,324	99,922	96,877	101,250	105,827	88,819	99,499	731,487	828,569	785,246
Rope paper sacks, shipments												
... rel. to 1921-22..	87	85	78	96	85	101	83	89	111			
<b>Printing</b>												
Sales books:												
New orders... thous. of books..	12,688	10,903	11,026	12,332	11,476	12,839	12,711	12,098	12,538	95,070	99,053	99,156
Shipments... thous. of books..	12,540	10,572	11,918	12,445	13,737	13,631	13,100	9,886	13,738	93,990	90,708	95,825
Book publication:												
American manufacture... no. of titles..	440	418	-----	695	501	819	745	555	551	-----	5,437	5,161
Imported... no. of titles..	71	74	-----	125	131	177	113	128	169	-----	1,140	1,074
Blank forms, new orders... thous. of sets..	64,544	59,152	55,779	58,887	57,225	54,054	53,774	48,963	58,108	494,460	473,313	370,315
Printing activity... relative to 1924..	96	89	-----	101	103	103	96	96	97	-----	-----	-----
<b>BUILDING CONSTRUCTION AND HOUSING</b>												
<b>Building Costs</b>												
Building materials:												
Frame house, 6-rm. 1st of mo. rel. to 1913..	175	173	169	176	177	177	176	175	177			
Brick house, 6-rm. 1st of mo. rel. to 1913..	179	177	175	181	182	182	181	181	181			
Bldg. costs, 1st of mo. rel. to 1913..	203.4	201.0	201.0	205.7	204.8	205.9	206.2	206.7	207.3			
Bldg. costs (A. G. C.), 1st of mo. rel. to 1913..	200	199	-----	203	202	203	198	198	200			
Construction costs (Am. Appraisal):												
Frame... rel. to 1913..	198	197	194	204	204	204	203	204	204			
Brick, steel frame... rel. to 1913..	193	193	190	197	197	197	198	198	198			
Brick, wood frame... rel. to 1913..	212	211	208	214	214	214	212	212	213			
Reinforced concrete... rel. to 1913..	198	197	195	201	200	201	201	201	201			
<b>Building and Engineering Construction</b>												
Total construction, all types:												
Projects... number..	13,359	12,535	11,622	17,142	16,601	16,053	20,061	17,653	17,947	95,101	125,049	140,398
Floor space... thous. of sq. ft..	48,214	44,604	39,933	71,826	75,464	66,720	94,381	82,125	78,873	367,752	571,028	665,550
Valuation... thous. of dolls..	600,573	367,528	347,318	529,891	652,436	488,882	650,466	583,433	516,970	3,352,859	4,156,866	4,543,270
Commercial buildings:												
Projects... number..	1,916	1,925	1,919	2,103	2,173	2,187	2,091	1,991	2,035	16,087	16,730	16,316
Floor space... thous. of sq. ft..	9,489	7,332	7,914	13,934	14,420	14,322	14,654	17,609	12,553	77,178	115,910	107,866
Valuation... thous. of dolls..	59,080	46,941	50,860	80,884	91,348	71,955	93,942	95,697	58,911	507,419	652,873	622,130

\* Revised.



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>BUILDING CONSTRUCTION AND HOUSING—Continued</b>												
<b>Building and Engineering Construction—Continued</b>												
Industrial buildings:												
Projects.....number.....	448	453	483	542	549	579	511	438	506	3,739	4,525	3,954
Floor space.....thous. of sq. ft.....	4,359	5,300	3,699	8,434	9,651	10,425	10,887	6,289	8,748	40,352	71,124	61,554
Valuation.....thous. of dolls.....	93,619	35,167	20,695	70,036	66,604	75,265	63,537	31,400	42,607	388,266	535,942	381,438
Educational buildings:												
Projects.....number.....	696	823	548	639	728	603	703	686	611	3,709	3,400	3,631
Floor space.....thous. of sq. ft.....	6,730	6,514	4,141	6,663	6,944	5,428	7,390	5,905	5,762	42,530	42,740	43,314
Valuation.....thous. of dolls.....	48,919	42,748	25,897	43,417	47,979	32,349	46,135	36,926	35,713	265,208	269,645	273,510
Hospital and institutional buildings:												
Projects.....number.....	125	127	120	120	133	117	106	100	117	836	783	742
Floor space.....thous. of sq. ft.....	1,903	1,927	1,782	1,694	2,036	1,964	1,913	1,697	1,659	14,947	11,309	11,896
Valuation.....thous. of dolls.....	19,675	13,073	14,090	12,326	15,697	14,382	14,396	12,759	11,913	122,393	88,589	89,463
Public buildings:												
Projects.....number.....	155	156	137	176	133	152	148	121	143	982	947	920
Floor space.....thous. of sq. ft.....	1,115	2,650	2,031	960	685	948	995	993	945	12,192	7,880	7,310
Valuations.....thous. of dolls.....	8,554	13,947	12,547	5,854	8,550	8,293	6,673	6,602	6,294	88,817	78,342	51,916
Religious and memorial buildings:												
Projects.....number.....	236	220	206	276	263	225	291	272	256	1,450	1,615	1,814
Floor space.....thous. of sq. ft.....	1,315	873	852	1,474	1,567	1,431	1,817	1,879	1,572	8,396	9,305	11,763
Valuation.....thous. of dolls.....	11,809	8,030	6,879	13,100	11,969	10,058	15,321	15,347	12,283	71,134	77,447	96,815
Social and recreational buildings:												
Projects.....number.....	242	270	220	254	248	254	282	240	236	1,807	1,814	1,942
Floor space.....thous. of sq. ft.....	1,253	1,059	1,462	1,311	1,924	1,832	2,697	2,632	2,573	10,875	12,946	19,243
Valuation.....thous. of dolls.....	10,187	8,423	9,478	9,624	15,816	11,204	21,527	18,624	16,654	84,406	99,129	159,929
Residential buildings, all types:												
Projects.....number.....	7,012	6,297	5,979	10,910	10,051	9,727	13,702	11,569	11,868	52,066	81,890	97,607
Floor space.....thous. of sq. ft.....	20,782	18,231	16,843	36,485	37,759	29,544	53,723	44,671	44,575	154,466	294,139	398,713
Valuation.....thous. of dolls.....	96,816	84,333	82,670	173,809	199,925	146,088	258,084	228,703	213,705	746,417	1,433,084	1,973,269
Public works and utilities:												
Projects.....number.....	2,529	2,264	2,010	2,122	2,323	2,209	2,327	2,236	2,175	14,375	13,345	13,472
Floor space.....thous. of sq. ft.....	1,270	718	1,208	872	478	825	305	451	486	16,820	5,674	4,071
Valuation.....thous. of dolls.....	251,916	114,866	124,202	120,841	194,547	119,288	130,852	137,075	118,890	1,078,807	921,814	896,798
Contracts awarded, Canada.....thous. of dolls.....	54,728	37,374	40,409	72,420	57,941	58,622	59,926	38,360	39,449	318,409	394,685	434,066
Building volume (A. G. C.).....rel. to 1913.....	191	199	206	231	218	239	244	237	239			
<b>BUILDING MATERIALS</b>												
<b>Softwood Lumber</b>												
Douglas fir:												
Exports, lumber.....M ft. b. m.....	85,004	61,813	42,129	83,966	98,179	72,811	85,174	54,181	59,236	450,486	634,922	517,545
Exports, timber.....M ft. b. m.....	41,849	22,369	25,850	51,571	43,932	48,303	43,142	45,471	40,837	280,083	380,543	383,063
Price, No. 1 common.....dolls. per M ft. b. m.....	14.30	14.47	13.44	18.74	18.72	18.57	16.68	16.99	17.75			
Price, flooring, 1 x 4, "B" and better, V. G.....dolls. per M ft. b. m.....	36.97	36.57	35.65	42.69	42.73	42.96	35.15	36.13	37.19			
California redwood:												
Production (computed).....M ft. b. m.....	31,095	28,335	28,835	37,866	28,435	44,923	36,190	30,092	41,137	269,771	304,745	321,248
Shipments (computed).....M ft. b. m.....	28,384	31,305	25,044	41,507	28,672	48,648	38,825	29,615	43,983	249,038	308,135	311,763
New orders (computed).....M ft. b. m.....	25,092	30,574	25,293	38,776	35,657	44,930	38,022	31,620	39,855	249,919	327,524	316,967
Unfilled orders, end of month (computed).....M ft. b. m.....	25,815	26,254	26,573	40,257	47,235	44,590	46,519	48,910	45,093			
California white pine:												
Production.....M ft. b. m.....	100,203			118,422	120,968	126,934	133,064	123,923	145,491		762,947	795,005
Shipments.....M ft. b. m.....	64,825			98,779	97,302	102,334	107,019	105,482	118,310		815,244	805,400
Stocks, end of month.....M ft. b. m.....	539,495			463,175	486,416	516,220	477,079	506,119	516,764			
New orders.....M ft. b. m.....	64,689			105,832	88,208	95,986	89,802	96,433	102,805		773,653	713,629
Unfilled orders, end of month.....M ft. b. m.....	141,944			156,475	150,643	162,494	183,610	190,185	181,014			
Northern pine:												
Lumber:												
Production.....M ft. b. m.....	41,891	37,849	27,583	50,537	50,733	49,846	51,756	52,384	57,335	218,589	318,036	344,368
Shipments.....M ft. b. m.....	25,160	22,101	21,515	44,197	44,825	43,764	47,243	48,300	47,755	200,217	329,998	329,873
New orders.....M ft. b. m.....	24,290	19,962	19,503	37,142	40,012	42,485	47,018	41,820	41,435	178,245	305,989	310,202
Lath:												
Production.....thousands.....	4,558	5,214	3,968	6,818	8,822	8,442	11,706	13,476	12,318	23,340	52,421	71,835
Shipments.....thousands.....	4,001	4,473	4,833	10,256	10,083	9,258	11,151	9,734	11,099	32,301	66,685	67,729
North Carolina pine:												
Production (computed).....M ft. b. m.....	35,917	26,803	27,349	53,270	47,831	48,993	57,904	44,471	45,437	297,514	458,437	403,865
Shipments (computed).....M ft. b. m.....	33,164	30,730	33,481	59,080	50,946	48,230	59,528	48,433	48,643	293,328	448,105	420,349
Northern hemlock:												
Production.....M ft. b. m.....	9,555	13,245	8,223	13,527	15,359	14,908	18,426	16,348	20,449	84,199	119,949	135,008
Shipments.....M ft. b. m.....	8,455	8,033	7,007	16,262	18,614	16,020	22,343	18,920	22,661	63,670	110,457	130,747
<b>Hardwood Lumber</b>												
Walnut lumber:												
Production.....M ft. b. m.....	1,850	1,312	1,174	4,532	3,839	4,608	3,422	2,527	2,931	15,576	29,958	23,645
Shipments.....M ft. b. m.....	1,696	1,123	1,511	3,699	3,570	3,607	3,000	2,742	2,863	13,817	29,224	23,130
Stocks, end of month.....M ft. b. m.....	20,281	20,454	20,090	12,960	12,640	14,303	13,530	13,116	13,166			
New orders.....M ft. b. m.....	1,989	1,031	1,698	3,625	3,627	3,266	2,538	2,731	2,990	13,080	29,789	23,361
Unfilled order, end of month.....M ft. b. m.....	3,970	4,016	4,025	7,636	6,474	6,892	5,216	5,088	5,270			
Walnut logs:												
Purchased.....M ft. log measure.....	712	598	886	3,711	2,951	3,667	2,519	2,633	2,736	10,622	23,482	19,833
Made into lumber and veneer.....M ft. log measure.....	1,268	943	1,029	3,241	3,217	3,358	2,670	2,527	2,579	12,816	22,823	20,060
Stocks, end of mo.....M ft. log measure.....	1,198	885	745	2,253	2,773	2,441	2,752	2,985	3,096			
Northern hardwoods:												
Production.....M ft. b. m.....	16,321	14,363	9,225	31,348	24,961	22,459	28,705	23,673	20,073	163,286	264,559	267,760
Shipments.....M ft. b. m.....	13,345	12,649	11,167	24,444	24,413	27,469	28,498	26,194	27,597	127,246	219,112	219,656
Gum:												
Stocks, total, end of month.....mill. ft. b. m.....	598	609		475	465	469	555	542	543			
Stocks, unsold, end of month.....mill. ft. b. m.....	470	488		325	318	325	424	419	410			
Unfilled orders, end of month.....mill. ft. b. m.....	128	120		150	147	144	130	124	132			

Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>BUILDING MATERIALS—Contd.</b>												
<b>Hardwood Lumber—Contd.</b>												
Oak:												
Stocks, total, end of month.....mill. ft. b. m.	1,049	1,044	923	955	982	1,000	974	959				
Stocks, unsold, end of month.....mill. ft. b. m.	917	929	747	785	802	854	809	800				
Unfilled orders, end of month.....mill. ft. b. m.	132	115	176	169	181	146	165	159				
All hardwoods:												
Production.....mill. ft. b. m.	214	172	300	311	334	236	244	263			2,502	2,098
Shipments.....mill. ft. b. m.	165	150	285	278	296	248	263	285			2,435	2,127
New orders.....mill. ft. b. m.	143	128	277	278	300	263	262	289			2,476	2,202
Stocks, total, end of month.....mill. ft. b. m.	3,294	3,323	2,681	2,731	2,772	2,817	2,786	2,771				
Stocks, unsold, end of month.....mill. ft. b. m.	2,737	2,795	2,031	2,088	2,122	2,289	2,225	2,211				
Unfilled orders, end of month.....mill. ft. b. m.	557	526	657	643	645	528	547	557				
<b>Flooring</b>												
Maple flooring:												
Production.....M ft. b. m.	3,968	3,755	3,724	5,418	6,450	6,918	7,608	7,784	8,413	40,400	51,757	60,933
Shipments.....M ft. b. m.	4,469	5,175	4,762	6,420	7,883	8,435	8,686	8,311	9,515	37,688	54,477	64,638
Stocks, end of month.....M ft. b. m.	30,170	28,786	26,909	20,964	21,913	20,480	26,271	24,667	23,232			
New orders.....M ft. b. m.	4,083	3,881	3,805	3,822	6,159	6,927	8,767	7,465	8,851	32,471	52,780	63,501
Unfilled orders, end of month.....M ft. b. m.	5,430	4,388	3,613	10,600	10,431	8,881	10,500	10,076	10,187			
<b>Fabricated Structural Steel</b>												
New orders (prorated).....short tons.	\$ 272,000	\$ 280,000	264,000	346,500	350,350	361,900	296,450	296,450	354,200	2,040,000	2,633,400	2,221,450
Ratio to capacity.....per cent.	68	70	66	90	91	94	77	77	92			
Shipments (prorated).....short tons.	\$ 296,000	\$ 288,000	280,000	288,750	304,150	338,800	261,800	265,650	288,750	2,260,000	2,344,650	1,978,900
Ratio to capacity.....per cent.	74	72	70	75	79	88	68	69	75			
<b>Portland Cement</b>												
Production.....thous. of bbls.	17,239	17,080	17,821	16,803	17,315	18,585	17,497	17,474	18,759	110,795	110,976	113,294
Operation.....per ct. of capacity.	81.4	77.8	81.0	80.9	80.4	86.1	90.1	97.0	93.1			
Shipments.....thous. of bbls.	18,781	20,147	20,299	18,949	20,319	23,052	18,421	19,901	21,970	110,584	113,619	115,824
Stocks, end of month.....thous. of bbls.	29,364	26,298	23,810	27,605	24,525	20,056	25,029	22,580	19,374			
Stocks, clinker, end of month.....thous. of bbls.	13,452	15,069	15,237	13,587	11,619	8,995	12,944	11,707	9,357			
Wholesale prices, composite, dolls. per bbl.	1.600	1.600	1.600	1.650	1.650	1.604	1.683	1.683	1.683			
Common brick:												
Stocks, end of month—												
Burned.....thousands.	390,782	341,993	350,940	308,257	290,044	290,265	302,249	408,563	491,088			
Unburned.....thousands.	213,848	197,069	222,710	154,185	95,756	110,904	130,990	208,202	206,938			
Shipments.....thousands.	123,694	82,429	105,493	154,021	118,834	130,982	219,522	238,941	218,339	740,185	1,077,096	1,625,111
Unfilled orders, end of month.....thousands.	182,680	95,101	149,034	163,126	148,289	109,564	260,970	290,457	221,625			
Plants closed down.....number.	69	67	62	50	17	56	3	11	14	680	354	277
Price, red, New York, dolls. per thous.	10.00	10.00	9.50	11.00	10.13	10.13	13.50	13.50	13.50			
Sand-lime brick:												
Production.....thousands.	10,317	10,415	9,636	17,578	16,061	16,838	19,134	18,072	21,680	71,697	109,014	131,915
Shipments by rail.....thousands.	2,929	3,102	2,921	5,412	4,263	4,684	6,120	6,055	8,284	23,825	32,950	44,996
Shipments by truck.....thousands.	6,809	6,781	6,437	13,757	12,266	11,615	14,437	11,772	13,215	45,462	85,971	89,454
Stocks, end of month.....thousands.	13,191	14,328	15,496	10,447	8,854	9,714	11,656	12,591	14,446			
Unfilled orders, end of month.....thousands.	9,314	9,797	7,762	14,968	14,739	9,925	11,718	11,762	14,503			
Floor and wall tile:												
Production.....thous. of sq. ft.	3,859	3,690	6,247	6,244	6,376	6,192	6,452	6,841			49,204	45,177
Shipments, quantity.....thous. of sq. ft.	4,280	4,385	6,424	6,459	6,797	6,604	6,595	7,403			46,136	45,823
Shipments, value.....thous. of dolls.	1,539	1,576	2,412	2,505	2,684	2,462	2,529	2,847			17,798	17,423
Stocks, end of month.....thous. of sq. ft.	17,049	16,562	18,092	18,301	17,919	13,031	12,837	12,343				
Terra cotta, new orders:												
Quantity.....net tons.	8,326	7,829	\$ 5,774	10,789	11,756	8,606	16,108	14,191	12,058	56,025	88,709	103,137
Value.....thous. of dolls.	734	741	\$ 538	1,178	1,183	940	1,558	1,385	1,123	5,530	9,720	9,776
Plate glass:												
Production, polished.....thous. of sq. ft.	9,128	8,326	5,523	12,278	13,057	14,722	11,354	9,966	12,159	77,216	88,698	83,386
<b>Roofing</b>												
Prepared roofing, shipments:												
Total.....thous. of sqs.	2,384	2,151	2,544	3,756	3,324	2,903	4,196	2,895	3,071	18,499	29,181	25,756
Smooth roll.....thous. of sqs.	924	803	1,021	1,452	1,338	1,077	1,726	1,195	1,257	8,023	13,053	11,024
Grit roll.....thous. of sqs.	653	612	655	988	983	829	1,157	830	853	4,739	7,286	7,084
Shingles—												
Strip, patented, and hexagon.....thous. of sqs.	656	597	692	1,107	801	813	1,091	718	784	4,726	7,392	6,329
Individual and single thickness.....thous. of sqs.	151	139	176	209	202	184	222	152	176	1,001	1,450	1,317
<b>Building Equipment</b>												
<b>Enameled Ware</b>												
Baths:												
Shipments.....pieces.	52,189	53,259	51,915	89,388	99,705	101,050	119,297	111,067	103,878	424,047	697,020	809,628
Stocks, end of month.....pieces.	181,746	173,860	165,569	181,677	162,694	152,349	120,723	113,430	122,167			
New orders.....pieces.	54,829	48,706	48,529	82,349	119,670	116,532	113,017	101,603	96,876	422,618	747,592	917,628
Unfilled orders, end of month.....pieces.	44,050	39,497	36,110	41,644	61,118	74,973	121,061	101,560	68,263			
Lavatories:												
Shipments.....pieces.	62,124	\$ 63,895	59,173	101,900	108,077	125,920	131,623	120,600	114,070	526,942	801,009	920,762
Stocks, end of month.....pieces.	197,117	\$ 187,979	186,927	246,575	223,657	192,213	173,898	164,830	161,276			
New orders.....pieces.	64,711	\$ 56,875	55,126	92,709	140,109	146,983	138,113	104,262	102,140	531,312	873,970	1,038,591
Sinks:												
Shipments.....pieces.	61,329	\$ 64,459	62,455	102,709	114,051	120,018	128,298	122,593	116,497	539,413	824,519	940,714
Stocks, end of month.....pieces.	261,633	\$ 257,039	254,204	298,739	273,463	254,210	227,929	213,539	216,338			
New orders.....pieces.	62,424	\$ 61,766	55,844	94,446	138,064	142,536	128,368	116,236	96,830	536,874	897,895	1,049,001

\* Revised.

TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>BUILDING MATERIALS—Continued</b>												
<b>Enameled Ware—Continued</b>												
Miscellaneous sanitary ware:												
Shipments.....pieces.....	27,283	25,987	26,688	42,061	44,762	48,554	48,221	48,550	54,003	235,357	322,860	388,502
Stocks, end of month.....pieces.....	125,505	104,102	102,022	142,411	133,265	126,626	111,141	110,330	95,958	41,692	232,921	347,941
New orders.....pieces.....	27,159	23,537	28,208	41,817	54,131	53,402	47,197	41,605	41,692			407,327
Small ware (all except baths):												
Unfilled orders, end of month.....pieces.....	126,144	113,899	104,569	154,243	214,996	259,787	315,920	274,135	174,072			
Vitreous china plumbing fixtures:												
New orders.....pieces.....	128,991	142,024	138,030	196,707	244,351	242,596	225,694	184,783	217,305	1,310,369	2,059,889	2,223,381
Shipments.....pieces.....	157,773	156,650	165,545	246,071	271,411	268,619	274,351	248,363	267,610	1,482,275	1,963,383	2,192,471
Unfilled orders, end of month.....pieces.....	313,895	299,269	271,754	438,715	411,655	385,632	406,919	403,339	353,034			
Stocks, end of month.....pieces.....	648,805	654,535	613,449	591,633	582,314	559,418	444,399	460,360	477,593			
Porcelain plumbing fixtures:												
Net new orders.....pieces.....	7,367	7,480	8,232	9,669	13,153	12,168	13,405	12,976	12,960	63,522	96,802	199,914
Shipments.....pieces.....	6,336	7,448	7,214	10,807	11,845	13,873	19,257	20,253	22,970	49,546	89,055	132,263
Unfilled orders, end of month.....pieces.....	35,674	34,171	33,493	31,234	30,088	26,911	95,246	81,699	65,029			
Stocks, end of month.....pieces.....	37,410	34,259	32,696	45,848	37,947	40,343	40,823	48,621	47,690			
Plumbing fixtures, 6 pieces.....dollars.....	99.25	98.27	98.32	97.54	97.94	98.84	100.90	100.09	101.21			
<b>Illuminating Glassware</b>												
Production:												
Total.....number of turns.....	2,262	1,663	1,850	3,239	1,818	2,819	3,365	1,748	2,985	19,638	25,225	23,467
Ratio to capacity.....per ct. of capacity.....	36.5	28.8	33.6	46.3	18.7	36.4	44.2	22.3	36.5			
New orders.....per ct. of capacity.....	36.1	26.8	29.9	44.6	40.1	42.9	41.6	40.2	44.5			
Shipments.....per ct. of capacity.....	36.2	28.0	30.4	45.1	35.3	43.8	42.6	26.8	42.5			
Unfilled orders, end of month.....number of weeks' supply.....	1.1	.8	.7	1.6	1.5	1.4	1.3	1.6	1.8			
Stocks, end of month.....number of weeks' supply.....	5.9	4.5	4.6	6.0	5.4	4.7	4.4	4.6	4.3			
<b>Furniture</b>												
Household furniture and case goods:												
Southeastern district—												
Shipments.....dolls., av. per firm.....	32,956	45,686	56,456	47,831	53,748	70,482	39,214	43,462	65,947	330,470	459,605	289,925
Unfilled orders.....dolls., av. per firm.....	33,951	35,903	33,432	36,232	64,573	77,568	30,858	59,214	57,288			
Grand Rapids district—												
Unfilled orders, end of month.....No. days' production.....	24	27	24	58	68	64	46	54	53			
New orders.....No. days' production.....	10	18	18	20	36	30	27	31	30	134	227	222
Shipments.....No. days' production.....	12	13	18	22	24	30	17	22	31	126	189	183
Outstanding accounts, end of month.....No. days' sales.....	36	37	40	44	46	53	44	38	56	310	433	393
Cancellations.....per ct. of new orders.....	23.0	7.0	6.0	11.0	5.0	5.0	10.0	5.0	7.0			
Plant operations.....per ct. of full time.....	70.0	67.0	79.0	88.0	90.0	97.0	95.0	88.0	92.0			
Steel furniture:												
Business group—												
Shipments.....thous. of dolls.....	2,165	1,813	1,967	2,544	2,659	2,483	3,009	2,515	2,565	18,840	23,329	23,159
New orders.....thous. of dolls.....	2,007	1,842	1,766	2,553	2,590	2,418	2,764	2,594	2,619	18,342	23,416	23,805
Unfilled orders, end of month.....thous. of dolls.....	1,492	1,529	1,331	2,325	2,241	2,171	1,993	2,072	2,118			
Shelving—												
Shipments.....thous. of dolls.....	705	610	559	920	867	890	720	723	826	5,611	7,783	5,958
New orders.....thous. of dolls.....	699	601	529	959	939	931	737	713	863	5,673	8,210	6,138
Unfilled orders, end of month.....thous. of dolls.....	746	636	703	934	999	1,041	729	706	734			
<b>PLYWOOD AND VENEER</b>												
Rotary-cut veneer:												
Receipts.....number of carloads.....	115	118	100	169	272	174	164	181	259	1,168	1,600	1,210
Purchases.....number of carloads.....	133	116	106	181	260	122	244	249	325	1,088	1,854	1,652
Bushel baskets:												
Production.....dozens.....	217,381	298,282	203,492	202,426	232,860	264,212	188,021	229,342	243,056	1,410,299	1,626,667	1,641,724
Shipments.....dozens.....	163,639	309,135	227,120	200,814	232,154	360,050	254,432	294,662	262,810	1,702,175	1,429,809	1,605,810
Stocks, end of month.....dozens.....	648,255	637,419	513,488	665,881	674,339	584,410	602,083	565,910	570,726			
<b>GLASS CONTAINERS</b>												
Actual production:												
Quantity.....gross.....	2,528	2,406	2,439	2,561	2,396	2,715	2,589	2,374	2,686	19,362	20,076	19,620
Relation to capacity.....per cent.....	78.1	71.5	72.5	81.5	73.3	77.5	86.7	77.2	80.9			
New orders.....gross.....	3,249	1,980	2,636	2,023	2,224	1,922	2,225	2,008	1,909	21,235	19,609	18,925
Shipments.....gross.....	2,451	2,368	2,459	2,679	2,507	2,656	2,552	2,311	2,654	19,188	20,149	19,454
Unfilled orders, end of month.....gross.....	11,147	10,152	10,024	9,278	8,824	8,079	9,642	9,166	8,467			
Stocks, end of month.....gross.....	6,750	6,790	6,768	6,500	6,388	6,447	6,220	6,267	6,297			
<b>CHEMICALS AND OILS</b>												
<b>Chemicals</b>												
Sulphuric acid:												
Exports.....thous. of lbs.....	409,748	570,683	176,023	693,027	506,758	641,492	732,598	773,624	291,035	3,553,598	4,524,324	5,022,603
Price, wholesale.....dolls. per 100 lbs.....	.78	.78	.78	.78	.78	.78	.78	.78	.78			
Nitrate of soda:												
Imports.....long tons.....	18,737	28,644	9,083	64,733	40,501	51,684	76,135	28,150	75,318	450,339	735,482	816,914
Production in Chile.....metric tons.....	205,905	199,284	202,466	252,600	272,300	270,300	252,300	264,300	275,000	1,766,155	2,153,100	2,042,300
Potash salts:												
Imports (commercial).....long tons.....	17,644	50,965	48,183	9,895	37,126	45,505	14,525	38,461	57,327	275,231	213,850	239,097
Production in France (K <sub>2</sub> O content).....metric tons.....				39,700	41,000	42,500	34,000	30,260	34,300		319,031	259,178
Sales in Germany (K <sub>2</sub> O content).....metric tons.....				97,723	89,190	95,372	99,948	102,668	108,696		1,014,558	1,014,282
Superphosphate (acid phosphate):												
Production.....short tons.....	290,615	308,241	295,790	270,447	296,629	309,749	294,115	294,121	304,857	2,681,254	2,353,932	2,546,674
Stocks, end of month.....short tons.....	1,079,061	1,309,280	1,524,558	916,847	1,171,912	1,362,679	1,025,612	1,237,066	1,380,278			
Shipments.....short tons.....	54,488	73,134	64,756	54,862	65,162	88,230	60,343	64,378	87,688	1,520,121	1,464,724	1,507,320

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>CHEMICALS AND OILS—Continued</b>												
<b>Chemicals—Continued</b>												
Fertilizer:												
Exports.....long tons	113,538	143,620	115,580	140,090	123,515	112,346	112,077	98,803	103,575	1,125,665	992,976	864,769
Consumption, Southern States.....short tons	79,171	18,468	38,256	99,407	20,047	* 46,930	45,776	19,101	* 64,823	5,085,632	4,973,796	5,072,611
Crude arsenic:												
Production.....short tons	2,168	1,428	1,217	2,452	1,444	887	1,703	1,385	2,086	12,519	11,758	11,331
Stocks, end of month.....short tons	3,654	3,495	3,254	2,161	1,998	1,876	2,099	2,105	2,999			
Refined arsenic:												
Production.....short tons	1,081	1,032	1,002	917	812	857	732	728	803	7,576	6,959	5,828
Stocks, end of month.....short tons	2,024	1,897	1,525	3,709	3,305	3,414	1,916	1,568	1,618			
Dyes and dyestuffs, exports:												
Vegetable.....thous. of lbs.	194	110	124	264	126	191	154	254	237	1,330	1,380	2,224
Coal tar.....thous. of lbs.	2,612	1,153	1,757	21	3,180	13	1,720	3,841	1,351	18,924	11,597	16,896
Price index numbers:												
Crude drugs.....rel. to Aug., 1914	154	147	143	184	183	179	199	197	193			
Essential oils.....rel. to Aug., 1914	111	107	97	190	191	188	166	162	161			
Drugs and Pharmaceuticals.....rel. to Aug., 1914	176	176	176	163	173	177	169	168	164			
Chemicals.....rel. to 1927	96	95	94	100	100	100	99	99	99			
Oils and fats.....rel. to 1927	89	88	87	92	92	96	96	95	94			
<b>Wood Chemicals</b>												
Acetate of lime:												
Production—												
United States.....thous. of lbs.	6,297	3,992	4,660	11,935	10,658	11,025	9,390	9,570	9,486	65,540	94,185	88,385
Canada.....thous. of lbs.	456			677	720	715	720	443		6,139	7,397	6,164
Shipments—												
United States.....thous. of lbs.	5,682	* 3,781	3,503	11,772	11,072	10,862	10,223	13,532	12,840	43,110	93,384	96,790
Canada.....thous. of lbs.	275	99	48	676	716	821	887	882	2,098	2,966	7,456	8,012
Stocks, end of month—												
United States.....thous. of lbs.	28,033	28,666	30,038	1,755	1,206	1,259	15,128	11,411	7,950			
Canada.....thous. of lbs.	3,952	3,852	3,804	102	179	73	2,848	2,333	140			
Exports.....thous. of lbs.			23		120		215	1,141	1,141	23	208	10,644
Price, wholesale.....dolls. per cwt.	4.29	3.11	3.00	4.50	4.50	4.50	3.50	3.50	3.88			
Methanol, crude:												
Production—												
United States.....gallons	410,363	230,162	272,823	676,193	633,731	656,414	528,029	544,693	535,803	4,032,782	5,567,819	4,925,248
Canada.....gallons	15,306			28,291	28,688	25,950	27,741	14,885		265,591	308,021	247,169
Stocks at crude plants, end of month—												
United States.....gallons	634,138	617,183	576,563	227,513	252,749	244,185	295,455	327,028	287,492			
Canada.....gallons	3,337	3,337	3,337	11,533	21,863	20,092	34,950	38,485	37,933			
Stocks at refineries and in transit—												
United States.....gallons	691,989	615,811	541,380	277,376	475,698	526,172	558,483	277,077	160,156			
Canada.....gallons	49,331	44,859	23,584	66,870	78,120	63,702	73,955	66,518	64,817			
Exports.....gallons	126,813	61,240	157,037	16,613	95,755	33,849	27,045	54,535	14,000	642,526	357,559	410,814
Wood at chemical plants:												
Consumption—												
United States.....cords	43,391	33,365	34,300	72,217	68,428	70,454	58,959	56,187	55,085	429,247	581,439	498,891
Canada.....cords	1,923			3,509	3,587	3,228	3,498	1,938		29,862	38,142	30,921
Stocks, end of month—												
United States.....cords	552,263	* 581,892	587,159	530,111	530,264	565,119	505,329	507,227	509,435			
Canada.....cords	70,000	70,000	70,000	72,586	72,126	72,026	73,900	73,699	73,700			
Daily capacity—												
Total.....cords	* 3,176	3,170	3,170	3,326	3,276	3,264	3,486	3,470	3,482			
Shutdown.....cords	* 1,088	1,714	1,598	361	468	475	697	807	1,053			
Methanol, refined:												
Production—												
United States.....gallons	376,905	265,509	275,712	423,811	259,118	454,160	603,247	541,113	436,811	2,757,347	3,501,079	3,935,592
Canada.....gallons	35,500	14,100	20,400	36,900	10,400	43,700	6,200	10,800	14,700	258,400	331,000	240,050
Stocks, end of month—												
United States.....gallons	702,587	677,532	543,107	759,740	712,752	783,674	541,083	444,496	396,730			
Canada.....gallons	38,951	32,876	41,783	51,787	31,185	37,761	45,733	39,210	26,715			
Shipments—												
United States.....gallons	441,870	356,274	510,215	449,245	365,438	487,153	596,502	667,549	497,971	3,045,280	3,834,465	4,026,025
Canada.....gallons	24,236	17,152	8,896	11,650	21,403	22,188	11,462	12,672	22,076	205,043	240,228	165,800
Price, wholesale, N. Y.....dolls. per gal.	.40	.40	.40	.58	.58	.58	.46	.47	.48			
<b>Ethyl Alcohol</b>												
Production.....thous. of gals.	13,100	11,617	12,890	12,545	16,871	20,026	13,036	16,618	18,764	95,768	123,337	106,565
Withdrawn for denaturation.....thous. of gals.	11,100	11,352	11,777	12,909	15,982	18,688	16,336	14,927	16,128	85,989	112,208	95,038
Warehouse stocks, end of month.....thous. of gals.	10,000	9,498	9,317	11,860	11,166	11,489	6,646	7,351	9,263			
<b>Explosives</b>												
(Black powder, permissible, and other high explosives)												
Production.....thous. of lbs.	33,546	30,810	31,168	34,383	35,756	40,584	32,625	30,084	35,092	258,089	287,508	254,307
Shipments.....thous. of lbs.	33,969	30,649	32,289	35,032	36,811	39,163	32,816	29,561	33,039	258,199	290,004	254,190
New orders.....thous. of lbs.	33,005	30,424	32,687	34,202	35,499	39,580	31,305	27,993	32,268	254,131	281,497	243,171
Stocks, end of month.....thous. of lbs.	17,181	17,392	16,043	17,225	16,964	17,529	16,732	17,158	18,554			
<b>Naval Stores</b>												
Turpentine (gum):												
Net receipts, southern ports.....barrels	46,711	55,822	46,521	48,658	54,872	49,436	48,111	46,637	42,724	250,947	249,671	215,957
Stocks at port, end of month.....barrels	42,344	58,491	65,024	57,728	65,570	63,151	61,336	69,245	73,304			
Price, southern, New York.....dolls. per gal.	.47	.43	.41	.52	.52	.52	.57	.55	.52			
Rosin (gum):												
Net receipts, southern ports.....barrels	149,880	178,876	151,269	154,168	181,433	172,670	148,041	148,250	145,357	839,081	858,329	725,123
Stocks at 3 ports, end of month.....barrels	196,857	242,948	267,540	123,505	169,420	* 205,595	165,604	178,225	227,517			
Price, B, New York.....dolls. per bbl.	6.50	5.90	5.39	7.88	8.51	8.51	9.10	9.71	9.59			

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>CHEMICALS AND OILS—Continued</b>												
<b>Naval Stores—Continued</b>												
Rosin (wood):												
Production.....barrels..	40,049	39,929	37,349	36,123	37,844	38,315	36,054	37,016	37,623	327,712	294,418	278,700
Stocks, end of month.....barrels..	109,198	117,318	114,281	113,449	104,492	98,777	108,200	112,703	114,074			
Turpentine (wood):												
Production.....barrels..	6,774	6,406	6,125	6,505	6,718	6,721	5,700	6,304	6,274	58,179	54,558	48,743
Stocks, end of month.....barrels..	13,762	13,642	12,772	4,778	4,623	4,713	8,510	7,786	6,898			
Pine oil:												
Production.....gallons..	248,777	241,193	224,546	215,153	235,892	229,388	191,947	238,767	225,668	1,976,244	1,791,305	1,841,511
Stocks, end of month.....gallons..	1,885,850	1,456,415	1,487,188	873,358	882,037	894,993	829,507	824,671	822,813			
<b>Fats and Oils</b>												
Total vegetable oils and copra:												
Exports.....thous. of lbs..	2,049	533	1,317	1,428	541	1,285	1,652	1,145	1,444	21,720	15,774	38,605
Imports.....thous. of lbs..	86,947	74,579	85,885	91,375	73,157	109,091	59,951	53,379	56,364	636,114	748,953	457,755
Copra, imports.....short tons..	16,106	18,663	16,885	23,828	21,693	26,622	20,488	24,409	19,716	164,004	214,293	147,341
Copra or coconut oil:												
Imports.....thous. of lbs..	25,590	8,118	19,331	32,571	23,669	36,623	12,671	19,629	12,581	199,533	273,712	158,980
Consumption in oleomargarine.....thous. of lbs..	11,763	11,455	11,479	12,029	12,658	14,715	11,791	10,642	11,910	110,322	115,200	98,821
Oleomargarine:												
Production.....thous. of lbs..	21,976	20,976	23,071	24,276	24,873	28,400	23,738	21,444	23,610	206,357	222,745	197,944
Consumption.....thous. of lbs..	22,178	18,782	24,672	23,379	24,977	25,788	23,926	20,490	24,965	202,804	219,034	197,043
Animal glues, shipments.....thous. of lbs..	4,788	5,585		6,246	6,376	7,231	5,887	6,621	6,780	738,933	746,474	745,594
<b>Cottonseed</b>												
Cottonseed:												
Receipts at mills.....short tons..	45,334	29,559	336,129	25,547	30,680	* 239,069	18,772	24,936	175,643	1,379,135	1,041,455	829,168
Consumption (crush).....short tons..	85,069	62,248	165,770	61,012	54,165	* 120,023	38,955	33,230	74,116	2,268,622	2,211,937	1,718,622
Stocks at mills, end of month.....short tons..	77,295	44,606	214,965	65,091	41,606	* 160,652	30,266	21,972	123,499			
Cottonseed oil, crude:												
Production.....thous. of lbs..	29,247	19,971	49,322	22,004	18,313	* 35,218	13,500	11,257	20,914	722,863	718,827	560,860
Stocks, end of month.....thous. of lbs..	22,750	8,110	25,606	29,682	19,182	* 28,823	34,559	20,351	15,261			
Cottonseed oil, refined:												
Production.....thous. of lbs..	47,721	29,182	26,525	40,430	27,933	* 22,877	22,274	25,930	21,012	718,017	752,194	622,557
Stocks, end of month.....thous. of lbs..	393,306	299,933	200,273	431,095	338,620	* 230,683	415,047	335,993	234,485			
Price, yellow, prime, New York.....dolls. per lb..	.083	.080	.084	.096	.096	.094	.102	.101	.094			
Consumption in oleomargarine.....thous. of lbs..	1,882	1,587	2,906	2,124	2,051	2,387	2,106	1,867	2,062	18,520	18,426	16,673
Cottonseed cake and meal:												
Production.....short tons..	40,890	27,516	76,440	28,942	25,774	* 56,303	19,847	14,065	35,101	1,015,295	1,009,552	792,216
Stocks, end of month.....short tons..	84,127	54,308	45,340	142,737	76,667	* 48,894	45,241	32,648	18,715			
Exports.....short tons..	248	304	175	4,777	11,969	12,837	143	71	944	36,110	127,345	107,728
<b>Flaxseed</b>												
Minneapolis and Duluth:												
Receipts.....thous. of bush..	314	294	3,266	492	381	1,479	632	245	1,025	5,274	4,019	4,782
Shipments.....thous. of bush..	267	193	1,436	271	340	567	392	272	426	2,982	2,531	3,955
Stocks, end of month.....thous. of bush..	433	319	447	764	360	23	764	411	310			
Imports.....thous. of bush..	371	360	551	2,366	1,293	1,020	1,644	1,484	1,068	11,849	17,785	12,186
Production, crop estimate.....thous. of bush..			* 24,611			* 16,844			* 19,928			
Price No. 1, Minneapolis.....dolls. per bush..	2.71	2.32	2.00	2.48	2.76	2.79	2.38	2.21	2.05			
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs..	6,274	6,436	6,117	15,205	14,381	10,787	17,196	14,229	13,571	54,404	113,213	118,982
Price, New York.....dolls. per lb..	.140	.140	.131	.105	.120	.129	.103	.100	.098			
Linseed cake and meal:												
Shipments from Minneapolis.....thous. of lbs..	5,768	5,066	13,398	7,632	12,215	15,683	11,421	10,057	16,051	84,717	131,831	160,900
Exports.....thous. of lbs..	29,066	24,833	22,593	60,131	80,855	74,874	45,136	47,219	52,394	305,502	520,618	380,247
<b>FOODSTUFFS</b>												
<b>Wheat</b>												
Visible supply, end of month:												
United States.....thous. of bush..	109,985	161,666	194,800	94,060	142,855	190,911	40,480	55,362	92,108			
Canada.....thous. of bush..	132,187	106,544	90,617	118,249	103,315	96,224	99,228	72,891	32,728			
Receipts, principal markets.....thous. of bush..	18,705	98,960	85,476	25,094	94,158	101,669	15,544	72,618	84,221	287,250	336,085	288,547
Shipments, principal markets.....thous. of bush..	20,575	42,047	48,053	18,644	42,577	60,983	14,840	33,543	46,105	185,621	210,341	178,607
Production, crop estimate:												
Winter wheat.....thous. of bush..			* 597,392			* 577,784			* 578,673			
Spring wheat.....thous. of bush..			* 240,369			* 228,006			* 336,203			
Total, wheat.....thous. of bush..			* 837,761			* 805,790			* 914,876			
Exports:												
United States—												
Wheat only.....thous. of bush..	8,066	11,934	18,646	4,564	8,691	12,094	5,006	4,153	10,374	62,973	51,132	38,051
Including wheat flour.....thous. of bush..	12,295	16,188	24,167	8,814	13,575	16,935	8,093	7,064	14,568	100,254	91,310	70,945
Canada—												
Including wheat flour.....thous. of bush..	21,681	22,834	20,461	29,796	20,538	13,050	25,182	35,944	29,220	117,293	177,400	199,986
Prices:												
No. 1, Northern Spring, Minneapolis.....dolls. per bush..	1.00	.92	.91	1.15	1.43	1.35	1.48	1.38	1.19			
No. 2, Red Winter, St. Louis.....dolls. per bush..	1.05	.85	.89	1.21	1.39	1.32	1.79	1.47	1.38			
No. 2, Hard Winter, Kansas City.....dolls. per bush..	.89	.80	.81	1.05	1.25	1.23	1.47	1.20	1.06			

\* As of Sept. 1.

\* Final estimate for 1929.

\* Final estimate for 1923.

\* Revised.

\* Cumulative through July 31

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
	<b>FOODSTUFFS—Continued</b>											
<b>Wheat Flour</b>												
Grindings of wheat:												
United States.....thous. of bush..	40,137	43,721	47,852	40,833	42,895	50,725	36,083	39,552	47,657	342,294	345,729	333,010
Canada.....thous. of bush..	5,218	6,448	6,930	7,029	7,247	7,178	6,304	6,769	7,330	45,661	59,326	55,063
Production:												
United States, actual.....thous. of bbls..	8,687	9,466	10,319	8,912	9,337	11,058	7,758	8,516	10,370	74,164	75,524	71,852
United States, prorated.....thous. of bbls..	9,423	10,507	11,562	9,838	10,449	12,562	8,854	9,409	14,567	81,226	84,661	80,798
Canada.....thous. of bbls..	1,161	1,436	1,548	1,548	1,603	1,607	1,359	1,458	1,590	10,192	13,042	11,922
Exports:												
United States.....thous. of bbls..	940	945	1,227	944	1,085	1,076	686	647	932	8,284	8,927	7,310
Canada.....thous. of bbls..	598	659	627	935	836	643	716	782	925	4,573	7,385	6,594
Grain offal, production.....thous. of lbs..	713,579	774,252	852,109	711,357	746,628	882,931	645,048	697,361	819,994	6,068,663	6,001,422	5,866,654
Capacity operated, flour mills.....per cent..	54	57	62	54	55	62	45	51	58			
Consumption (computed).....thous. of bbls..	7,883	10,012	9,585	8,494	8,365	11,686	8,268	7,762	10,435	72,942	74,238	72,090
Stocks, all positions, end of month (computed).....thous. of bbls..	9,300	8,850	9,600	8,000	10,084	8,800	6,200	7,847	7,400			
Wholesale prices:												
Standard patents,												
Minn.....dolls. per bbl..	5.83	5.51	5.34	6.38	7.69	7.31	7.95	7.36	6.62			
Winter, straights,												
Kansas City.....dolls. per bbl..	4.99	4.64	4.56	5.26	6.31	6.24	7.18	6.44	5.66			
<b>Corn</b>												
Exports, including meal.....thous. of bush..	776	395	332	981	850	895	1,045	891	1,018	6,214	31,770	16,950
Visible supply, end of month.....thous. of bush..	7,378	4,012	4,226	13,932	9,493	5,765	17,451	12,479	9,985			
Receipts, principal markets.....thous. of bush..	17,833	16,660	20,282	20,644	21,205	19,023	18,771	23,742	21,467	174,689	179,392	228,433
Shipments, prin. markets.....thous. of bush..	15,693	11,699	12,792	15,160	15,644	13,643	20,221	16,080	15,778	121,270	125,650	161,040
Grindings (starch, glucose).....thous. of bush..	6,100	6,103	6,565	6,697	6,558	7,672	6,428	5,833	5,193	52,261	57,477	58,573
Production, crop estimate.....thous. of bush..			21,982,765			32,614,307			42,818,901			
Prices:												
No. 3, Yellow,												
Chicago.....dolls. per bush..	.79	.82	.99	.91	.99	1.01	1.03	1.06	1.02			
No. 3, Yellow,												
Kansas City.....dolls. per bush..	.80	.80	.92	.88	.93	.99	1.02	1.00	.94			
No. 3, White, Chicago.....dolls. per bush..	.81	.84	.99	.94	1.00	1.01	1.03	1.06	1.02			
<b>Oats</b>												
Receipts, prin. markets.....thous. of bush..	7,114	8,725	25,277	8,486	10,123	36,320	7,144	6,610	27,271	84,163	102,871	104,004
Visible supply, end of month.....thous. of bush..	11,317	9,149	25,867	8,114	8,129	25,897	3,392	1,954	15,687			
Exports, including meal.....thous. of bush..	204	717	292	488	487	1,182	296	245	2,571	2,728	6,465	6,504
Production, crop estimate.....thous. of bush..			21,390,892			31,233,574			41,439,407			
Price, No. 3, white,												
Chicago.....dolls. per bush..	.38	.35	.39	.45	.47	.43	.68	.56	.38			
Grindings, Canada.....thous. of bush..	719	826	817	895	854	1,101	753	723	988	6,016	7,200	7,003
Production, oatmeal and rolled oats, Canada.....thous. of lbs..	9,660	10,893	11,032	11,360	12,145	14,228	9,974	9,320	15,968	74,873	91,247	89,793
<b>Barley</b>												
Receipts, prin. markets.....thous. of bush..	2,537	2,568	10,822	3,338	4,849	18,666	2,652	2,217	23,611	30,563	46,388	50,138
Visible supply, end of month.....thous. of bush..	4,671	3,997	7,429	5,731	5,518	9,805	711	685	6,313			
Exports.....thous. of bush..	550	698	1,281	2,783	4,120	4,624	1,910	2,242	8,658	7,084	22,387	18,892
Production, crop estimate.....thous. of bush..			2,322,700			3,303,552			4,357,487			
Price, No. 2, Minneapolis.....dolls. per bush..	.49	.47	.52	.60	.69	.61	.94	.85	.65			
<b>Rye</b>												
Receipts, prin. markets.....thous. of bush..	445	758	5,200	870	880	5,766	781	571	2,636	10,327	13,122	11,556
Visible supply, end of month.....thous. of bush..	11,248	10,969	12,649	6,422	6,447	8,015	1,465	1,146	1,440			
Exports, including flour.....thous. of bush..	3	18	23	295	106	470	1,297	195	709	233	1,691	7,221
Price, No. 2, Minneapolis.....dolls. per bush..	.57	.55	.60	.84	1.07	.98	1.23	1.11	.94			
Production, crop estimate.....thous. of bush..			2,46,655			3,40,533			4,43,366			
<b>Total Grains</b>												
Total grains exports, incl. flour.....thous. of bush..	13,829	18,015	26,095	13,361	19,138	24,106	12,641	10,637	27,644	116,515	153,955	121,063
<b>Rice</b>												
Southern paddy, receipts at mills.....bbls..	59,690	22,216	507,920	191,944	125,737	583,944	129,752	16,892	338,269	3,032,726	3,215,120	4,057,044
Shipments:												
Total from mills.....pockets (100 lbs.)	345,705	267,710	498,911	650,414	515,342	506,895	531,073	285,155	346,076	5,322,924	5,688,416	5,892,921
New Orleans.....pockets (100 lbs.)	65,195	56,861		130,369	113,969	126,470	115,399	35,274	96,643	7,542,868	7,886,457	1,112,779
Stocks, end of month.....pockets (100 lbs.)	687,350	450,146	487,724	865,117	485,177	506,953	1,067,092	829,608	695,660			
Exports.....pockets (100 lbs.)	202,224	124,181	99,249	261,377	231,401	221,314	291,094	189,456	120,281	1,536,949	2,737,980	2,437,450
Imports.....pockets (100 lbs.)	5,829	4,951	5,977	2,984	6,556	5,349	14,815	31,688	6,026	127,008	176,193	265,271
Production, crop estimate.....thous. of bush..			2,38,307			3,40,217			4,43,240			
<b>Fruits and Vegetables</b>												
Apples:												
Production, crop estimate.....thous. of bush..			2,146,057			3,142,078			4,186,893			
Cold-storage holdings, end of month.....thous. of bush..												
Car-lot shipments.....carloads..	1,083	3,253	2,729	1,001	1,903	3,532	1,040	3,369	4,170	30,213	31,754	26,491
Potatoes:												
Production, crop estimate.....thous. of bush..			2,339,278			3,359,796			4,465,350			
Car-lot shipments.....carloads..	24,614	22,093	15,979	24,321	19,359	16,871	29,152	20,972	15,538	165,755	161,256	170,973
Onions, car-lot shipments.....carloads..	1,729	2,556	2,793	1,700	2,351	2,545	1,200	1,652	2,561	22,207	19,827	19,866
Citrus fruits, car-lot shipments.....carloads..	5,478	5,765	4,441	11,820	8,152	7,348	5,134	5,070	4,254	53,424	103,265	59,687

<sup>2</sup> As of Sept. 1.<sup>3</sup> Final estimate for 1929.<sup>4</sup> Final estimate for 1928.<sup>5</sup> Revised.<sup>6</sup> Cumulative through July 31.



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Hay</b>												
Production, crop estimate...thous. of tons			<sup>2</sup> 82,095			<sup>3</sup> 101,786			<sup>4</sup> 93,351			
Receipts.....no. of cars	3,881	4,505	4,717	4,058	4,598	4,425	4,898	5,903	4,747	38,368	42,079	46,232
<b>Cattle and Beef</b>												
Cattle movements, primary markets:												
Receipts.....thousands	1,459	1,512	1,605	1,451	1,665	1,619	1,558	1,650	1,829	12,249	12,431	13,272
Shipments, total.....thousands	496	501	619	530	595	687	594	608	814	4,547	4,604	5,072
Shipments, stocker and feeder.....thousands	129	109	150	176	173	267	184	196	336	1,483	1,659	1,854
Local slaughter.....thousands	953	1,004	959	907	1,043	940	963	1,013	1,007	7,599	7,738	8,097
Beef products:												
Production, inspected...thous. of lbs.	375,276	411,226	403,081	364,470	402,501	406,700	406,435	375,745	398,056	3,059,563	3,079,747	3,101,199
Apparent consumption...thous. of lbs.	385,956	<sup>6</sup> 415,237	409,482	388,343	420,212	419,494	418,874	386,213	407,512	3,148,130	3,220,552	3,204,065
Exports.....thous. of lbs.	1,973	1,987	1,661	1,494	2,268	1,457	1,392	1,510	1,419	12,447	11,591	9,590
Cold-storage holdings, end of month.....thous. of lbs.	66,891	<sup>6</sup> 64,591	59,756	52,055	45,930	48,014	32,238	32,442	31,065			
Prices:												
Cattle, corn-fed,												
Chicago.....dolls. per 100 lbs.	10.73	9.28	9.14	14.38	14.98	14.69	13.56	14.99	15.11			
Steer rounds, No. 2.....dolls. per lb.	.195	.174	.168	.234	.238	.238	.212	.229	.244			
Western dressed steers, New York.....dolls. per lb.	.218	.177	.173	.238	.255	.251	.225	.249	.260			
<b>Hogs and Pork</b>												
Hog movements, primary markets:												
Receipts.....thousands	3,215	2,918	2,617	3,275	3,297	2,964	3,548	2,924	2,523	27,103	29,118	31,413
Shipments, total.....thousands	1,082	1,139	1,133	1,151	1,202	1,132	1,299	1,193	1,160	10,589	10,799	11,752
Shipments, stocker and feeder.....thousands	40	30	35	53	38	38	56	45	43	361	427	505
Local slaughter.....thousands	2,123	1,782	1,487	2,124	2,092	1,835	2,269	1,719	1,363	16,511	18,298	19,641
Pork production, total:												
Production, inspected...thous. of lbs.	664,172	603,324	500,438	672,947	675,915	586,150	705,111	537,820	466,636	5,205,576	5,636,362	5,810,771
Apparent consumption...thous. of lbs.	573,488	<sup>6</sup> 557,813	556,903	586,060	604,340	617,432	598,492	560,122	550,185	4,568,546	4,707,522	4,791,561
Exports.....thous. of lbs.	82,054	75,473	72,719	100,556	96,298	87,277	82,936	84,290	81,924	702,279	790,765	745,595
Cold-storage holdings, end of month.....thous. of lbs.	799,543	<sup>6</sup> 769,797	640,900	1,041,636	1,017,364	899,485	1,129,839	1,024,124	859,903			
Fresh and cured.....thous. of lbs.	679,221	<sup>6</sup> 651,444	551,760	841,937	814,354	719,400	915,360	819,185	682,015			
Lard (included in pork products):												
Production.....thous. of lbs.	133,563	121,351		144,272	139,693	121,894	146,520	108,522	92,401	<sup>7</sup> 963,369	<sup>7</sup> 1,076,525	<sup>7</sup> 1,125,025
Exports.....thous. of lbs.	56,666	51,670	49,287	67,252	64,274	55,487	53,436	52,940	50,658	476,007	536,982	499,626
Cold-storage holdings, end of month.....thous. of lbs.	120,322	<sup>6</sup> 118,353	89,140	199,699	203,010	180,085	214,479	204,939	177,888			
Prices:												
Hogs, heavy,												
Chicago.....dolls. per 100 lbs.	9.68	8.94	9.78	10.66	11.20	10.66	10.12	10.86	11.71			
Hams, smoked, Chicago.....dolls. per lb.	.233	.230	.229	.254	.267	.275	.215	.236	.249			
Lard, prime contract, New York.....dolls. per lb.	.102	.100	.114	.123	.125	.124	.122	.125	.128			
<b>Sheep and Lambs</b>												
Sheep movement, primary market:												
Receipts.....thousands	2,230	2,296	2,583	1,752	2,119	2,544	1,913	1,898	2,362	17,523	15,548	14,610
Shipments, total.....thousands	955	940	1,317	742	883	1,392	904	828	1,250	7,736	7,267	6,893
Shipments, stocker and feeder.....thousands	216	206	465	226	231	639	278	234	564	1,489	1,949	1,726
Local slaughter.....thousands	1,263	1,362	1,266	1,020	1,217	1,155	1,020	1,068	1,097	9,780	8,262	7,703
Lamb and mutton:												
Production, inspected...thous. of lbs.	48,239	51,861	52,268	42,012	46,804	49,096	40,691	39,395	44,525	417,692	353,681	332,582
Apparent consumption...thous. of lbs.	47,774	<sup>6</sup> 52,074	52,661	41,948	47,563	48,743	39,923	39,449	44,443	418,080	359,508	336,634
Cold-storage holdings, end of month.....thous. of lbs.	4,820	<sup>6</sup> 4,476	3,976	3,061	2,639	3,159	1,947	1,822	1,691			
Prices:												
Sheep, ewes,												
Chicago.....dolls. per 100 lbs.	3.45	3.06	3.09	5.31	5.55	5.16	5.88	5.38	5.72			
Sheep, lambs, Chicago.....dolls. per 100 lbs.	9.73	8.13	7.72	12.75	13.80	12.88	13.03	15.18	14.31			
<b>Miscellaneous Meats</b>												
Cold-storage holdings, end of month.....thous. of lbs.	87,980	<sup>6</sup> 90,631	84,246	81,132	81,068	76,539	63,941	63,610	56,886			
<b>Total Meats</b>												
Production, inspected...thous. of lbs.	1,087,687	1,066,412	955,786	1,079,429	1,125,221	1,041,946	1,152,237	952,959	909,277	8,682,831	9,069,791	9,244,550
Cold-storage holdings, end of mo.....thous. of lbs.	959,231	<sup>6</sup> 929,495	788,878	1,177,884	1,147,001	1,027,197	1,227,965	1,121,998	949,547			
Apparent consumption...thous. of lbs.	1,007,218	<sup>6</sup> 1,025,124	1,019,047	1,016,351	1,072,115	1,085,669	1,057,289	985,784	1,002,140	8,134,757	8,287,582	8,332,200
<b>Poultry</b>												
Receipts at 5 markets.....thous. of lbs.	23,867	19,858	20,527	20,434	22,548	26,150	18,849	22,238	22,361	179,181	172,328	165,655
Cold-storage holdings, end of mo.....thous. of lbs.	54,253	<sup>6</sup> 46,967	42,629	42,001	40,896	49,010	38,230	40,395	40,749			
<b>Fish</b>												
Total catch, prin. ports.....thous. of bbls.	32,886	46,751	35,875	31,728	43,185	43,903	29,809	27,324	30,130	271,069	244,308	200,776
Cold-storage holdings, 15th of mo.....thous. of lbs.	47,498	64,847	78,997	40,148	51,661	<sup>6</sup> 64,810	40,946	53,140	66,170			
Canned salmon:												
Shipments, United States.....cases	357,729	356,873	1,030,095	217,781	367,842	830,404	240,311	454,600	832,632	3,447,867	3,028,493	2,683,493
Exports, Canada.....cases	22,494	24,942	29,494	42,794	38,983	53,100	23,106	26,333	121,152	388,933	642,706	601,772

<sup>2</sup> As of Sept. 1.<sup>3</sup> Final estimate for 1929.<sup>4</sup> Final estimate for 1928.<sup>6</sup> Revised.<sup>7</sup> Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Butter</b>												
Production (factory).....thous. of lbs.	182,313	163,318	133,600	192,869	185,317	152,192	181,037	167,601	145,430	1,089,797	1,156,289	1,061,427
Receipts, 5 markets.....thous. of lbs.	70,529	62,274	44,821	69,511	68,104	54,885	69,650	65,145	55,339	423,671	437,134	418,441
Cold-storage holdings, cream-ery, end of month.....thous. of lbs.	106,522	145,061	143,096	91,962	151,621	168,952	69,750	120,437	136,175	1,437,085	1,451,825	1,415,615
Apparent consumption.....thous. of lbs.	199,016	191,178	193,110	192,045	241,232	188,708	202,787	185,928	189,164	1,437,085	1,451,825	1,415,615
Wholesale price, New York.....dolls. per lb.	.33	.35	.39	.44	.42	.43	.44	.45	.47			
<b>Cheese</b>												
Total, all varieties:												
Production (factory).....thous. of lbs.	57,871	45,120	41,125	74,295	67,453	55,593	64,671	57,182	49,842	303,495	418,305	376,149
Receipts, 5 markets.....thous. of lbs.	17,895	17,436	14,952	18,404	20,548	18,605	19,216	21,741	18,727	116,676	126,559	133,856
Apparent consumption.....thous. of lbs.	41,486	29,440	47,564	38,626	36,607	39,453	43,014	34,461	36,541	324,479	306,464	322,404
Cold-storage holdings, end of month.....thous. of lbs.	90,421	108,899	107,254	79,724	98,070	106,009	68,613	89,708	101,498			
Imports.....thous. of lbs.	6,097	3,106	3,687	8,608	6,653	5,268	6,581	5,937	5,597	47,374	50,066	47,033
Exports, United States.....thous. of lbs.	159	172	137	209	285	138	190	172	215	1,375	1,794	1,788
Exports, Canada.....thous. of lbs.	5,560	12,092	10,188	8,403	15,074	11,047	5,849	20,095	15,788	32,241	39,960	51,743
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs.	70,186	88,749	87,253	62,737	79,907	86,558	53,646	73,088	83,906			
Wholesale price, New York.....dolls. per lb.	.18	.18	.19	.23	.23	.23	.26	.26	.26			
<b>Eggs</b>												
Receipts, 5 markets.....thous. of cases	1,728	1,377	944	1,813	1,409	1,151	1,763	1,335	1,076	13,136	12,866	12,553
Cold-storage holdings, end of month: Case.....thous. of cases	10,743	11,198	10,375	8,510	8,962	8,547	10,002	10,496	9,944			
Frozen.....thous. of lbs.	115,134	116,272	113,238	84,766	91,488	86,693	77,744	81,670	89,196			
<b>Milk</b>												
Condensed milk:												
Total stocks, mfrs., end of mo.—												
Case goods.....thous. of lbs.	35,373	35,006	30,875	31,459	34,750	32,142	31,087	30,397	30,542			
Bulk goods.....thous. of lbs.	28,855	30,337	25,765	25,803	29,890	29,217	25,255	20,794	19,332			
Unsold stocks, mfrs., end of mo.—												
Case goods.....thous. of lbs.	31,222	30,866	26,464	25,140	28,883	26,950	25,081	23,594	24,159			
Bulk goods.....thous. of lbs.	8,176	10,212	6,954	9,296	9,221	8,751	13,368	8,611	8,367			
Exports.....thous. of lbs.	2,682	1,515	3,294	3,280	3,865	3,366	3,054	3,011	3,246	22,388	31,238	26,461
Wholesale price, New York.....dolls. per case	6.13	6.03	6.03	6.13	6.13	6.13	5.83	5.97	6.18			
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs.	227,201	258,836	244,969	222,956	281,137	272,427	187,789	180,377	161,679			
Unsold, case goods.....thous. of lbs.	176,439	218,761	197,189	178,684	215,878	186,717	151,769	124,738	101,819			
Exports.....thous. of lbs.	5,417	4,720	5,223	7,121	5,929	4,609	5,464	5,180	6,343	44,178	49,967	54,847
Wholesale price, New York.....dolls. per case	3.69	3.74	3.80	4.30	4.30	4.30	4.28	4.34	4.45			
Production, condensed and evaporated milk.....thous. of lbs.												
249,057	205,641	163,034	312,351	253,215	191,805	255,369	197,877	160,360	1,453,587	1,685,707	1,450,741	
Powdered milk:												
Manufacturer's stocks, end of month.....thous. of lbs.												
31,820	32,493	33,500	31,103	33,921	33,491	21,517	22,632	19,941				
Exports.....thous. of lbs.	346	376	426	480	454	250	225	526		4,307	3,374	2,516
Net new orders.....thous. of lbs.	11,913	10,946	9,399	9,961	9,967	10,225				80,817	70,807	
Fluid milk:												
Receipts—												
Boston (including cream).....thous. of qts.												
21,149	20,348		19,920	20,114	19,115	19,151	19,215	19,081	137,513	128,051	125,607	
Greater New York.....thous. of qts.												
122,086	123,165	116,769	124,702	122,366	117,248	115,866	122,100	117,162	936,559	933,217	910,635	
Consumption in manufacture of oleomargarine.....thous. of lbs.												
6,074	5,837	6,173	6,487	7,045	8,144	7,034	6,652	7,014	56,774	61,041	58,259	
<b>Sugar</b>												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons												
109,929	199,950	132,240	112,546	156,633	90,922	180,861	102,353	107,202	1,157,082	933,383	1,093,105	
From foreign countries.....long tons												
201,442	195,187	181,184	338,905	359,393	410,479	208,241	253,613	274,866	1,971,479	3,473,615	2,446,240	
Meltings, 8 ports.....long tons												
371,714	501,569	360,592	450,035	445,904	504,207	404,120	433,367	471,175	3,200,130	3,531,686	3,182,498	
Stocks at refineries, end of month.....long tons												
622,945	444,415	442,894	875,942	864,589	830,508	682,591	595,214	488,161				
Refined:												
Shipments, 2 ports.....long tons												
69,423	89,928	49,066	81,088	93,673	89,294	64,224	67,638	82,773	533,321	612,454	492,580	
Stocks, 2 ports.....long tons												
47,827	48,600	53,324	50,753	42,889	47,419	34,166	24,930	34,049				
Exports, including maple.....long tons												
4,742	4,661	7,246	6,341	11,631	8,579	5,364	10,313	11,329	42,957	72,703	69,411	
Prices:												
Wholesale, 96° centrif., N. Y.....dolls. per lb.												
.032	.033	.032	.035	.038	.038	.043	.042	.041				
Wholesale, granulated, N. Y.....dolls. per lb.												
.045	.046	.044	.049	.052	.054	.059	.057	.055				
Retail granulated, N. Y.....dolls. per lb.												
.055	.054	.054	.056	.057	.060	.067	.066	.063				
Retail average, 51 cities.....rel. to 1913.....												
111	111	111	116	116	120	133	133	129				
Cuban movement (raw):												
Receipts at Cuban ports.....long tons												
164,444	149,333	160,710	196,995	153,925	211,090	123,340	149,682	182,414	3,191,147	4,472,424	4,430,449	
Exports.....long tons												
236,592	326,074	314,239	356,616	428,066	464,310	229,869	299,714	348,808	2,136,326	3,708,581	2,736,068	
Stocks, end of month.....long tons												
1,631,332	1,417,997	1,278,971	1,298,387	978,543	739,068	1,127,054	1,017,638	829,437				
<b>Candy</b>												
Sales by manufacturers.....thous. of dolls.												
19,774	16,713	19,044	20,808	17,963	26,174				180,198	201,711		
<b>Coffee</b>												
Imports.....thous. of bags												
1,010	801	712	817	864	875	906	821	925	7,902	7,524	7,683	
Visible supply:												
World.....thous. of bags												
5,572	5,378	5,529	5,352	5,448	5,269	5,321	5,734	5,515				
United States.....thous. of bags												
867	861	784	700	700	685	861	850	793				

6 Revised.

7 Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Coffee—Continued</b>												
Receipts, total, Brazil.....thous. of bags..	1,031	1,391	1,462	1,069	1,056	1,191	1,303	1,168	1,181	10,471	8,976	9,601
Clearances:												
Total, Brazil, for world.....thous. of bags..	922	1,025	1,318	1,020	1,267	1,242	1,100	1,105	1,057	9,510	9,001	9,174
Total, Brazil, for U. S.....thous. of bags..	441	539	652	488	634	655	549	598	548	4,903	4,654	4,845
Price, Rio No. 7, Brazil grades.....dolls. per lb..	.093	.076	.072	.168	.163	.161	.157	.165	.173			
<b>Tea</b>												
Imports.....thous. of lbs..	6,555	7,007	8,134	6,029	6,734	7,019	4,863	7,209	8,086	50,698	52,314	51,036
Price, Formosa fine, N. Y.....dolls. per lb..	.300	.292	.290	.325	.310	.310	.325	.325	.325			
<b>Cocoa</b>												
Shipments from the Gold and Nigerian Coasts, Africa.....long tons..	14,694	20,764	13,441	9,889	7,224	5,238	7,601	6,316	4,011	177,906	187,737	168,851
Imports.....long tons..	15,121	20,443	17,863	14,486	18,862	15,922	23,336	12,971	13,461	128,165	162,876	136,660
Spot price, Accra, New York.....dolls.	.0825	.0869	.0775	.1069	.1069	.1081	.1450	.1350	.1213			
<b>TOBACCO</b>												
Consumption (tax-paid withdrawals):												
Large cigars.....thousands..	519,599	532,805	517,200	556,746	589,282	598,583	575,996	558,206	601,877	3,863,536	4,224,433	4,101,643
Small cigarettes.....thousands..	11,750,525	11,858,840	10,577,438	10,839,673	10,724,403	10,930,629	9,690,961	9,723,647	10,627,344	81,861,443	80,183,605	70,816,630
Manufactured tobacco and snuff.....thous. of lbs..	30,939	30,964	31,370	32,353	32,694	34,470	33,801	30,155	34,981	251,893	258,733	261,475
Production, crop estimate.....thous. of lbs..			1,420,947			1,519,081			1,374,547			
Exports:												
Unmanufactured.....thous. of lbs..	30,351	27,620	39,527	28,588	26,266	41,343	30,796	20,252	26,833	328,494	293,712	291,089
Cigarettes.....thousands..	566,015	643,358	295,744	799,935	504,565	659,187	1,032,268	1,078,362	860,791	3,712,186	6,209,559	7,563,664
<b>TRANSPORTATION</b>												
<b>River and Canal Cargo Traffic</b>												
Panama Canal:												
Total cargo traffic,thous. of long tons..	2,147	2,402	2,145	2,424	2,598	2,681	2,140	2,292	2,425	18,961	21,113	19,262
In American vessels.....thous. of long tons..	1,062	1,221	1,022	1,186	1,335	1,311	1,097	1,212	1,103	9,009	9,817	8,969
In British vessels.....thous. of long tons..	556	578	532	591	583	639	537	535	707	4,789	5,592	5,473
Sault Ste. Marie canals.....thous. of short tons..	12,650	12,367	11,267	14,076	14,120	14,085	12,633	13,247	13,680	48,014	60,617	48,858
New York State canals.....thous. of short tons..	416	563	457	387	444	380	400	414	517	2,150	1,664	1,864
Cape Cod Canal.....short tons..	208,467	219,574	247,376	161,143	175,179	206,188	120,261	135,702	148,691	1,573,917	335,772	820,011
Suez Canal.....thous. of met. tons..	2,111	2,390	2,590	2,590	2,745	2,762	2,538	2,758	2,602	17,370	20,360	18,965
Welland Canal.....short tons..	756,563	850,918	985,829	760,431	628,041	612,943	1,037,051	1,006,713	1,115,601	3,540,251	3,076,221	4,209,318
St. Lawrence Canal.....short tons..	874,612	928,453	1,005,853	927,933	783,484	809,323	1,143,735	1,225,338	1,359,561	3,761,070	3,646,322	4,824,050
Mississippi River Govt. barges.....short tons..	140,176	84,266	70,088	103,934	94,141	85,000	90,658	112,248	113,903	742,559	887,509	883,082
Ohio River, Pittsburg, Pa., to Wheeling, W. Va.....short tons..	1,015,299	1,106,423	997,548	1,056,795	1,088,912	1,080,996	931,641	947,227	1,034,775	7,127,168	7,118,389	6,495,095
Allegheny River.....short tons..	307,823	367,727	387,260	345,995	396,514	330,123	225,960	306,010	346,670	2,038,473	1,990,148	1,742,918
Monongahela River.....short tons..	2,151,936	2,154,045	2,152,186	2,460,644	2,396,993	2,500,617	2,109,892	2,095,606	2,304,619	17,512,979	18,878,701	16,977,630
<b>Ocean Traffic</b>												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons..	7,509	8,067	8,480	7,664	8,099	8,428	7,371	7,781	8,377	55,179	54,854	50,841
American.....thous. of net tons..	2,822	3,371	3,359	2,985	3,176	3,219	2,847	3,056	3,173	21,746	20,973	19,640
Foreign.....thous. of net tons..	4,687	4,696	5,121	4,679	4,923	5,208	4,524	4,725	5,204	33,433	33,880	31,201
<b>Shipbuilding</b>												
Completed during month:												
Total.....gross tons..	29,806	45,069	37,616	21,585	32,298	10,719	25,523	12,537	7,199,235	7,111,508	7,107,621	
Steel seagoing.....gross tons..	17,395	15,974	14,379	15,708	21,497	4,458	21,450	2,245	7,110,581	7,52,005	7,64,013	
Building or under contract, end of month:												
Merchant vessels,thous. of gross tons..	487	465	489	170	160	215	264	256	235	3,339	1,584	1,919
<b>Freight Cars</b>												
Surplus (daily av. last week of month):												
Total.....cars..	465,464	454,815	431,971	217,657	197,923	158,112	336,181	271,017	201,864			
Box.....cars..	246,622	232,235	232,896	116,657	96,577	87,985	170,606	137,618	114,355			
Coal.....cars..	163,396	165,499	141,721	55,150	58,485	31,021	114,710	90,513	47,615			
Shortage (daily av. last week of month):												
Total.....cars..				75	3	12		82	8			
Box.....cars..												
Coal.....cars..				11				32	8			
Car loadings:												
Total.....cars..	3,719,447	3,555,731	4,670,368	4,291,881	4,160,078	5,600,706	4,924,115	3,944,041	5,348,407	31,433,405	35,377,737	33,754,221
Grain and grain products.....cars..	166,012	233,312	303,994	178,439	246,841	316,111	172,412	237,348	288,572	1,580,581	1,659,136	1,603,246
Livestock.....cars..	86,439	80,293	105,560	94,308	92,030	121,357	126,200	91,007	126,780	1,814,946	887,660	956,907
Coal and coke.....cars..	573,855	556,605	769,079	669,448	633,584	902,230	773,449	606,857	874,369	5,577,394	6,276,082	5,894,998
Forest products.....cars..	198,629	159,618	207,372	281,226	245,248	343,804	329,127	238,676	332,061	1,753,179	2,284,759	2,274,635
Ore.....cars..	250,110	244,998	284,388	305,924	305,437	378,809	327,987	250,150	321,700	1,201,231	1,587,845	1,214,067
Merchandise and l. c. l.....cars..	967,221	899,253	1,178,655	1,042,060	995,782	1,307,838	1,261,515	986,282	1,290,844	8,339,400	8,885,841	8,827,770
Miscellaneous.....cars..	1,472,181	1,381,652	1,821,330	1,720,476	1,641,155	2,230,557	1,933,605	1,563,721	2,114,081	12,166,674	13,796,414	12,982,571
<b>Railroad Operations</b>												
Operating Revenues:												
Freight.....thous. of dolls..	331,647	347,293	391,140	417,083	446,001	370,814	382,226	421,771				
Passenger.....thous. of dolls..	67,146	65,805	79,344	79,593	84,267	81,824	82,822	85,187				
Total operating.....thous. of dolls..	444,848	457,025	532,621	558,386	580,563	503,157	513,730	558,751				
Operating expenses.....thous. of dolls..	334,638	331,662	382,355	389,258	395,686	375,571	376,044	384,528				
Net operating income.....thous. of dolls..	65,853	82,750	105,818	123,825	152,223	85,992	85,992	95,231				
Freight carried.....mills. ton-miles..	34,419	35,580	40,740	42,009	44,944	37,307	39,153	42,425				

\* As of Sept. 1.

\* Final estimate for 1929.

\* Final estimate for 1928.

\* Revised.

\* Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>TRANSPORTATION—Continued</b>												
<b>Railway Equipment</b>												
<b>Locomotives (Am. Ry. Assn.):</b>												
Owned, end of month—												
Quantity.....number.....	56,380	56,342	56,287	57,876	57,635	57,477	60,095	59,975	59,769			
Tractive power.....mills. of lbs..	2,535	2,537	2,539	2,546	2,541	2,540	2,591	2,590	2,585			
In bad order, end of month—												
Awaiting classified repairs	6 4,516	4,562	4,585	6 4,152	6 4,205	6 4,002	6 4,522	6 4,582	6 4,486			
Per cent of total in use.....per cent..	8.1	8.2	8.2	7.2	7.3	7.0	7.6	7.7	7.6			
Installed.....number.....	165	118	161	158	120	153	95	116	114	1,187	1,084	995
Retired.....number.....	193	156	216	297	369	306	284	235	320	1,712	2,306	2,009
New orders.....number.....		2	34	181	36	31	7	32	70	305	588	241
Shipments, manufacturers' (Census)—												
Total.....number.....	81	56	77	78	69	129	51	46	34	552	517	394
Steam, domestic.....number.....	80	52	68	58	39	117	39	19	23	522	420	257
Electric, domestic.....number.....		3	5	1	3	6	11	5	4	14	25	85
Unfilled orders (railroads), end of mo.—												
From manufacturers.....number.....	300	242	189	334	365	370	90	56	81			
In railroad shops.....number.....	64	54	46	55	45	25	30	17	19			
Unfilled orders, manufacturers' (Census)—												
Total.....number.....	343	291	234	552	539	436	201	198	204			
Steam, domestic.....number.....	291	243	193	489	490	392	109	98	135			
Electric, domestic.....number.....	44	41	36	21	18	13	37	59	26			
Exports, steam.....number.....	3	4	2	14	32	30	15	32	20	42	145	133
<b>Freight cars (Am. Ry. Assn.):</b>												
Owned, end of month—												
Quantity.....thous. of cars.....	2,272	2,274	2,274	2,266	2,267	2,268	2,301	2,300	2,299			
Capacity.....mills. of lbs..	211,221	211,550	211,792	208,867	209,095	208,897	210,386	210,437	210,483			
In bad order, end of month—												
Quantity.....cars.....	140,594	144,987	153,046	142,064	137,495	134,253	145,210	151,867	149,252			
Per cent of total in use.....per cent..	6.3	6.5	6.8	6.4	6.2	6.0	6.5	6.7	6.6			
New orders.....cars.....	794	1,306	823	5,869	242	2,562	2,286	307	767	32,572	61,933	23,400
Shipments—												
Total.....cars.....	5,066	5,348	5,940	6,517	7,109	7,811	5,147	4,963	5,295	56,065	41,971	30,430
Domestic.....cars.....	5,059	5,348	5,934	6,514	7,093	7,633	5,115	4,908	5,261	54,858	39,761	29,763
Unfilled orders (railroads)—												
Total.....cars.....	22,759	17,230	10,802	39,173	36,014	31,671	12,446	13,531	8,177			
From manufacturers.....cars.....	19,161	14,247	7,723	34,145	31,590	27,289	9,316	10,371	5,673			
In railroad shops.....cars.....	3,598	2,983	3,079	5,028	4,424	4,382	3,130	3,160	2,504			
Passenger cars:												
New orders.....cars.....	13	32	13	176	89	149	57	19	589	561	1,077	1,702
Shipments—												
Total.....cars.....	66	41	35	94	64	76	95	123	147	525	656	671
Domestic.....cars.....	66	41	35	82	53	64	95	123	144	485	607	604
<b>Highways</b>												
<b>Concrete pavements, new contracts:</b>												
Total.....thous. of sq. yds..	18,156	17,416	10,657	16,421	18,022	11,969	15,446	13,123	16,889	110,895	103,472	109,740
Road.....thous. of sq. yds..	13,860	12,720	7,243	10,410	11,344	7,010	8,997	6,984	9,254	84,955	69,201	69,668
<b>Federal-aid highways:</b>												
Completed—												
Cost.....thous. of dolls..	22,939	13,844	18,541	15,552	16,445	9,729	18,802	8,828	12,145	93,803	93,260	93,408
Distance.....miles.....	938	483	537	520	693	442	661	483	599	3,563	3,282	3,940
Under construction, end of month												
.....miles.....	7,709	8,055	8,339	8,359	8,404	8,724	9,494	9,497	9,547	59,728	64,363	70,931
<b>Passenger Travel</b>												
<b>National parks:</b>												
Visitors.....number.....	293,931	506,699	549,287	273,059	593,324	523,623	271,621	553,394	499,633	1,799,570	1,719,144	1,687,702
Automobiles entered.....number.....	77,153	143,049	127,153	59,412	131,511	112,574	60,324	111,642	98,523	439,598	361,953	322,787
<b>Arrivals from abroad:</b>												
Immigrants.....number.....	14,944	13,323		22,490	20,068	22,778	20,419	20,682	24,629	118,053	152,039	163,272
United States citizens.....number.....	32,284	38,822		28,119	37,636	70,783	27,201	32,974	63,191	227,654	219,253	207,235
<b>Departures abroad:</b>												
Emigrants.....number.....	4,320	4,818		4,881	5,086	5,571	7,205	7,804	6,488	26,832	29,612	740,726
United States citizens.....number.....	40,103	55,366		42,846	56,339	70,551	53,028	68,463	50,323	253,486	245,094	277,348
Passports issued.....number.....	32,405	616,084	10,510	29,508	18,115	11,295	29,674	15,776	9,866	172,560	163,095	155,263
<b>Pullman company operations:</b>												
Revenue.....thous. of dolls..	7,198	6,485		7,763	7,220	7,927	7,432	7,279	7,593	45,891	47,945	47,026
Passengers carried.....thousands..	2,679	2,541		3,000	2,939	3,287	3,095	3,073	3,312	17,587	19,228	19,569
<b>Trend of business in hotels:</b>												
Room occupancy.....per ct. of capacity..	62	59	60	66	63	65	64	60	63			
Average sale per occupied room												
.....dollars.....	3.89	3.86	3.96	3.97	3.94	4.13	4.05	3.98	4.09			
<b>Warehouses</b>												
Public merchandise warehouses, space occupied.....per ct. of total..	68.4	67.2		71.0	71.2	71.9	67.2	67.1	67.9			
<b>PUBLIC UTILITIES</b>												
<b>Telephone companies:</b>												
Operating revenues.....thous. of dolls..	77,815	76,850		74,622	75,141	75,898	68,783	67,676	68,784	547,465	521,472	471,786
Operating income.....thous. of dolls..	17,432	15,452		18,194	15,905	17,601	16,941	15,019	15,985	123,185	125,592	116,560
<b>Telegraph companies:</b>												
Commercial telegraph												
tolls.....thous. of dolls..	10,759	10,131		11,396	11,679	12,067	11,169	10,618	11,530	74,001	79,565	74,334
Operating revenues.....thous. of dolls..	13,768	13,090		14,446	14,843	15,316	14,036	13,376	14,328	94,852	100,753	93,020
Operating income.....thous. of dolls..	1,412	875		1,516	1,528	1,688	1,906	1,428	1,887	7,814	11,498	11,771
<b>Gas and electric companies:</b>												
Gross earnings.....thous. of dolls..	189,000	181,440		183,000	178,000	179,500	178,697	173,646	173,952	1,372,940	1,332,750	1,295,42
Net earnings.....thous. of dolls..	83,000	70,550		79,000	71,000	73,000	67,537	62,260	61,810	599,050	578,500	492,622
<b>Electric railways (212 companies):</b>												
Passengers carried.....thous. of persons..	681,788	655,477	646,750	744,310	722,289	724,812	760,509	728,849	736,223	5,696,687	6,120,093	6,199,555
Average fare.....cents.....	8.328	8.340	8.352	8.228	8.244	8.260	8.081	8.081	8.121			

\* Revised.

† Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>ELECTRIC POWER</b>												
Electric power production:												
Total.....mills. of kw. hours.....	7,753	7,870	7,768	8,072	8,356	6,998	7,142	7,510	7,560,83	7,55,471	7,49,477	
By water power.....mills. of kw. hours.....	3,038	2,862	3,068	3,055	2,837	3,093	3,071	3,036	7,21,284	7,21,191	7,20,451	
By fuels.....mills. of kw. hours.....	4,715	5,008	4,699	5,017	5,518	3,905	4,071	4,474	7,34,759	7,34,281	7,29,027	
In street railways, manf. plants, etc. mills. of kw. hours.....	541	541	362	368	390	372	381	382	7,3,528	7,2,685	7,3,134	
In central stations.....mills. of kw. hours.....	7,212	7,329	7,406	7,704	6,766	6,626	6,761	7,128	7,52,555	7,52,779	7,46,384	
Electric power production (Canada):												
Total.....mills. of kw. hours.....	1,424	1,415	1,378	1,411	1,445	1,242	1,248	1,314	7,10,314	7,9,980	7,8,995	
By water power.....mills. of kw. hours.....	1,404	1,393	1,361	1,393	1,426	1,228	1,233	1,298	7,10,137	7,9,800	7,8,876	
Exported.....mills. of kw. hours.....	136	132	119	129	133	127	130	146	7,872	7,823	7,897	
Electric power, gross revenue.....thous. of dolls.....	6169,200	166,400	6165,300	6162,300	163,400	149,599	146,600	148,600	7,1,245,100	7,1,201,200	7,1,086,499	
Rate of manufacturing operations (based on the consumption of electrical energy for power purposes):												
Activity by geographical divisions—												
United States.....rel. to 1923-25.....	115.3	105.1	105.3	135.2	129.0	128.2	116.4	120.2	120.8			
New England.....rel. to 1923-25.....	94.2	87.9	87.1	123.5	113.4	108.7	108.4	102.4	102.2			
North Central.....rel. to 1923-25.....	116.0	109.9	112.0	142.0	141.3	135.5	124.6	131.8	132.4			
Middle Atlantic.....rel. to 1923-25.....	111.8	102.9	94.3	129.5	120.5	127.9	113.4	110.8	118.3			
Southern.....rel. to 1923-25.....	119.5	106.5	110.2	128.4	114.7	132.7	114.6	112.0	112.8			
Western.....rel. to 1923-25.....	135.0	129.0	125.0	134.2	129.4	127.0	118.5	116.5	127.5			
Activity by industries—												
All industry.....rel. to 1923-25.....	115.3	105.1	105.3	135.2	129.0	128.2	116.4	120.2	120.8			
Chemical and allied products.....rel. to 1923-25.....	138.6	140.6	135.7	133.8	127.0	125.0	122.6	128.5	119.2			
Food and kindred products.....rel. to 1923-25.....	145.4	139.2	141.2	121.8	129.9	132.2	116.8	129.2	128.3			
Rolling mills and steel plants.....rel. to 1923-25.....	115.2	109.7	112.0	154.3	144.4	150.9	121.2	121.2	125.4			
Metal working plants.....rel. to 1923-25.....	106.8	95.1	95.2	143.4	144.4	134.6	123.7	126.3	125.8			
Metal groups.....rel. to 1923-24.....	110.0	100.5	100.3	147.9	144.2	140.7	122.7	124.2	125.5			
Leather and its products.....rel. to 1923-25.....	96.8	97.3	87.7	98.7	82.0	102.2	100.2	99.0	94.7			
Lumber and its products.....rel. to 1923-25.....	107.3	100.0	81.3	113.8	103.2	102.3	109.2	108.8	111.6			
Paper and pulp.....rel. to 1923-25.....	137.5	119.9	115.1	137.3	122.3	123.6	133.7	127.3	129.1			
Rubber and its products.....rel. to 1923-25.....	104.8	103.8	110.5	158.1	136.7	120.2	131.7	135.3	138.4			
Shipbuilding.....rel. to 1923-25.....	111.8	110.8	122.8	106.9	107.7	96.3	85.3	67.2	67.3			
Stone, clay, and glass.....rel. to 1923-25.....	136.5	110.8	118.2	170.3	154.7	157.7	128.0	129.8	135.3			
Textiles.....rel. to 1923-25.....	95.3	79.7	72.5	123.0	113.4	110.0	104.7	91.8	97.3			
Automobiles, including repair parts.....rel. to 1923-25.....	102.9	75.3	86.6	154.0	139.5	143.0	136.0	143.7	143.2			
<b>EMPLOYMENT AND WAGES</b>												
Employment in factories:												
New York State.....rel. to 1923.....	77.5	74.6	73.9	87.6	87.3	87.7	82.2	81.5	82.5			
Maryland.....rel. to 1924.....	86.2	83.3	82.0	93.9	93.0	93.0	86.5	85.6	88.1			
Iowa.....rel. to 1923.....	122.5	118.1	117.2	130.8	129.7	133.2	124.1	123.3	124.0			
Massachusetts.....rel. to 1925-27.....	75.6	71.5	72.8	88.2	87.9	88.8	84.2	83.4	84.9			
Illinois.....rel. to 1925-27.....	91.2	85.7	84.9	104.1	103.4	105.1	95.8	93.9	96.3			
Wisconsin.....rel. to 1923.....	89.0	90.5	85.2	98.2	100.3	99.2	92.9	96.8	97.9			
Ohio.....rel. to 1925.....	103.9	99.4	96.1	110.4	108.8	106.5	102.8	102.4	104.9			
Cleveland.....rel. to Jan. 1921.....	99.0	48.0	83.0	128.2	124.2	125.0	111.1	111.3	113.8			
Detroit.....rel. to 1923-25.....	428,678	412,693	408,895	484,637	483,142	485,330	454,952	451,125	456,303			
New York State.....number.....	36,795			34,984		33,978	27,888	29,405	31,137			
Oklahoma.....number.....												
Total pay roll:												
New York State (weekly).....thous. of dolls.....	12,369	11,717	11,631	14,549	14,398	14,599	13,413	13,149	13,411			
Oklahoma (weekly).....thous. of dolls.....				1,005	965	1,074	743	793	877			
Wisconsin.....rel. to 1923.....	83.0	77.7	73.9	107.0	100.2	105.3	104.8	98.7	108.7			
New York State.....rel. to 1923.....	82.0	77.7	77.2	96.5	95.5	96.8	89.0	87.2	89.0			
Illinois.....rel. to 1925-27.....	82.2	74.5	73.2	107.5	102.7	106.0	97.9	91.4	96.3			
Employment:												
Canada.....rel. to cal. year 1926.....	116.5	118.9	118.8	122.2	124.7	127.8	113.8	117.7	119.3			
Ohio construction.....rel. to 1923.....				108.8	115.0	120.9	114.2	123.5	138.4			
Employment, trade-unions:												
United States.....per cent of total.....	80.0	78.0	78.0	91.0	91.0	91.0	89.0	88.0	91.0			
Canada.....per cent of total.....	89.4	90.8		97.1	97.0	96.5	96.8	97.5	97.6			
Anthracite mines:												
Employment.....rel. to 1923-25.....	91.5	92.3	80.8	95.4	85.6	93.6	102.3	100.7	110.9			
Pay roll.....rel. to 1923-25.....	74.1	71.6	67.2	71.0	56.8	68.9	60.6	82.5	97.2			
Federal civilian employees, Washington, D. C., end of month.....number.....	68,510	69,666	70,197	63,904	63,372	63,632	61,388	61,650	62,111			
Average weekly earnings, factories:												
Illinois.....dollars.....	27.49	26.27	26.45	29.46	28.16	28.57	29.28	27.45	29.13			
New York State.....dollars.....	28.86	28.40	28.45	30.02	29.80	30.08	29.48	29.15	29.39			
Wisconsin.....dollars.....	23.96	21.47	22.21	26.03	23.96	26.51	27.03	24.45	26.60			
Oklahoma.....dollars.....				27.31	27.57	27.55	26.24	26.97	28.15			
New York.....rel. to 1923.....	105.9	104.3	104.4	110.2	109.4	110.4	108.2	107.0	107.9			
Illinois.....rel. to 1925-27.....	96.9	92.6	93.2	103.8	99.2	100.7	103.2	96.7	99.9			
Wisconsin.....rel. to 1923.....				109.0	100.0	106.3	112.8	102.0	111.0			
Average weekly earnings (National Industrial Conference Board):												
Grand total (both sexes).....dollars.....	26.48	25.72	25.38	28.28	28.09	27.94	27.30	27.09	27.35			
Total males.....dollars.....	28.56	27.33	27.15	31.16	31.01	30.69	30.35	29.95	30.30			
Skilled male.....dollars.....	29.87	28.55	28.35	32.66	32.52	32.18	31.74	31.35	31.77			
Unskilled male.....dollars.....	23.13	22.26	22.30	25.45	25.23	25.09	25.17	24.69	24.78			
Total women.....dollars.....	16.13	15.88	15.71	17.86	17.54	17.47	17.01	17.07	17.04			
Average weekly hours:												
Nominal (both sexes).....hours.....	43.6	43.4	43.1	49.7	49.6	49.4	49.7	49.6	49.6			
Actual (both sexes).....hours.....	44.5	43.3	42.6	48.5	48.8	48.4	47.7	47.5	47.9			

\* Revised.

† Cumulative through July 31.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>EMPLOYMENT AND WAGES—Con.</b>												
Wages, road labor, by districts:												
New England.....cents per hour..	49	49	50	51	49	51	48	47	48			
Middle Atlantic.....cents per hour..	43	42	42	42	42	42	42	43	41			
South Atlantic.....cents per hour..	26	25	28	29	30	30	26	27	34			
East South Central.....cents per hour..	25	25	23	26	25	25	26	25	25			
West South Central.....cents per hour..	28	26	26	32	30	30	30	27	29			
East North Central.....cents per hour..	38	38	37	38	40	39	37	38	39			
West North Central.....cents per hour..	37	36	36	37	36	37	36	36	38			
Mountain.....cents per hour..	48	47	46	47	47	48	45	44	50			
Pacific.....cents per hour..	54	53	53	52	53	52	53	53	53			
United States, average, cents per hour..	40	40	39	40	39	40	40	40	42			
Wage rates, U. S. Steel Corp.....cents per hour..	50	50	50	50	50	50	50	50	50			
Wages, steel sheet workers, per cent of base..	127.0	127.0	127.0	127.0	127.0	127.0	125.5	125.5	125.5			
Applicants per 100 jobs, employment agencies:												
United States.....number..	186	198	177	128	131	124	121	137	129			
Eastern States.....number..	202	231	214	127	139	136	147	151	223			
Central States.....number..	209	221	204	140	141	135	161	150	132			
Southern States.....number..	240	253	252	185	174	178	221	174	121			
Western States.....number..	81	98	79	71	83	75	66	80	69			
Illinois.....number..	224	262	234	139	148	137	168	151	133			
Wisconsin.....number..	155	150	162	120	115	117	123	113	107			
Canada.....number..	156	161		130	134	119	126	122	109			
<b>Factory Labor Turnover</b> (Percentage of number on pay roll)												
Departures:												
Total.....per cent (annual basis)..	30.8	29.3	28.0	51.1	46.5	48.5	39.5	38.0	42.3			
Voluntary.....per cent (annual basis)..	14.8	11.8	11.2	39.5	35.7	38.4	27.1	27.2	31.9			
Lay offs.....per cent (annual basis)..	13.6	15.4	15.3	5.4	5.0	4.8	7.5	5.9	5.1			
Discharges.....per cent (annual basis)..	2.4	2.1	1.5	6.2	5.8	5.3	4.9	4.9	5.3			
Accessions.....per cent (annual basis)..	19.7	17.4	14.7	60.9	61.4	54.3	41.3	46.9	55.7			
Industrial disputes:												
Disputes.....number..	34	32		57	53	43	46	42	42			
Workers involved.....number..	8,562	5,848		58,152	15,589	6,714	143,137	132,187	105,760			
Man-days lost in month.....number..	150,142	162,838		1,627,565	1,062,428	358,148	3,670,878	3,337,386	3,553,750			
<b>DISTRIBUTION MOVEMENT</b>												
<b>Retail Sales</b>												
Mail-order houses:												
Total sales, 2 houses.....thous. of dolls..	54,356	48,790	50,682	57,702	53,309	60,088	44,848	40,253	45,994	415,286	428,933	328,913
Sears, Roebuck & C.....thous. of dolls..	30,367	30,121	29,715	35,748	33,501	35,133	25,669	26,276	28,986	245,476	261,362	201,361
Montgomery Ward & Co.....thous. of dolls..	23,989	18,669	20,967	21,954	19,808	24,955	19,179	13,977	17,008	169,820	167,571	127,552
Ten-cent chain stores:												
Total sales (4 chains).....thous. of dolls..	40,548	39,802	41,995	44,403	42,603	46,613	42,099	38,760	41,049	330,296	340,468	211,604
Total stores operated (4 chains).....number..	2,952	2,967	2,988	2,744	2,767	2,787	2,509	2,526	2,552			
F. W. Woolworth & Co.....thous. of dolls..	20,715	20,737	22,055	23,611	22,521	24,446	22,400	20,587	21,812	174,106	182,777	167,673
Stores operated.....number..	1,867	1,871	1,881	1,775	1,789	1,802	1,652	1,658	1,675			
S. S. Kresge Co.....thous. of dolls..	11,400	10,882	11,410	12,572	11,687	13,001	11,834	10,583	11,272	89,750	92,333	84,646
Stores operated.....number..	636	645	656	537	542	547	450	460	468			
McCrary Stores Corp.....thous. of dolls..	3,212	3,123	3,406	3,335	3,300	3,853	3,099	2,951	3,115	25,940	26,179	23,557
Stores operated.....number..	240	240	240	238	239	240	223	224	224			
S. H. Kress & Co.....thous. of dolls..	5,221	5,061	5,125	4,885	5,095	5,317	4,766	4,639	4,850	40,502	39,185	36,728
Stores operated.....number..	209	211	211	194	197	198	184	185	185			
Metropolitan.....thous. of dolls..	1,337	1,258	1,437	1,467	1,337	1,612	1,027	993	977	9,738	7,173	
Stores operated.....number..	148	148	148	120	123	131	94	96	97			
W. T. Grant Co.....thous. of dolls..	5,469	4,818	5,855	5,374	4,524	5,066	4,366	3,731	3,996	40,213	36,460	29,018
Stores operated.....number..	303	305	309	241	244	252	181	193	191			
F. & W. Grand.....thous. of dolls..	1,869	1,669	1,669	1,889	1,635	1,731	1,259	1,205	1,236	13,208	12,514	8,854
Stores operated.....number..	103	105	108	89	89	89	70	74	74			
Isaac Silver & Bros.....thous. of dolls..	696	598	608	613	649	679	517	462	460	5,002	4,535	3,554
Stores operated.....number..	45	45	45	40	41	43	25	26	26			
J. C. Penny Co.....thous. of dolls..	15,828	13,602	14,397	17,104	14,566	16,498	14,129	11,734	12,877	114,465	114,145	96,365
Stores operated.....number..	1,435	1,438	1,440	1,215	1,217	1,292	953	953	982			
G. C. Murphy Co.....thous. of dolls..	1,289	1,319	1,362	1,229	1,148	1,273	881	796	873	9,782	8,877	6,435
Stores operated.....number..	160	163	163	145	145	148	116	116	118			
Restaurant chains:												
Total sales (3 chains).....thous. of dolls..	4,585	4,501	4,642	4,808	4,821	5,151	4,429	4,280	4,577	38,273	39,054	36,581
Stores operated.....number..	382	379	379	374	372	369	369	369	369			
Childs Co., sales.....thous. of dolls..	2,103	2,050	2,173	2,222	2,259	2,478	2,041	2,012	2,217	17,742	18,202	17,393
Stores operated.....number..	114	113	113	114	114	113	117	116	116			
J. R. Thompson Co., sales.....thous. of dolls..	1,225	1,199	1,208	1,313	1,302	1,331	1,209	1,163	1,190	10,009	10,363	9,669
Stores operated.....number..	121	119	120	124	124	122	121	121	121			
Waldorf System (Inc.), sales.....thous. of dolls..	1,257	1,252	1,261	1,273	1,260	1,342	1,180	1,105	1,170	10,522	10,489	9,527
Stores operated.....number..	147	147	146	136	134	134	131	132	132			
Installment sales in New England Dept. stores, ratio to total sales.....per cent..	5.2	6.6		4.1	6.7	12.5	4.6	5.7	12.1			
<b>Advertising</b>												
Magazine advertising.....thous. of lines..	2,752	1,986	1,658	2,884	2,338	6,195 <sup>6</sup>	2,602	2,171	1,770			
Magazine advertising, total cost.....thous. of dolls..	19,614	14,316	12,075	18,187	15,756	12,453	16,500	14,210	11,437	136,171	134,387	123,463
Newspaper advertising.....thous. of lines..	88,702	72,007	70,018	100,698	87,409	84,645 <sup>6</sup>	97,092	81,012	83,240	700,831	791,137	759,395
Radiobroadcast cost, facilities.....thous. of dolls..	2,033	2,074	1,960	1,309	1,312	1,330	680	640	676	16,723	11,304	5,809
National advertising in newspapers:												
Total.....thous. of lines..	47,010	39,911	31,126	56,159	46,841	42,932 <sup>6</sup>	42,916	41,339	39,167	372,320	421,758	328,528
Passenger cars.....thous. of lines..	3,781	4,082	2,736	6,634	6,278	6,910 <sup>6</sup>	6,168	7,193	7,064	42,923	66,868	54,956
Tires, trucks, and accessories.....thous. of lines..	5,927	5,634	5,431	7,867	7,240	6,570 <sup>6</sup>	6,488	5,536	5,681	44,192	47,557	34,004
Financial.....thous. of lines..	6,162	6,446	3,755	7,499	8,525	6,155 <sup>6</sup>	5,863	6,648	4,796	51,143	62,295	49,232
Building materials.....thous. of lines..	342	117	99	685	274	6,279 <sup>6</sup>	549	342	400	2,517	4,812	4,186
Electrical appliances, supplies.....thous. of lines..	1,247	739	459	1,760	1,052	6,851 <sup>6</sup>	1,127	822	887	8,617	9,443	6,726
Foods and beverages.....thous. of lines..	7,781	6,428	5,898	8,169	6,421	5,716 <sup>6</sup>	7,449	6,640	5,802	58,866	53,366	46,301

<sup>6</sup> Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>DISTRIBUTION MOVEMENT—Con.</b>												
<b>Advertising—Continued</b>												
Heating and plumbing equipment.....thous. of lines..	479	401	484	350	291	6 388	492	352	476	3, 648	3, 703	3, 206
Medical.....thous. of lines..	2, 194	1, 853	1, 760	2, 821	2, 288	6 2, 136	2, 347	2, 232	2, 214	30, 761	36, 849	27, 828
Radio.....thous. of lines..	649	927	1, 049	1, 855	2, 413	6 2, 887	583	634	1, 009	9, 141	17, 579	6, 693
Tobacco.....thous. of lines..	5, 413	3, 742	1, 760	4, 238	2, 416	6 2, 941	2, 117	2, 520	2, 708	30, 459	27, 702	22, 476
Toilet requisites.....thous. of lines..	3, 123	2, 985	2, 055	3, 113	2, 498	6 2, 316	2, 294	2, 250	1, 949	25, 159	24, 170	18, 722
Transportation.....thous. of lines..	4, 101	3, 130	2, 323	4, 692	3, 625	6 3, 941	3, 361	2, 946	2, 467	23, 033	25, 195	19, 574
All other.....thous. of lines..	5, 812	3, 427	3, 318	6, 477	3, 520	6 3, 644	4, 081	3, 224	3, 715	41, 855	42, 223	34, 629
<b>Postal Business</b>												
Postal receipts:												
50 selected cities.....thous. of dolls..	27, 956	26, 761	25, 876	29, 280	29, 069	29, 251	29, 990	26, 508	27, 951	238, 738	239, 383	242, 202
50 industrial cities.....thous. of dolls..	3, 062	3, 157	3, 132	3, 061	3, 189	3, 289	3, 094	2, 956	3, 115	26, 806	26, 661	26, 379
Money orders:												
Domestic issued (50 cities)—												
Quantity.....thousands..	3, 554	3, 436	3, 285	8, 545	3, 602	3, 510	3, 382	3, 180	3, 165	29, 452	29, 275	27, 125
Value.....thous. of dolls..	35, 395	34, 672	33, 363	36, 198	37, 120	37, 027	34, 263	32, 812	32, 886	293, 299	296, 030	273, 138
Domestic paid (50 cities)—												
Quantity.....thousands..	10, 619	10, 197	9, 681	11, 223	10, 741	10, 862	11, 145	9, 627	10, 183	86, 472	90, 312	86, 379
Value.....thous. of dolls..	82, 691	81, 800	77, 670	86, 958	86, 573	83, 806	85, 280	76, 227	81, 180	673, 230	697, 601	662, 722
Air mail, weight dispatched.....pounds..	680, 814	693, 627	779, 219	593, 254	645, 653	701, 538	210, 957	214, 558	419, 047	5, 232, 899	4, 482, 652	1, 686, 580
<b>BANKING AND FINANCE</b>												
<b>Banking</b>												
Bank debits:												
New York City.....mills. of dolls..	37, 690	29, 600	25, 052	43, 263	49, 215	49, 034	45, 455	35, 085	35, 102	274, 985	395, 967	318, 100
Outside of New York												
City.....mills. of dolls..	24, 647	23, 171	20, 966	26, 428	28, 444	28, 339	27, 029	23, 897	23, 401	189, 818	217, 306	198, 501
Canada.....mills. of dolls..	1, 667	1, 613	1, 464	1, 817	2, 108	1, 937	1, 986	1, 896	1, 813	12, 814	15, 621	15, 051
Federal reserve banks:												
Bills discounted.....mills. of dolls..	260	197	231	1, 125	1, 076	974	1, 191	1, 086	1, 039	-----	-----	-----
Notes in circulation.....mills. of dolls..	1, 432	1, 335	1, 368	1, 736	1, 779	1, 829	1, 660	1, 613	1, 651	-----	-----	-----
Total investments.....mills. of dolls..	761	714	781	226	232	328	430	378	394	-----	-----	-----
Total reserve.....mills. of dolls..	3, 151	3, 178	3, 086	3, 041	3, 109	3, 149	2, 693	2, 756	2, 765	-----	-----	-----
Total deposits.....mills. of dolls..	2, 474	2, 469	2, 454	2, 438	2, 398	2, 348	2, 459	2, 402	2, 325	-----	-----	-----
Reserve ratio.....per cent..	80.7	83.5	80.5	72.9	74.4	75.4	65.4	68.6	69.5	-----	-----	-----
Federal reserve member banks:												
Total loans and dis-												
counts.....mills. of dolls..	16, 960	16, 945	16, 830	16, 925	17, 058	16, 950	16, 089	15, 861	15, 729	-----	-----	-----
Total investments.....mills. of dolls..	6, 120	6, 291	6, 338	5, 560	5, 549	5, 456	6, 647	6, 589	6, 495	-----	-----	-----
Net demand deposits.....mills. of dolls..	13, 740	13, 798	13, 636	13, 293	13, 395	12, 985	13, 574	13, 186	12, 871	-----	-----	-----
Brokers' loans, end of month—												
To N. Y. Stock Ex. members—												
Total.....mills. of dolls..	3, 728	3, 689	3, 599	7, 071	7, 474	7, 882	4, 898	4, 837	5, 051	-----	-----	-----
Ratio to market value.....per cent..	5.83	5.49	5.31	9.15	9.16	8.79	9.25	9.00	8.80	-----	-----	-----
By New York F. R.												
member banks.....mills. of dolls..	3, 219	3, 228	3, 110	5, 769	5, 960	6, 217	4, 307	4, 259	4, 235	-----	-----	-----
Deposits, New York State												
savings banks, end of												
month.....mills. of dolls..	4, 559	4, 572	4, 591	4, 459	4, 434	4, 426	4, 301	4, 283	4, 299	-----	-----	-----
Interest rates:												
Time loans, 90 days.....per cent..	2.88	2.75	2.63	8.13	7.75	8.88	5.69	6.00	6.25	-----	-----	-----
Call loans, renewal.....per cent..	2.62	2.20	2.21	7.70	9.23	8.23	6.21	6.05	6.87	-----	-----	-----
Prime com. paper (4-6 mos.).....per cent..	3.50	3.25	3.00	6.00	6.00	6.13	4.88	5.13	5.38	-----	-----	-----
Prime bankers' acceptances.....per cent..	2.13	1.88	1.88	5.50	5.13	5.13	4.07	4.25	4.63	-----	-----	-----
N. Y. Fed. Res. Bank (redis.).....per cent..	2.50	2.50	2.50	5.00	5.00	6.00	4.50	5.00	5.00	-----	-----	-----
Federal land banks.....per cent..	5.58	5.58	5.58	5.20	5.29	5.31	5.04	5.04	5.04	-----	-----	-----
Intermediate credit banks.....per cent..	4.55	4.17	4.13	5.62	5.67	5.67	4.56	4.63	4.84	-----	-----	-----
<b>Public Finance</b>												
Government debt, gross,												
end month.....mills. of dolls..	16, 185	16, 176	16, 188	16, 931	16, 832	16, 805	17, 604	17, 526	17, 648	-----	-----	-----
Customs receipts.....thous. of dolls..	72, 170	26, 200	32, 083	52, 401	52, 144	56, 427	44, 162	44, 591	52, 797	343, 069	400, 055	361, 110
Total ordinary receipts.....thous. of dolls..	803, 495	138, 741	127, 388	765, 882	169, 473	174, 502	678, 927	154, 859	173, 495	2, 366, 531	2, 509, 586	2, 380, 762
Expenditures chargeable to												
ordinary receipts.....thous. of dolls..	416, 799	284, 310	224, 117	420, 473	349, 825	210, 725	404, 607	278, 620	308, 594	2, 516, 684	2, 372, 899	2, 306, 304
U. S. money in circulation:												
Daily average.....mills. of dolls..	4, 489	4, 483	4, 476	4, 687	4, 764	4, 777	4, 736	4, 746	4, 743	-----	-----	-----
<b>Gold and Silver</b>												
Gold:												
Domestic receipts at mint, fine ounces..	90, 764	115, 119	112, 395	73, 468	92, 256	100, 387	70, 205	72, 676	98, 769	706, 467	583, 636	596, 414
Rand output.....fine ounces..	887, 000	912, 000	921, 000	856, 029	889, 480	889, 601	862, 363	867, 211	891, 863	7, 095, 178	6, 963, 096	6, 870, 900
Monetary stock of U. S.—												
daily average.....mills. of dolls..	4, 528	4, 532	4, 496	4, 311	4, 335	4, 351	4, 119	4, 113	4, 118	-----	-----	-----
Imports.....thous. of dolls..	13, 938	21, 889	19, 714	30, 762	35, 525	19, 271	20, 001	10, 331	2, 445	273, 802	236, 303	95, 753
Exports.....thous. of dolls..	26	41, 529	39, 332	550	807	881	99, 932	74, 190	1, 698	90, 524	8, 737	531, 406
Silver:												
Production—												
United States.....thous. of fine oz..	3, 969	3, 551	3, 749	4, 976	4, 523	5, 006	4, 945	3, 915	4, 776	35, 101	40, 029	38, 681
Canada.....thous. of fine oz..	1, 485	2, 100	2, 685	1, 146	1, 910	2, 744	1, 401	2, 389	2, 252	14, 215	12, 951	12, 826
Stocks, end of month—												
United States.....thous. of fine oz..	737	459	679	1, 332	682	1, 074	479	262	263	-----	-----	-----
Canada.....thous. of fine oz..	441	312	410	543	339	880	707	430	720	-----	-----	-----
Imports.....thous. of dolls..	2, 707	3, 953	2, 982	5, 022	4, 723	7, 345	6, 221	6, 544	6, 496	30, 208	44, 802	44, 493
Exports.....thous. of dolls..	3, 336	3, 709	4, 543	5, 445	6, 795	8, 522	7, 456	6, 180	9, 246	38, 254	56, 672	57, 737
Price at New York.....dolls. per fine oz..	.346	.343	.352	.524	.525	.526	.600	.592	.589	-----	-----	-----
<b>Business Failures</b>												
Firms (United States):												
Total commercial.....number..	2, 026	2, 028	1, 913	1, 767	1, 752	1, 762	1, 947	1, 723	1, 852	17, 712	15, 686	16, 403
Manufacturers.....number..	507	425	566	496	461	482	513	450	493	4, 360	4, 057	3, 925
Trade establishments.....number..	1, 393	1, 481	1, 234	1, 154	1, 190	1, 163	1, 325	1, 161	1, 241	12, 293	10, 657	11, 503
Agents and brokers.....number..	126	122	113	117	101	117	109	112	112	1, 109	972	969
Firms (Canada).....number..	156	183	167	112	180	132	126	123	136	1, 543	1, 308	1, 208
Liabilities (United States):												
Total commercial.....thous. of dolls..	63, 131	39, 826	49, 151	31, 375	32, 426	33, 746	29, 827	29, 587	58, 202	426, 095	298, 302	339, 237
Manufacturers.....thous. of dolls..	26, 273	13, 369	22, 735	12, 721	12, 767	13, 857	12, 723	12, 932	16, 877	164, 817	112, 304	121, 032
Trade establish-												
ments.....thous. of dolls..	22, 825	21, 572	17, 829	13, 931	14, 605	16, 002	13, 781	12, 899	19, 096	181, 954		



## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise note. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>BANKING AND FINANCE—Contd.</b>												
<b>Business Failures—Continued</b>												
Liabilities (Canada).....thous. of dolls.	2,707	2,997	2,939	1,534	2,592	6 1,393	1,681	1,402	2,584	30,648	19,876	25,049
By groups:												
Manufacturers—												
Metals.....number..	28	45	33	40	39	35	40	31	36	301	288	299
Textiles.....number..	75	51	55	47	63	48	67	61	59	544	466	486
Lumber.....number..	85	81	98	107	88	102	76	69	60	774	670	591
Chemicals.....number..	9	11	14	19	6	11	7	5	4	84	91	58
Printing and engraving.....number..	22	20	19	23	15	11	18	16	22	143	130	128
Foodstuffs.....number..	45	37	29	45	31	34	45	47	51	318	323	350
Leather, etc.....number..	8	10	12	12	10	4	11	18	8	99	99	102
Liquors and tobacco.....number..	6	1	11	3	7	6	5	3	6	35	56	47
Stone, clay, and glass.....number..	7	9	7	6	9	6	9	5	10	70	65	71
All other.....number..	222	160	279	194	193	225	235	195	237	1,992	1,769	1,793
Traders—												
General stores.....number..	73	83	67	68	68	72	78	77	54	754	710	691
Foods and tobacco.....number..	365	403	329	373	406	399	426	387	423	3,120	3,361	3,421
Clothing.....number..	264	268	270	202	201	163	248	202	210	2,492	1,852	2,310
Household furniture.....number..	259	235	204	200	180	179	228	179	171	2,234	1,922	2,015
Chemicals and paints.....number..	93	73	78	50	54	64	57	55	71	681	493	555
Books and paper.....number..	13	21	11	13	5	15	7	14	11	107	100	102
All other.....number..	326	398	275	248	276	271	281	247	307	2,855	2,219	2,406
<b>Life Insurance</b>												
<i>(Association of Life Insurance Presidents)</i>												
Policies and certificates, new (44 companies):												
Ordinary.....number of policies..	266,801	270,285	245,110	277,615	273,099	273,484	293,224	249,738	245,081	2,238,680	2,153,450	1,959,275
Industrial.....number of policies..	1,162,942	896,318	804,504	880,770	809,110	795,451	840,312	753,773	740,371	7,164,121	7,326,655	6,953,191
Group.....number of certificates..	52,009	74,171	38,851	66,353	72,923	40,622	51,895	38,905	24,005	396,585	393,147	316,945
Total policies and certificates.....number..	1,481,752	1,240,774	1,085,465	1,224,738	1,155,132	1,109,557	1,185,431	1,042,416	1,010,057	9,796,386	9,869,252	9,229,411
Amount of new insurance (44 companies):												
Ordinary.....thous. of dolls..	725,725	714,748	622,075	750,228	722,451	698,196	755,699	660,062	626,594	6,006,598	5,939,988	5,527,659
Industrial.....thous. of dolls..	311,925	247,506	233,745	242,166	223,680	219,144	214,882	194,642	193,365	1,959,643	1,953,371	1,811,050
Group.....thous. of dolls..	106,782	130,036	73,188	106,589	147,658	99,773	113,711	74,196	56,926	712,250	758,142	708,367
Total insurance.....thous. of dolls..	1,144,432	1,092,290	929,008	1,098,983	1,093,789	1,017,113	1,084,292	928,900	876,885	8,678,501	8,651,501	8,052,076
Premium collections (44 companies):												
Ordinary.....thous. of dolls..	166,190	170,847	150,754	158,733	169,773	154,206	154,916	152,862	143,386	1,347,411	1,326,414	1,246,918
Industrial.....thous. of dolls..	59,522	54,602	58,961	55,801	57,932	56,143	51,509	53,072	50,228	465,467	439,783	411,454
Group.....thous. of dolls..	7,615	8,480	6,508	7,345	11,494	7,129	5,574	7,296	5,705	64,316	76,108	62,139
Annuities.....thous. of dolls..	5,859	7,047	5,797	5,797	5,797	5,797	5,797	5,797	5,797	55,189	55,189	55,189
Total.....thous. of dolls..	238,686	240,976	222,020	221,879	239,199	217,478	211,999	213,230	199,319	1,932,383	1,842,305	1,720,511
Admitted life insurance assets (40 companies):												
Grand total.....mills. of dolls..	14,736	14,837	14,926	13,469	13,594	13,691	12,197	12,312	12,406	-----	-----	-----
Mortgage loans—												
Total.....mills. of dolls..	6,171	6,200	6,213	5,792	5,849	5,887	5,292	5,338	5,382	-----	-----	-----
Farm.....mills. of dolls..	1,573	1,572	1,571	1,599	1,607	1,600	1,600	1,601	1,602	-----	-----	-----
All other.....mills. of dolls..	4,598	4,628	4,642	4,193	4,242	4,287	3,692	3,737	3,780	-----	-----	-----
Bonds and stocks (book value)												
Total.....mills. of dolls..	5,531	5,582	5,616	5,119	5,171	5,188	4,621	4,665	4,704	-----	-----	-----
Government.....mills. of dolls..	1,073	1,079	1,085	1,048	1,048	1,062	905	916	927	-----	-----	-----
Railroad.....mills. of dolls..	2,609	2,617	2,621	2,507	2,517	2,526	2,390	2,397	2,411	-----	-----	-----
Public utility.....mills. of dolls..	1,441	1,450	1,473	1,261	1,267	1,274	1,112	1,128	1,138	-----	-----	-----
All other.....mills. of dolls..	417	436	437	308	339	326	214	224	228	-----	-----	-----
Policy loans and premium notes.....mills. of dolls..	1,992	2,018	2,041	1,652	1,670	1,688	1,459	1,472	1,480	-----	-----	-----
<i>(Life Insurance Sales Research Bureau)</i>												
Sales of ordinary life insurance:												
United States total.....thous. of dolls..	822,437	779,184	685,864	829,202	796,900	765,702	805,695	700,939	702,275	6,541,755	6,478,209	5,985,352
Eastern manuf. dis.thous. of dolls..	330,948	319,321	275,228	334,551	319,437	300,810	333,895	273,188	273,055	2,719,171	2,679,735	2,462,929
Western manuf. dis.thous. of dolls..	188,821	172,695	153,052	189,447	182,763	177,990	176,121	163,694	163,568	1,470,005	1,404,953	1,325,302
Western agric. district.....thous. of dolls..	121,170	114,929	99,276	125,349	121,224	116,749	121,069	107,659	104,287	941,265	938,092	904,057
Southern district.....thous. of dolls..	94,384	89,284	80,888	97,104	90,954	90,526	96,796	85,056	86,288	732,315	730,034	708,607
Far western district.....thous. of dolls..	87,114	82,955	77,450	82,751	82,522	79,627	77,794	71,342	75,077	678,996	645,395	584,457
Canada total, 15 companies.....thous. of dolls..	55,355	47,829	37,061	54,700	56,078	42,468	51,844	49,492	43,503	385,652	405,808	374,547
<b>Dividend and Interest Payments</b>												
Grand total.....thous. of dolls..	721,079	915,900	423,500	658,300	897,856	6 410,500	470,100	748,704	335,800	5,621,170	5,029,601	3,989,614
Interest payments.....thous. of dolls..	391,680	542,900	227,000	386,400	515,156	201,000	316,900	466,704	182,000	2,904,471	2,717,201	2,435,754
Dividend payments:												
Total.....thous. of dolls..	329,400	373,000	196,500	271,900	382,700	6 209,500	153,200	282,000	153,800	2,716,700	2,312,400	1,553,860
Industrial and misc.....thous. of dolls..	235,000	278,000	152,900	185,800	284,500	6 165,000	119,500	200,500	112,100	2,022,400	1,691,000	1,129,480
Steam railroads.....thous. of dolls..	39,500	54,000	36,900	33,600	55,000	6 37,600	27,500	43,900	35,200	351,400	313,200	265,080
Street railways.....thous. of dolls..	6,900	12,500	6,700	6,500	13,100	6,900	6,200	12,600	6,500	79,900	77,500	79,300
<b>New Security Issues</b>												
Foreign loans in the U. S.....thous. of dolls..	187,855	69,602	30,580	128,226	41,708	25,250	268,150	45,303	577	920,788	545,292	1,096,315
Foreign governments.....thous. of dolls..	103,250	42,100	2,680	6,000	6,000	15,000	48,550	41,396	-----	419,486	56,750	542,870
Total corporation.....thous. of dolls..	512,678	428,762	189,866	641,129	862,847	6 788,222	830,934	323,748	201,426	4,583,099	7,214,152	4,961,232
Purpose of issue:												
New capital.....thous. of dolls..	445,363	402,281	121,516	624,907	803,553	6 763,177	613,908	284,803	182,716	4,190,192	6,265,304	3,435,343
Refunding.....thous. of dolls..	67,315	26,481	68,350	16,222	59,294	25,045	217,026	38,945	18,709	392,907	948,848	1,525,888
Type of security—												
Stocks.....thous. of dolls..	154,955	70,430	57,673	359,009	650,604	6 670,090	410,111	208,212	73,892	1,384,422	4,854,029	1,912,847
Bonds and notes.....thous. of dolls..	357,723	358,332	132,193	282,120	212,243	118,132	420,823	115,536	127,534	3,198,677	2,360,123	3,048,386
Class of industry:												
Railroads.....thous. of dolls..	178,467	62,632	41,516	91,350	27,580	660	42,158	18,874	13,726	923,433	479,489	544,631
Public utilities.....thous. of dolls..	172,091	234,465	48,071	139,552	319,796	6 108,910	373,590	57,598	97,776	2,082,816	1,782,835	1,852,340
Industrial.....thous. of dolls..	55,953	45,920	84,714	105,205	127,621	91,282	190,356	96,810	32,989	726,582	1,484,093	956,878
Oil.....thous. of dolls..	66,000	625	-----	45,641	17,639	2,105	21,241	15,030	-----	239,074	179,015	95,027
Land and buildings.....thous. of dolls..	15,383	22,070	3,101	40,843	41,269	35,503	74,071	64,538	30,256	175,687	464,996	548,984
Shipping and misc.....thous. of dolls..	24,785	63,050	9,363	218,739	328,944	6 549,763	130,718	75,374	26,678	376,009	2,708,496	937,342

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31		
	June	July	August	June	July	August	June	July	August	1930	1929	1928
<b>BANKING AND FINANCE—Contd.</b>												
<b>New Security Issues—Continued</b>												
States and municipalities:												
Permanent loans.....thous. of dolls..	153,699	111,657	95,379	162,168	86,745	80,415	137,213	75,886	78,445	961,758	867,286	931,451
Temporary loans.....thous. of dolls..	69,742	153,068	26,245	48,109	59,321	86,164	44,621	57,014	63,543	637,236	600,688	520,143
Bond sales (Canada):												
Govt. and provincial.....thous. of dolls..	7,300	1,000	7,150	2,526			10,734			98,286	60,209	49,770
Municipal.....thous. of dolls..	4,056	12,930	2,365	7,363	1,537	1,449	2,158	975	964	86,849	63,984	17,110
Corporation.....thous. of dolls..	13,900	3,475	35,873	16,080	39,525	693	77,198	9,565	4,095	157,605	154,646	210,744
Tax-exempt securities outstanding, end of month.....mills. of dolls..	19,772	19,848	19,892	17,501	17,531	17,635	16,804	16,825	16,865			
<b>Agricultural Finances</b>												
Loans outstanding, end mo.:												
Federal farm loan banks.....thous. of dolls..	1,192,720	1,191,949	1,191,212	1,204,916	1,204,363	1,203,806	1,184,656	1,185,714	1,187,365			
Joint-stock land banks.....thous. of dolls..	569,363	567,010	564,933	597,956	596,403	594,876	609,580	608,314	608,706			
Federal intermediate credit banks.....thous. of dolls..	91,665	111,244	122,697	68,101	68,981	68,882	69,978	67,815	66,978			
<b>Stocks and Bonds</b>												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share..	284.36	283.64	282.81	372.70	414.04	431.20	252.94	257.98	267.16			
25 railroads, average.....dolls. per share..	113.84	113.69	110.38	134.37	149.27	151.29	118.64	119.18	121.57			
Southern cotton mills.....dolls. per share..	74.91	71.92	68.96	95.15	92.45	90.41	110.42	108.17	104.82			
103 stocks, average.....dolls. per share..	54.84	56.98	55.92	82.50	86.25	90.35	72.89	73.30	76.59			
Stock prices, average weekly closing:												
Industrials, rails, and utilities (402).....rel. to 1926..	152.8	149.3	147.6	190.7	207.2	218.1	145.3	144.2	148.3			
All industrials (335).....rel. to 1926..	143.1	139.8	138.7	191.0	202.7	210.3	148.2	147.8	152.6			
All railroads (33).....rel. to 1926..	124.5	124.2	121.2	144.8	160.0	165.4	126.7	124.6	126.5			
All utilities (34).....rel. to 1926..	223.5	215.4	212.7	233.0	272.8	304.3	148.1	145.3	147.9			
Automobiles and trucks (13).....rel. to 1926..	134.0	132.2	134.1	241.7	241.0	240.8	235.3	238.4	244.7			
Automobile tires and rubber goods (7).....rel. to 1926..	84.0	76.8	72.0	184.8	184.9	169.5	115.8	113.3	119.3			
Airplane (10).....rel. to 1926..	418.1	405.7	400.9	1,069.0	1,131.0	1,130.0	134.2	130.6	132.0			
Agricultural implements (4).....rel. to 1926..	311.1	285.5	268.5	380.5	418.0	423.9	259.9	263.9	281.7			
Chain stores (17).....rel. to 1926..	89.5	88.7	90.1	144.5	148.0	148.7	136.8	136.3	142.9			
Copper and brass (9).....rel. to 1926..	134.6	129.1	121.3	270.8	280.8	288.9	147.5	150.0	155.2			
Food, other than meat (20).....rel. to 1926..	148.7	149.4	147.2	175.6	189.1	186.7	152.4	152.1	158.1			
Machinery and machine equipment (10).....rel. to 1926..	152.1	154.5	152.3	159.4	171.8	177.2	132.3	132.7	135.4			
Oil producing and refining (16).....rel. to 1926..	133.1	132.9	129.7	144.1	149.1	157.5	112.0	110.9	112.6			
Railroad equipment (9).....rel. to 1926..	98.8	94.3	93.4	141.7	148.5	157.8	127.1	125.1	123.6			
Rayon (5).....rel. to 1926..	73.7	72.0	65.8	138.0	126.6	126.2	178.2	167.0	165.1			
Steel and iron (9).....rel. to 1926..	161.1	159.1	160.4	188.2	211.5	238.4	137.7	136.6	143.6			
Textiles (30).....rel. to 1926..	68.5	67.1	66.0	122.4	120.3	118.1	126.3	120.3	120.5			
Theaters, motion pictures, and amusements (7).....rel. to 1926..	119.4	111.9	106.1	133.4	139.0	142.5	111.5	111.0	116.6			
Tobacco and tobacco products (10).....rel. to 1926..	145.2	146.6	149.2	135.1	139.1	141.6	134.9	134.3	137.6			
Traction, motor transportation, etc. (9).....rel. to 1926..	75.3	74.1	72.7	83.7	83.6	83.1	97.3	96.0	95.7			
Stock yields:												
Total common (90).....per cent..	4.50	4.44	4.42	3.38	3.16	3.01	4.12	4.14	4.01			
Industrials (50).....per cent..	4.91	4.77	4.69	3.51	3.36	3.26	4.12	4.11	3.96			
Public utilities (20).....per cent..	2.92	3.94	3.12	2.22	1.95	1.78	3.43	3.48	3.39			
Railroad (20).....per cent..	5.43	5.41	5.50	4.62	4.17	4.04	5.75	5.66	5.50			
Preferred high grade industrial (20).....per cent..	5.52	5.56	5.53	5.49	5.52	5.54	5.32	5.40	5.43			
Stock sales, N. Y. Stock Exchange.....thous. of shares..												
Exchange.....thous. of shares..	76,593	46,753	39,869	69,548	93,379	95,705	63,741	39,001	67,704	595,748	726,950	522,295
Bond sales:												
Miscellaneous.....thous. of dolls..	218,500	183,716	167,584	237,676	295,577	251,287	246,885	183,815	173,561	1,787,210	1,817,345	1,965,361
Liberty-Treasury.....thous. of dolls..	11,789	10,112	9,951	9,848	13,390	8,510	14,517	25,240	9,988	74,980	85,934	128,383
Total.....thous. of dolls..	230,289	193,828	177,535	237,524	308,967	259,797	261,402	209,055	183,549	1,862,191	1,903,279	2,093,744
Bond prices:												
Highest-grade rails.....p. ct. of par. 4% bond..	91.36	92.83	94.25	86.37	86.06	85.98	92.04	90.62	89.66			
Second-grade rails.....p. ct. of par. 4% bond..	84.91	85.09	86.94	78.59	78.55	77.25	84.42	83.09	80.99			
Public utility.....p. ct. of par. 4% bond..	74.78	74.99	76.82	74.32	73.25	73.14	79.51	79.47	79.08			
Industrial.....p. ct. of par. 4% bond..	75.60	75.43	76.33	75.29	75.24	74.54	79.39	77.74	77.97			
Comb. price index.....p. ct. of par. 4% bond..	81.10	81.43	82.93	78.37	77.99	77.43	83.54	82.45	81.68			
Bond prices, 1st of following month:												
5 Liberty bonds.....p. ct. of par..	105.28	105.44	105.23	100.87	100.64	100.61	105.16	103.20	103.88			
50 domestic bonds.....p. ct. of par..	99.10	99.81	100.41	96.57	96.82	96.51	100.41	99.09	99.48			
40 Representative issues.....p. ct. of par..	90.62	91.12	90.99									
Bond yields:												
Total, 60 high grade.....per cent..	4.53	4.49	4.43	4.73	4.73	4.74	4.50	4.54	4.59			
Railroads (15).....per cent..	4.41	4.36	4.29	4.65	4.67	4.67	4.35	4.44	4.49			
Industrials (15).....per cent..	4.92	4.92	4.87	5.09	5.09	5.09	4.91	4.95	4.96			
Utilities (15).....per cent..	4.67	4.63	4.59	4.90	4.90	4.89	4.66	4.68	4.73			
Municipal (15).....per cent..	4.10	4.05	3.97	4.26	4.28	4.31	4.09	4.13	4.16			
Municipal bond yield (20).....per cent..	4.14	4.08	4.01	4.33	4.41	4.41	4.06	4.13	4.18			
U. S. Treasury notes and certificates, 3-6 months.....per cent..	1.89	1.83	1.53	4.80	4.55	4.70	3.92	4.12	4.36			
Liberty and Treasury bonds.....per cent..	3.37	3.37	3.38	3.71	3.68	3.72	3.40	3.50	3.56			
Long-term and real-estate bonds issued:												
Grand total.....thous. of dolls..	11,093	16,425	1,938	20,025	36,700	28,403	66,364	48,495	21,947	110,607	293,342	465,973
Purpose of issue—												
Finance construction.....thous. of dolls..	6,648	10,725	300	4,295	24,660	16,108	27,400	18,581	9,970	51,346	112,550	90,050
Real-estate mortgage.....thous. of dolls..	1,555	2,590	1,388	4,800	4,556	8,485	6,763	24,079	5,590	14,378	77,250	145,374
Acquisitions and improvements.....thous. of dolls..	1,110	480		7,485	2,390	105	2,610	1,510	3,252	8,490	52,605	49,228

\* Revised.

## TREND OF BUSINESS MOVEMENTS—Continued

The cumulatives shown are through August, except where otherwise noted. Earlier data for items shown here may be found on pages 27 to 139 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH AUGUST 31			
	June	July	August	June	July	August	June	July	August	1930	1929	1928	
<b>BANKING AND FINANCE—Contd.</b>													
<b>Stocks and Bonds—Continued</b>													
Long-term and real-estate bonds issued—Continued.													
Kind of structure—													
Office and commercial.....	thous. of dolls.	3,035	3,395	250	10,845	24,860	9,875	22,430	9,786	4,785	47,463	97,305	160,161
Hotels.....	thous. of dolls.	198	1,400	675	700	1,175	9,995	885	4,020	2,200	3,573	25,230	34,160
Apartments.....	thous. of dolls.	5,665	10,050		2,200	1,582	1,588	4,035	4,600	3,145	21,335	15,437	30,009
Interest rates.....	per cent.	6.20	5.99	5.46	6.07	6.09	6.03	5.78	5.86	5.76			
<b>FOREIGN EXCHANGE RATES</b>													
Europe:													
England.....	dolls. per £ sterling..	4.86	4.87	4.87	4.85	4.85	4.85	4.88	4.86	4.85			
France.....	dolls. per franc..	.039	.039	.039	.039	.039	.039	.039	.039	.039			
Italy.....	dolls. per lira..	.052	.052	.052	.052	.052	.052	.053	.052	.052			
Belgium.....	dolls. per franc..	.140	.140	.140	.139	.139	.139	.140	.139	.139			
Netherlands.....	dolls. per guilder..	.402	.402	.403	.402	.401	.401	.403	.403	.401			
Sweden.....	dolls. per krona..	.269	.269	.269	.268	.268	.268	.268	.268	.268			
Switzerland.....	dolls. per franc..	.194	.194	.194	.192	.192	.192	.193	.193	.193			
Asia:													
Japan.....	dolls. per yen..	.494	.494	.494	.439	.456	.467	.466	.459	.451			
India.....	dolls. per rupee..	.360	.361	.360	.360	.360	.360	.365	.363	.363			
America:													
Canada.....	dolls. per Canadian doll.	1.000	1.001	1.001	.992	.995	.994	.998	.998	1.000			
Argentina.....	dolls. per gold peso..	.845	.821	.825	.953	.954	.954	.969	.961	.959			
Brazil.....	dolls. per milreis..	.114	.109	.100	.119	.119	.119	.120	.119	.119			
Chile.....	dolls. per paper peso..	.121	.121	.121	.120	.120	.121	.122	.121	.121			
<b>U. S. FOREIGN TRADE</b>													
<b>Imports</b>													
Grand total.....	thous. of dolls.	250,343	220,494	218,359	353,403	352,981	369,358	317,249	317,848	346,715	2,174,838	3,008,714	2,750,495
By grand divisions:													
Europe—													
Total.....	thous. of dolls.	72,147	62,046		106,420	115,113	109,759	95,532	95,596	107,793	757,459	770,561	7697,321
France.....	thous. of dolls.	7,484	7,857		13,280	14,590	14,028	11,918	11,321	15,075	76,962	795,268	783,478
Germany.....	thous. of dolls.	12,817	12,724		19,330	22,806	22,731	15,793	20,668	21,023	729,974	7148,829	7122,931
Italy.....	thous. of dolls.	6,770	4,518		10,608	8,487	7,660	8,145	6,956	6,876	751,729	765,101	756,753
United Kingdom.....	thous. of dolls.	15,511	13,901		25,396	27,975	25,920	27,871	28,103	27,535	7134,649	7197,597	7203,747
North America—													
Total.....	thous. of dolls.	66,181	57,515		81,898	79,393	82,242	73,905	77,533	78,216	477,837	601,753	7566,093
Canada.....	thous. of dolls.	39,503	30,265		44,315	44,092	43,751	41,027	41,798	43,254	249,579	292,104	7273,867
South America—													
Total.....	thous. of dolls.	35,554	30,248		50,750	46,630	51,624	51,102	45,894	51,043	291,765	391,068	7348,020
Argentina.....	thous. of dolls.	4,109	3,931		6,488	7,388	7,818	10,319	8,119	8,975	57,625	70,675	765,145
Asia and Oceania—													
Total.....	thous. of dolls.	71,194	65,281		107,848	104,987	114,589	87,237	89,788	100,880	566,649	806,499	7733,416
Japan.....	thous. of dolls.	15,357	17,147		32,486	28,885	40,254	22,317	24,888	38,993	153,232	230,620	7211,588
Africa, total.....	thous. of dolls.	5,013	5,354		6,488	6,857	11,144	9,472	7,037	8,782	47,017	69,474	755,929
By economic classes:													
Crude materials.....	thous. of dolls.	76,643	69,579	72,611	120,734	119,038	125,817	109,666	106,065	122,186	720,941	1,072,947	1,012,562
Foodstuffs, crude and food animals.....	thous. of dolls.	35,372	29,310	26,598	40,955	42,957	39,357	48,325	43,174	45,940	283,247	368,810	380,753
Manufactured food-stuffs.....	thous. of dolls.	24,813	19,669	17,211	36,527	32,990	35,558	30,005	33,314	30,060	205,492	303,151	276,773
Semimanufactures.....	thous. of dolls.	51,725	44,886	44,141	75,703	71,833	79,725	57,655	60,038	66,337	445,149	608,207	494,306
Finished manufactures.....	thous. of dolls.	61,790	57,250	57,798	79,484	86,163	89,901	71,597	75,258	82,192	520,009	655,598	586,102
<b>Exports</b>													
Grand total, including reexports.....	thous. of dolls.	295,097	266,619	300,000	393,177	402,902	380,758	388,661	378,984	379,006	2,643,051	3,406,579	3,135,979
By grand division:													
Europe—													
Total.....	thous. of dolls.	122,830	113,043		153,966	160,999	160,654	161,579	152,285	149,216	1,064,795	1,280,847	1,250,563
France.....	thous. of dolls.	11,152	11,986		14,587	15,794	17,095	15,733	15,918	15,167	122,592	138,370	7119,054
Germany.....	thous. of dolls.	16,456	14,151		21,261	24,634	26,367	28,371	22,092	24,579	7147,310	7204,841	7228,130
Italy.....	thous. of dolls.	6,240	5,522		12,639	8,666	6,620	11,254	11,853	9,956	761,420	787,905	788,765
United Kingdom.....	thous. of dolls.	47,915	40,628		52,537	56,890	58,333	52,298	52,098	52,827	379,127	459,105	7436,922
North America—													
Total.....	thous. of dolls.	92,174	82,956		115,609	116,405	111,517	113,810	110,919	118,041	654,999	841,229	7739,049
Canada.....	thous. of dolls.	59,715	55,058		80,480	79,569	76,862	81,684	77,940	84,963	426,754	582,205	7506,790
South America—													
Total.....	thous. of dolls.	27,636	27,612		49,686	49,293	39,430	38,999	43,907	43,767	212,718	337,293	7261,469
Argentina.....	thous. of dolls.	12,067	10,816		20,464	20,481	17,352	15,686	16,736	17,348	82,316	128,591	719,370
Asia and Oceania—													
Total.....	thous. of dolls.	43,960	35,913		61,686	63,183	58,610	63,727	61,866	59,971	350,484	486,300	7440,930
Japan.....	thous. of dolls.	12,709	7,489		16,966	15,006	11,507	21,637	17,987	15,517	104,500	141,603	7140,909
Africa, total.....	thous. of dolls.	8,497	7,095		12,229	13,022	10,546	10,546	10,006	8,011	60,066	70,150	764,962
By economic classes:													
Total domestic exports only.....	thous. of dolls.	290,143	262,028	293,871	386,804	393,794	374,533	380,305	371,471	371,312	2,595,649	3,346,846	3,067,462
Crude materials.....	thous. of dolls.	37,484	36,537	53,149	56,134	50,012	50,887	74,918	60,177	52,375	462,458	585,057	650,639
Foodstuffs, crude and food animals.....	thous. of dolls.	13,346	16,656	24,160	14,518	20,250	28,438	17,243	14,217	29,310	116,256	175,617	140,672
Manufactured food-stuffs.....	thous. of dolls.	27,305	24,210	28,350	34,018	35,840	37,107	31,137	30,661	34,749	245,684	310,513	287,360
Semimanufactures.....	thous. of dolls.	47,125	39,834	40,772	62,119	60,511	57,069	63,046	61,397	55,873	370,956	500,485	486,253
Finished manufactures.....	thous. of dolls.	164,882	144,791	147,439	220,016	227,173	201,032	193,961	205,019	199,005	1,400,315	1,775,173	1,502,538
Agricultural exports (quantities):													
All commodities.....	rel. to 1910-1914..	55	57	87	69	70	76	76	64	75			
All commodities except cotton.....	rel. to 1910-1914..	93	98	130	102	117	132	91	84	126			
<b>CANADIAN FOREIGN TRADE</b>													
Total trade.....													
Imports.....	thous. of dolls.	91,544	84,551	77,906	111,049	114,201	111,631	110,694	103,404	114,175	705,771	890,201	806,201
Exports.....	thous. of dolls.	80,536	77,906	70,613	114,492	105,686	98,395	109,139	127,369	113,904	596,238	793,791	805,983

\* Revised.

\* Cumulative July 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.

**Acoustics.—Sound Absorption Coefficients of More Common Materials.** ii+2 pages. (Bureau of Standards, Circular No. 384.) Data on sound absorption coefficients of a number of materials used as acoustic correctives. Price, 5 cents.

**Agricultural machinery.—British Market for Agricultural Machinery and Implements.** ii+16 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 712.) Discussion of the character of farms in the United Kingdom, the British agricultural implement industry, the trade in these implements, types of machinery commonly used, and sales methods employed. There is included a list of agricultural fairs held annually. Price, 10 cents.

**Aviation.—Aeronautics Trade Directory: Part I, Commodities; Part II, Activities.** ii+54 pages. (Aeronautics Branch, Aeronautics Bulletin No. 3.) List of manufacturers of aircraft equipment arranged alphabetically by kind of apparatus produced, and list of operators of aircraft arranged by State and town from which their activities start.

**Bureau of Standards Journal of Research** is published monthly and contains the papers formerly issued as Scientific and Technologic Papers series, which have been discontinued. The articles in the journal are known as the Research Papers series and are issued separately after publication in the journal. Single copies, 40 cents; annual subscription, \$2.75.

**Coal and coke.—Fuel Briquets in 1929,** by O. E. Kiessling and J. M. Corse. (Bureau of Mines, Mineral Resources of United States, 1929, Pt. II, pp. 23-32.) This publication shows the production, sales, and imports of briquets in the United States, and the world production of this kind of fuel. Price, 5 cents.

**Commercial standards.—Interchangeable Ground Glass Joints.** vi+12 pages, 1 illustration. (Bureau of Standards, Commercial Standard C321-30.) These are the standards established for ground glass joints for laboratory and industrial glassware. Price, 15 cents.

**Commercial Standards Monthly.** Review of Progress in Commercial Standardization and Simplification. Published monthly by the Bureau of Standards. Annual subscription, \$1.

**Explosives.—Procedure for Testing Explosives for Permissibility for Use in Coal Mines,** with Test Requirements, Tolerance Limits, and Schedule of Fees. ii+11 pages, 1 chart. (Bureau of Mines, Schedule 17B.)

**Fish.—Migrations and Other Phases in Life History of Cod off Southern New England,** by William C. Schroeder. (Bureau of Fisheries, Document No. 1081.) From Bulletin of Bureau of Fisheries, Vol. XLVI, 1930, pp. 1-136, 8 illustrations, 3 pages of plates, 18 charts. This publication describes the methods used in obtaining data, such as tagging and measuring of fish when first caught, and the results obtained in the study of the migratory habits of the cod. A bibliography is included. Price, 45 cents.

**Fish nets.—Investigations upon Deterioration of Nets in Lake Erie,** by A. C. Robertson and W. H. Wright. (Bureau of Fisheries, Document No. 1083.) Appendix VIII to Report of Commissioner of Fisheries for Fiscal Year 1930, pp. 149-176, 10 illustrations. Discussion of the causes of deterioration of fish nets in Lake Erie and methods which may be employed to prevent such deterioration. Price, 5 cents.

**Foodstuffs.—San Francisco Restaurant Industry.** iv+28 pages. (Bureau of Foreign and Domestic Commerce.) Study of the restaurants of San Francisco, showing the number in operation, amount of investment, character of equipment, number of employees and pay roll, seating capacity of the various establishments, average annual sales, relation of wages of employees to sales made, average amount of customer's check, and length of time each restaurant has been operated under same management. Price, 5 cents.

**Foreign Trade of United States in Fiscal Year 1929-30,** ii+22 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 713.)

**Machinery.—Far Eastern Markets for Dairy Equipment and Supplies.** ii+23 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 711.)

Standards Committee, 4 pages. (Bureau of Standards, American Marine Standard E No. 33-1930.) Price, 5 cents.

**Metals and minerals.—Arsenic in 1929,** by V. C. Heikes. (Bureau of Mines, Mineral Resources of United States, 1929, Pt. I, pp. 1-4.) This pamphlet shows the production, imports, and sales of arsenic in the United States during 1929, the market conditions during this year, and world production of this mineral for the years 1924 to 1928. Price, 5 cents.

**Copper Electrotyping.** ii+34 pages. (Bureau of Standards, Circular No. 387.) This publication outlines the process of electrotyping, gives general principles of electrodeposition, and describes the conditions necessary for satisfactory operation and control of copper electrotyping solutions. Price, 10 cents.

**Mineral Resources of United States, 1929.** (Preliminary Summary) ii+A120 pages. (Bureau of Mines.) The tables in this report show production of different minerals in the United States and trade in these minerals for a series of years, and for production in the different States, arranged in alphabetic order. Price, 20 cents.

**Zinc Smelting from Chemical and Thermodynamic Viewpoint,** by C. G. Maier. iv+93 pages, 10 charts. (Bureau of Mines, Bulletin 324.) In this bulletin is shown the application of theoretical data to the general chemistry of zinc reduction in smelting. Price, 20 cents.

**Monthly Summary of Foreign Commerce of United States, July, 1930.** Parts I and II. (Bureau of Foreign and Domestic Commerce.) Part I contains statistics of exports of domestic merchandise, and imports by articles for July, 1929 and 1930, and for seven months ending July, 1929 and 1930. 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 cents; Part II, 5 cents; annual subscription, \$1.25.

**Petroleum.—Effect of Vacuum on Oil Wells,** by Ben E. Lindsley and W. B. Berwald. vi+133 pages, 13 illustrations, 9 pages of plates, charts. (Bureau of Mines, Bulletin 322.) Description of the so-called vacuum method of extracting petroleum from oil wells. Price, 35 cents.

**Radio Service Bulletin** is issued monthly by the Radio Division of the Department of Commerce and contains list of radio stations. Single copies, 5 cents; annual subscription, 25 cents.

**Shipping.—American Documented Seagoing Merchant Vessels of 500 Gross Tons and Over.** Published monthly by the Bureau of Navigation. Single copies, 10 cents; annual subscription, 75 cents.

**Pilot Rules for Certain Inland Waters of Atlantic and Pacific Coasts and of Coast of Gulf of Mexico.** ii+33 pages, illustrations. (Steamboat Inspection Service, Form 804.)

**Simplified practice recommendations.—Color for School Furniture.** vi+12 pages, 1 plate, 1 chart. (Bureau of Standards, Simplified Practice Recommendation R111-30.) Price, 5 cents.

**Industrial Truck Tires.** iv+14 pages, 1 chart. (Bureau of Standards, Simplified Practice Recommendation R103-29.) Price, 5 cents.

**Stoves.—Market for Cooking and Heating Appliances in Canada and Latin America.** ii 55 pages. (Bureau of Foreign and Domestic Commerce, Trade Information Bulletin No. 714.) Discussion of the kinds of cooking and heating appliances in demand and conditions for their marketing in Canada and the different countries of Latin America. Price, 10 cents.

**Tariff.—Handbook of Foreign Tariffs and Import Regulations on Agricultural Products: III, Canned Foods in Western Hemisphere,** by Roberta P. Wakefield and Robert S. Hollingshead. xiv 379 pages. (Bureau of Foreign and Domestic Commerce, Trade Promotion Series No. 97.) This publication gives the sanitary, manufacture, import, and sales regulations for canned foods in the different countries of the Western Hemisphere. Price, 50 cents.

**Vital statistics.—Fifteenth Census of United States, 1930: Arkansas, Number and Distribution of Inhabitants.** 26 pages, map. (Bureau of the Census, Population Bulletin, First Series.)



# CHIEF FUNCTIONS OF THE DEPARTMENT OF COMMERCE

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## AERONAUTICS BRANCH

CLARENCE M. YOUNG, Assistant Secretary of Commerce for Aeronautics

Establishment of civil airways and maintenance of aids to air navigation; inspection and registration of aircraft and licensing of pilots; enforcement of air traffic rules; investigation of accidents; encouragement of municipal air ports; fostering of air commerce; scientific research in aeronautics; and dissemination of information relating to commercial aeronautics. (Some of these functions are performed by special divisions of the Lighthouse Service, the Bureau of Standards, and the Coast and Geodetic Survey.)

## BUREAU OF THE CENSUS

WILLIAM M. STEUART, Director

Taking censuses of population, mines and quarries, water transportation, and religious bodies every 10 years; censuses of agriculture and electrical public utilities every 5 years; and a census of manufactures every 2 years.

Compilation of statistics of wealth, public debt and taxation, including financial statistics of local governments, every 10 years; annual compilation of financial statistics of State and municipal governments.

Compilation of statistics of marriage, divorce, births, deaths, and penal and other institutions annually, and of death rates in cities and automobile accidents weekly.

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

## BUREAU OF FOREIGN AND DOMESTIC COMMERCE

WILLIAM L. COOPER, Director

The collection of timely information concerning world market conditions and openings for American products in foreign countries, through commercial attachés, trade commissioners, and consular officers, and its distribution through weekly Commerce Reports, bulletins, confidential circulars, the news and trade press, and district and cooperative officers in 65 cities.

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 publication of statistics on imports and exports.

The study of the processes of domestic trade and commerce. The Survey of Current Business.

## BUREAU OF STANDARDS

GEORGE K. BURGESS, Director

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.

Establishment of simplified commercial practices through cooperation with business organizations in order to reduce the wastes resulting from excessive variety in commodities.

## 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 publications 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. TYLER, 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. ROBERTSON, 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.