

UNITED STATES  
DEPARTMENT OF COMMERCE  
WASHINGTON

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# SURVEY OF CURRENT BUSINESS

DECEMBER, 1930

No. 112



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 trades, 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 of 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 equivalent 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.

### METHOD 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 October and contains text covering the early weeks of November (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



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UNITED STATES DEPARTMENT OF COMMERCE

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### PRELIMINARY SUMMARY FOR NOVEMBER

Early reports on industrial conditions in November show, in the main, little change from a month ago, when allowance is made for the fewer number of working days in the month. Distribution of goods through primary channels, however, was running smaller than last year, as indicated by the returns on carloadings. The value of new building contracts awarded for the month of November showed a falling off from both the preceding month and a year ago. The production of bituminous coal and anthracite declined from the previous month and was also lower than a year ago. The output of steel ingots and pig iron receded from October and November, 1929. Tiu deliveries showed declines from comparative periods.

Wholesale prices in general showed but slight change, while prices for copper, although lower than a year ago, averaged higher than in October. Prices for iron and steel averaged lower than prior periods.

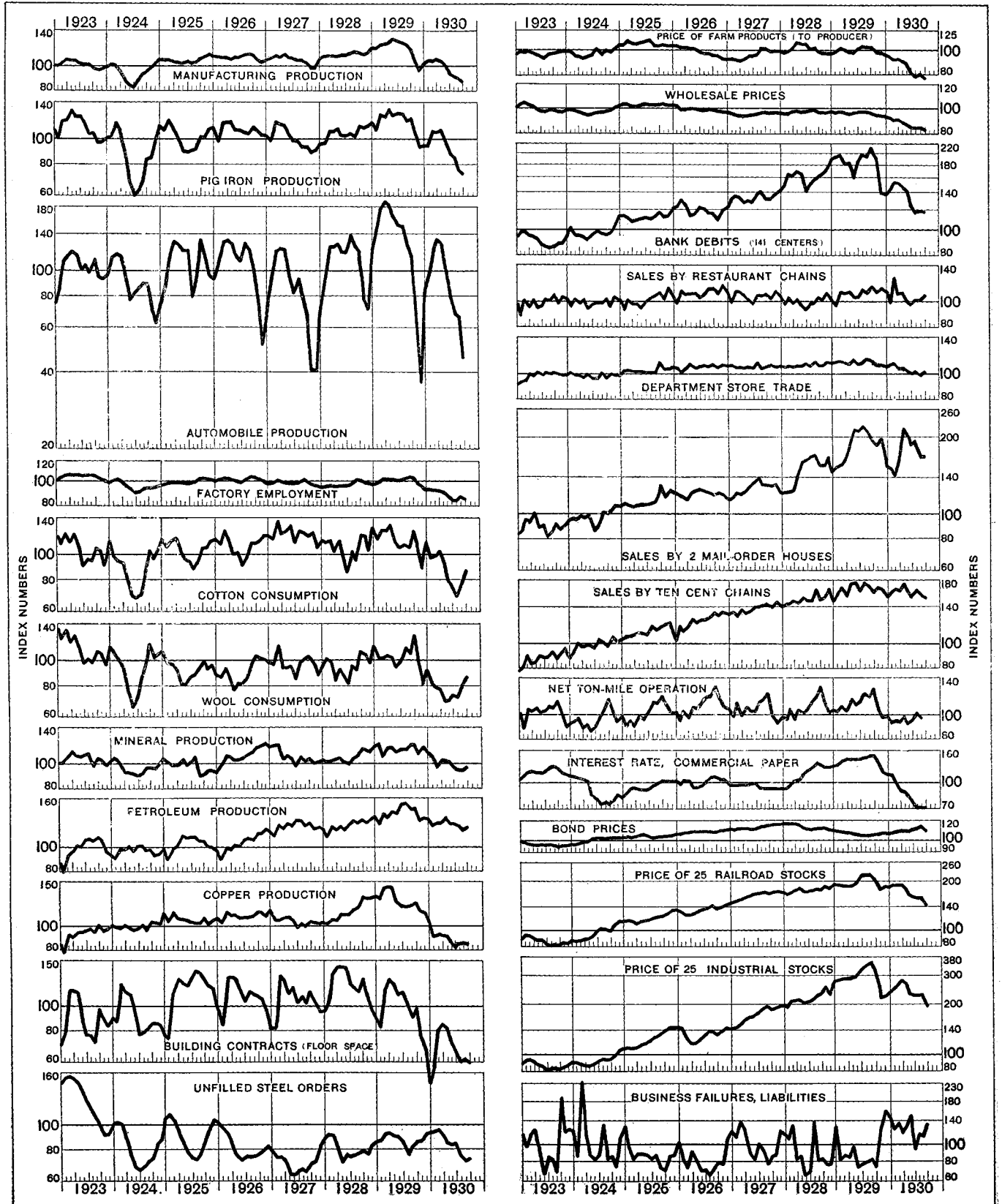
Loans and discounts of Federal reserve member

banks at the end of November showed a falling off from the end of October and were less than those of a year ago. The Federal reserve ratio was higher than at the end of November, 1929. Bank debits outside New York for the early weeks of November indicate a decline from October and from a corresponding period a year ago. Prices for stocks listed on the New York Exchange averaged lower than both preceding periods; bond prices, on the other hand, were higher than in November, 1929. Loans to brokers secured by stocks and bonds continued to decline during the month.

Interest rates on call loans, although lower than a year ago, showed no change from the previous month. Rates on prime commercial paper declined slightly from the rates of October and, like all money rates, were lower than last year. Business failures during November were less numerous than during the preceding month.

## 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		July	Aug.	Sept.	Oct.	July	Aug.	Sept.	Oct.	June	July	Aug.	Sept.	Oct.
	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	111.0	113.0	115.0	114.0	126.0	125.0	122.0	117.0	101.0	93.0	90.0	91.0	86.0	
*Total minerals.....	105.0	96.0	99.0	108.0	107.0	106.0	115.0	101.0	105.0	107.0	114.0	114.0	115.0	118.0	118.0	100.0	97.0	96.0	94.0	97.0	
Pig iron.....	111.7	86.7	101.5	109.0	101.0	105.5	117.9	102.8	105.0	102.5	112.9	126.7	125.7	117.1	120.1	98.2	88.4	84.5	76.2	72.5	
Steel ingots.....	104.8	88.7	106.4	113.1	104.6	120.2	130.9	110.1	120.9	120.0	134.5	140.3	142.9	131.0	131.2	99.5	84.8	89.5	83.0	78.7	
Automobiles.....	101.7	90.8	107.5	108.4	85.7	109.9	135.1	118.6	139.5	125.6	120.2	151.5	150.8	125.8	114.9	101.5	79.4	67.5	65.6	45.4	
Cement.....	92.1	99.8	108.1	110.0	115.3	118.0	114.1	140.6	150.9	143.9	141.1	139.3	149.5	138.6	134.6	138.7	137.4	143.4	129.7	115.9	
Cotton (consumption).....	105.9	89.7	104.4	108.5	120.2	106.7	114.6	85.7	102.6	95.9	120.1	106.6	108.9	106.4	124.7	79.0	73.8	68.7	76.8	86.6	
Wool (consumption).....	112.8	94.6	92.6	89.7	97.0	94.7	103.1	80.4	95.2	91.8	108.6	99.8	111.1	105.0	125.3	69.2	73.2	71.3	80.4	86.5	
<b>Raw material output:</b>																					
Animal products.....	100.0	104.0	96.0	96.0	97.0	99.0	99.2	108.4	96.7	91.6	101.6	116.0	100.0	98.7	102.6	116.7	111.8	91.4	91.2	96.1	
Crops.....	91.9	104.0	104.0	109.0	113.3	117.0	114.2	86.8	115.0	178.3	252.1	91.1	134.5	177.1	246.3	45.3	86.6	115.3	165.6	199.7	
Forest products.....	99.0	97.0	104.0	98.0	93.0	88.2	85.4	87.1	88.6	76.8	87.1	88.3	91.8	80.3	89.2	70.0	65.5	66.0	61.2	68.6	
Crude petroleum.....	99.4	96.9	103.7	104.6	122.3	122.4	136.5	123.1	126.7	124.6	129.9	148.7	150.1	142.5	144.0	124.6	125.0	121.9	115.6	118.4	
Bituminous coal.....	108.0	92.5	99.5	109.7	99.0	95.8	102.3	84.6	95.9	96.3	117.5	95.0	102.6	104.1	119.8	77.4	79.7	81.9	88.7	101.3	
Copper.....	93.4	100.2	106.4	110.2	104.9	114.9	127.1	111.3	116.7	118.8	131.1	120.1	119.6	120.4	125.2	86.0	82.3	85.1	85.8	84.6	
<b>Power and construction:</b>																					
Electric power.....	92.5	98.1	109.5	122.6	133.3	146.0	161.8	142.4	149.8	145.1	158.0	161.0	166.6	160.8	173.7	154.6	156.9	157.1	154.8	162.7	
Building contracts (37 States).....	89.7	92.7	117.6	111.0	106.8	121.4	99.6	123.7	118.8	114.2	129.1	113.7	100.5	90.2	98.9	72.6	67.2	60.2	62.1	59.5	
<b>Unfilled orders:</b>																					
General index.....	121.7	87.0	91.3	84.6	74.0	76.2	80.8	76.8	74.6	74.6	71.7	81.8	76.0	76.9	77.0	75.9	74.5	69.6	67.4	65.9	
U. S. Steel Corporation.....	125.8	83.6	90.6	82.1	71.1	80.7	87.1	74.8	75.9	77.4	78.6	85.6	76.6	81.7	85.6	83.1	84.2	75.0	71.7	72.9	
<b>Stocks:</b>																					
General index.....	94.5	102.0	103.5	114.6	120.8	123.0	136.8	105.8	107.9	116.3	133.3	122.0	127.4	139.4	155.1	124.8	125.4	132.2	147.8	161.7	
Manfd. commodities (28).....	93.8	103.2	103.0	106.3	112.5	117.4	120.1	119.3	116.3	112.1	111.5	120.7	116.2	114.2	114.4	125.3	124.5	120.5	117.7	117.3	
Cotton.....	102.5	91.4	106.2	145.5	153.1	123.6	126.8	58.6	52.4	89.3	155.0	54.2	58.1	106.4	176.9	118.7	108.0	119.1	165.3	236.6	
Copper (refined).....	106.4	113.9	73.1	64.8	85.4	58.4	78.4	48.5	48.4	45.8	40.3	86.3	92.2	83.7	78.1	279.8	284.5	307.1	318.6	322.4	
<b>Employment:</b>																					
Factories.....	104.2	96.2	99.7	101.4	98.8	97.2	100.4	95.7	98.3	100.3	100.2	100.7	102.0	105.4	103.3	88.2	84.6	85.1	86.4	84.3	
<b>Prices:</b>																					
Farm products, to producers.....	97.8	97.1	106.5	98.6	94.9	100.7	100.0	105.1	100.7	102.2	99.3	101.4	103.6	102.2	101.4	89.1	80.4	78.3	80.4	76.8	
Wholesale, all commodities.....	99.9	97.4	102.8	99.3	94.7	97.0	95.8	97.6	98.2	99.4	97.1	97.3	97.0	96.8	95.6	86.2	83.2	83.4	83.6	82.0	
Retail food.....	97.6	97.0	104.9	107.6	103.6	102.9	104.6	102.1	103.0	105.3	104.8	105.9	107.0	107.4	107.2	98.8	96.2	96.0	97.3	96.5	
Cost of living (including food).....	98.2	99.4	102.4	102.4	100.0	98.7	98.4	98.1	98.0	99.3	99.3	98.8	99.4	99.2	99.3	94.4	92.6	92.6	93.2	92.6	
<b>Distribution (values):</b>																					
*Bank debits, 141 cities.....	91.2	96.7	111.9	119.6	132.5	158.2	184.5	140.4	149.9	156.9	161.0	184.9	198.2	192.8	211.1	142.2	125.7	117.8	120.8	120.3	
*Department stores, sales.....	98.0	99.0	103.0	106.0	107.0	108.0	110.0	110.0	107.0	112.0	108.0	109.0	111.0	114.0	112.0	103.0	100.0	102.0	99.0	102.0	
*Mail-order sales, 2 houses.....	89.3	97.2	111.9	120.6	126.2	147.7	188.6	163.6	168.7	170.8	156.2	211.2	223.3	212.1	194.7	200.2	190.8	193.2	167.1	167.8	
*10-cent chains, sales.....	88.0	99.0	113.0	125.0	138.0	150.0	164.0	148.0	147.0	165.0	148.0	162.0	174.0	168.0	159.0	160.0	152.0	163.0	156.0	151.0	
Postal receipts.....	93.6	98.5	107.9	114.5	117.3	117.7	121.1	99.6	105.0	109.3	127.7	109.1	110.0	114.5	133.5	104.9	101.2	98.1	107.9	121.1	
Imports.....	97.8	93.1	109.0	114.3	108.0	105.5	113.5	98.4	107.3	98.9	110.0	109.3	114.3	108.8	121.1	77.5	68.2	67.6	70.1	107.7	
Exports.....	91.5	100.8	107.8	105.5	106.8	112.6	115.2	99.8	99.8	111.0	144.9	106.1	100.2	115.1	139.2	77.6	70.2	78.4	82.2	86.4	
<b>Transportation:</b>																					
Freight, net ton-miles.....	102.2	95.9	101.9	109.1	106.0	106.5	109.9	104.9	113.7	117.4	129.3	112.6	120.5	118.5	128.1	92.2	95.4	100.3	97.1	-----	
<b>Finance:</b>																					
Member bank loans and discounts.....	94.1	98.5	107.4	112.9	117.3	126.8	135.9	126.6	125.6	127.3	128.3	136.2	135.3	139.1	151.1	135.4	135.3	134.3	135.8	133.8	
Interest rate (commercial paper).....	116.2	90.0	93.5	100.9	95.4	112.8	135.7	119.0	124.8	130.6	127.6	139.2	142.2	145.0	145.0	81.2	75.4	69.6	69.6	69.6	
Federal reserve ratio.....	99.0	104.1	96.9	96.0	99.1	89.1	93.4	88.9	90.0	86.5	87.0	96.4	97.7	94.2	89.9	104.5	108.2	104.3	105.7	106.7	
Price, corporation bonds.....	96.4	99.9	103.6	108.0	112.5	113.0	106.5	110.9	109.8	111.0	111.3	104.9	104.1	103.9	105.2	109.1	109.5	111.5	113.3	110.9	
Price, railroad stocks.....	86.0	96.1	117.9	133.4	162.7	174.5	194.3	170.3	173.8	178.5	176.4	213.4	216.3	217.7	203.5	162.8	162.6	157.8	157.5	139.1	
Price, industrial stocks.....	86.1	91.9	122.0	132.4	171.4	214.8	292.6	206.1	213.4	226.9	234.5	330.8	344.5	358.5	316.3	227.2	225.8	225.9	226.0	192.1	
Failures (liabilities).....	106.0	106.8	87.2	80.4	102.2	96.2	95.0	69.8	137.3	80.1	82.5	76.5	79.6	80.5	73.9	148.9	93.9	116.0	110.7	132.8	

\*Seasonal adjustments.



## BUSINESS CONDITIONS IN OCTOBER

### PRODUCTION

According to the weighted orders of the Federal Reserve Board, industrial production in October, after adjustments for seasonal variations, showed a decline from the preceding month and was lower than in October, 1929. Manufacturing output showed a decrease from September amounting to 5 per cent and was considerably lower than a year ago. The production of minerals, also adjusted for seasonal variations, registered a seasonal increase over the previous month, mainly because of increased production of bituminous coal and anthracite.

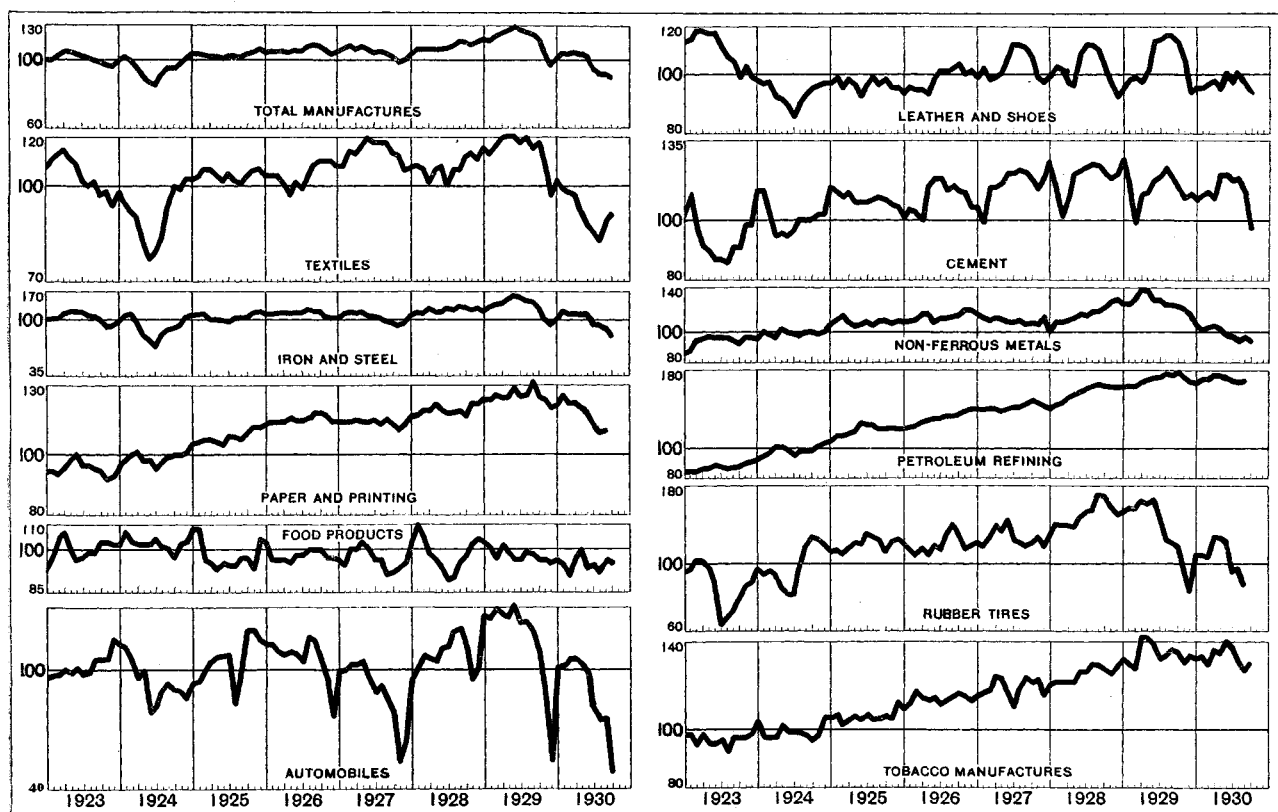
### DISTRIBUTION

Wholesale trade of groceries, dry goods, hardware, and drugs was lower than the month of October, 1929. For the year to date declines were noted in all lines when compared with a similar period of last year.

The volume of sales transacted by department stores during October increased by 9 per cent over the preceding month, when allowance is made for the number of trading days. As compared with October of last year the total sales were 8 per cent smaller. The value of merchandise stocks held by department stores, as represented by the adjusted

### MANUFACTURING PRODUCTION BY MAJOR GROUPS

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



### COMMODITY STOCKS

Stocks of commodities held at the end of October were greater than at the end of the preceding month or a year ago. Inventories of raw materials showed an increase at the end of the month over both comparative periods, while stocks of finished goods, although remaining unchanged from the preceding month, were greater than a year ago.

### SALES

The general index of unfilled orders showed a slight decline from the month of September and was lower than a year ago. In comparison with September, unfilled orders for all groups showed declines with the exception of iron and steel which group showed no change.

index, relative to the 1923-1925 average, showed a slight increase over the stocks held at the end of September, but were considerably lower than a year ago. The sales of leading mail-order systems showed a marked gain over the previous month, but a decrease from the same month in 1929. Sales by principal chain stores were, without exception, larger than the month of September, and, like mail-order sales, were smaller than last year. The decline in the value of sales of these retail units from a year ago was due to a great extent to lower prices paid for sales articles.

Restaurant sales during October, although advancing over the sales of September, were lower than a year ago.

### PRICES

The composite index of wholesale prices as computed by the Bureau of Labor Statistics relative to the year 1926 taken as 100, stood at 82.6 for October. This compares with 84.2 for September and 96.3 for October, 1929. Prices for all major groups were fractionally lower than September, with the exception of prices paid for hides and leather products, which advanced. Prices for all groups showed decreases when compared with prices that ruled in October of last year.

Classified according to condition of manufacture prices for raw materials, semimanufactured goods and finished products were slightly lower than the preceding month, and like prices in general were lower than in October a year ago.

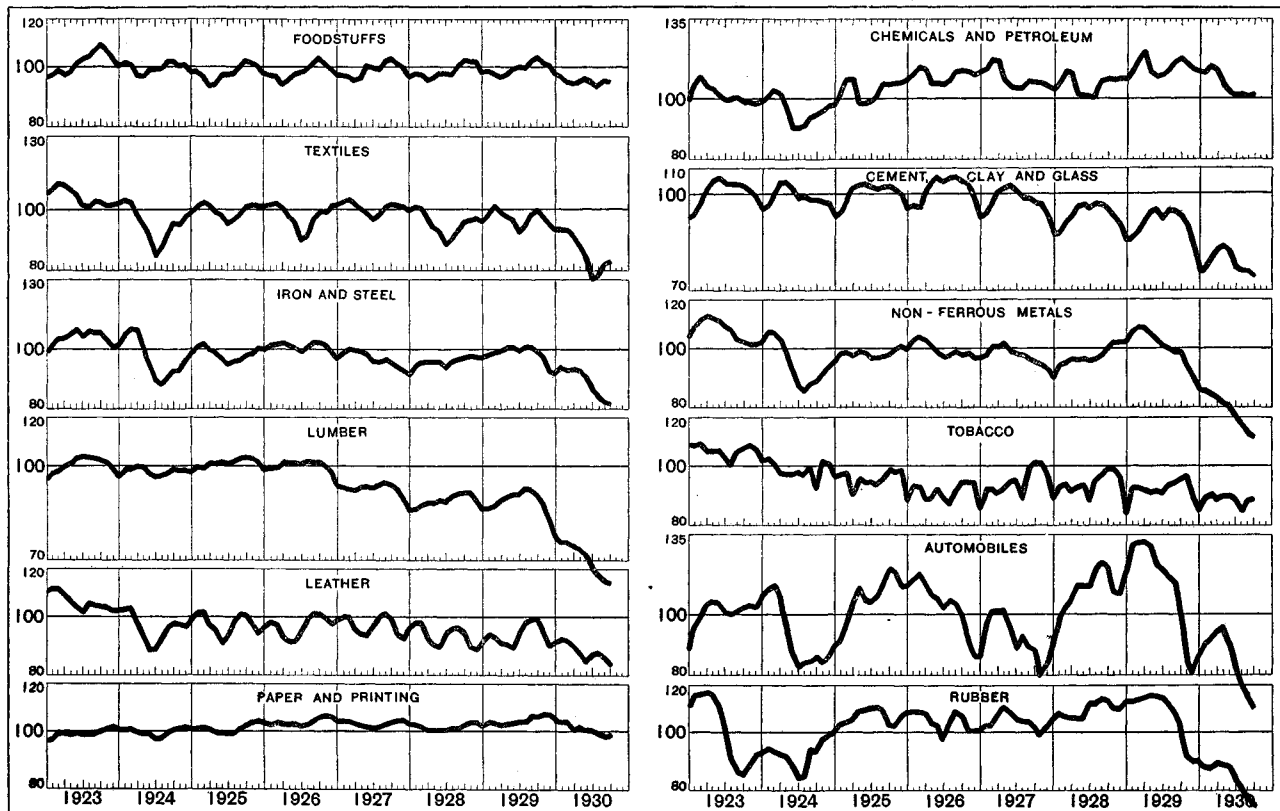
Prices received by farmers for their products were, in the main, lower than the preceding month or a year

ago, but the gains were insufficient to offset decreased employment in establishments producing iron and steel, machinery, food products, lumber, automobiles, leather, cement, nonferrous metals, chemicals, and rubber products. Compared with October, 1929, all groups showed smaller numbers employed.

Factory pay rolls in October were likewise somewhat lower than in September, and like employment was smaller than a year ago. In comparison with the month of September increased pay-roll payments were made by factories producing iron and steel and textiles, while smaller payments than September occurred in establishments producing machinery, food products, paper, transportation equipment, leather, nonferrous metals, chemicals, rubber, and tobacco products. Pay rolls in the cement, clay, and glass industries remained unchanged from the month of September. The

### FACTORY EMPLOYMENT, BY GROUPS

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



ago. Although prices received by producers of dairy and poultry products were higher than the previous month, this increase was insufficient to offset declines occurring in the other groups. Retail prices for food were lower than in both comparative periods.

### EMPLOYMENT

Employment in factories in October, as shown by the general index, unadjusted for seasonal conditions, stood at 84.3. This compares with 86.4 for September and 103.3 for October, 1929. Increased employment occurred, as compared with September in factories producing textiles, paper and books, and tobacco

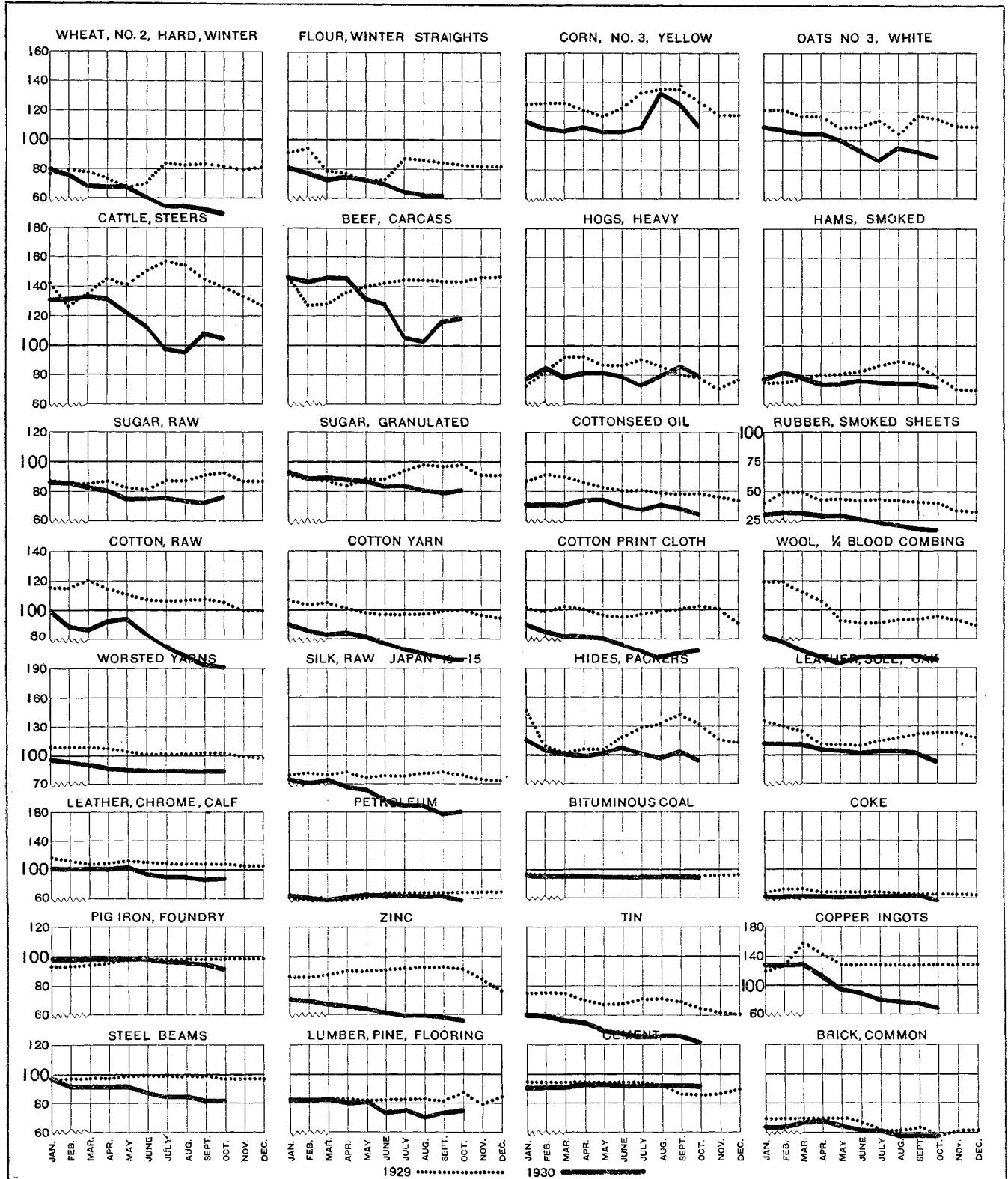
decrease in the amount of pay rolls from a month ago was due in no small degree to the smaller number of workers employed. In comparison with October a year ago smaller payments were made to workers in all groups included in the general index.

### COST OF LIVING

The cost of living index for October relative to July, 1914, as compiled by the National Industrial Conference Board, stood at 152, as compared with 153 for September and 163 for October, 1929. As compared with September, decreases occurred in all groups except fuel, which increased, and sundries, which showed no change.

## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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





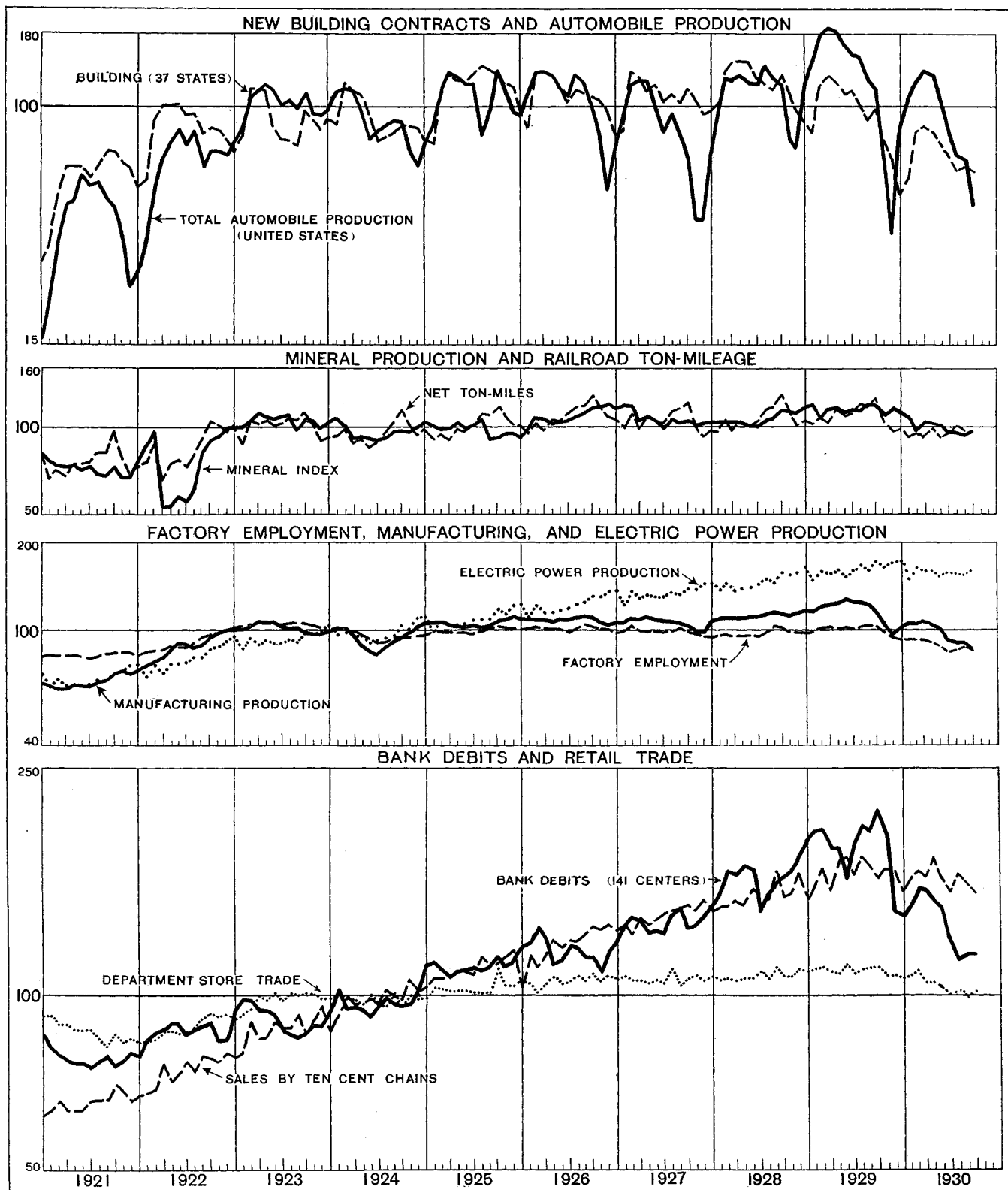
## WHOLESALE PRICES FOR SPECIFIED COMMODITIES

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				
		September, 1930	October, 1930	October, 1929	1926 average=100				
					August, 1930	September, 1930	October, 1930	September, 1929	October, 1929
<b>FARM PRODUCTS—AVERAGE PRICE TO PRODUCER</b>									
Wheat.....	Bushel.....	0.703	0.656	1.115	55	52	49	83	83
Corn.....	Bushel.....	.917	.819	.919	129	131	117	139	132
Potatoes.....	Bushel.....	1.099	1.017	1.352	59	59	55	73	74
Cotton.....	Pound.....	.099	.092	.175	75	66	61	121	116
Cottonseed.....	Ton.....	23.89	20.73	31.40	88	88	76	114	115
Cattle, beef.....	Pound.....	.0661	.0654	.0892	97	102	101	143	138
Hogs.....	Pound.....	.0944	.0879	.0910	72	80	74	81	77
Lambs.....	Pound.....	.0667	.0615	.1097	59	58	53	96	95
<b>FARM PRODUCTS—MARKET PRICE</b>									
Wheat, No. 1, northern spring (Minneapolis).....	Bushel.....	.87	.82	1.31	58	55	52	85	83
Wheat, No. 2, red, winter (St. Louis).....	Bushel.....	.88	.87	1.32	57	57	56	87	85
Wheat, No. 2, hard, winter (Kansas City).....	Bushel.....	.78	.74	1.22	54	52	50	83	82
Corn, No. 3, yellow (Chicago).....	Bushel.....	.94	.82	.95	132	125	109	135	127
Oats, No. 3, white (Chicago).....	Bushel.....	.38	.36	.47	95	93	88	117	115
Barley, No. 2 (Minneapolis).....	Bushel.....	.53	.52	.59	81	83	81	94	92
Rye, No. 2 (Minneapolis).....	Bushel.....	.55	.49	.97	65	60	53	105	105
Cotton, middling upland (New York).....	Pound.....	.109	.107	.186	69	62	61	108	106
Wool, $\frac{1}{4}$ blood combing, Ohio and Pennsylvania fleeces (Boston).....	Pound.....	.31	.30	.43	67	67	65	93	93
Cattle, steers, good to choice, corn fed (Chicago).....	Cwt.....	10.325	9.969	13.313	96	108	105	145	140
Hogs, heavy (Chicago).....	Cwt.....	10.580	9.856	9.650	79	86	80	81	78
Sheep, ewes (Chicago).....	Cwt.....	3.075	2.844	4.625	47	47	43	71	70
Sheep, lambs (Chicago).....	Cwt.....	7.350	7.031	12.094	56	54	51	92	88
<b>FOOD</b>									
Flour, standard patents (Minneapolis).....	Barrel.....	5.080	4.981	6.905	63	60	59	85	82
Flour, winter straights (Kansas City).....	Barrel.....	4.444	4.231	6.006	63	61	58	84	83
Sugar, 96° centrifugal (New York).....	Pound.....	.031	.033	.040	73	72	76	92	93
Sugar, granulated, in barrels (New York).....	Pound.....	.043	.044	.054	80	79	81	97	98
Cottonseed oil, prime yellow (New York).....	Pound.....	.081	.076	.093	71	69	64	78	79
Beef, fresh, carcass, good native steers (Chicago).....	Pound.....	.191	.195	.236	102	116	119	144	144
Beef, fresh, carcass, steers (New York).....	Pound.....	.203	.205	.238	101	119	120	147	139
Pork, smoked hams (Chicago).....	Pound.....	.227	.221	.242	74	74	72	87	79
Butter, creamery, 92 score (New York).....	Pound.....	.40	.40	.43	87	89	89	102	96
Oleomargarine, standard, uncolored (Chicago).....	Pound.....	.205	.205	.235	90	90	90	103	103
<b>TEXTILES</b>									
Cotton yarns, carded, white, northern, mule spun, 22-1-cones (Boston).....	Pound.....	.242	.235	.359	70	67	66	100	100
Cotton-print cloth 64 x 60-38 $\frac{1}{2}$ "-5.35-yards to pound.....	Yard.....	.053	.055	.078	67	70	73	101	103
Cotton sheeting, brown 4/4 Trion (New York).....	Yard.....	.070	.066	.087	75	75	71	93	94
Worsted yarns, 2/32's cross-bred stock, white, in skein (Boston).....	Pound.....	1.200	1.200	1.475	84	84	84	103	103
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.....	1.601	1.601	1.901	80	80	80	95	95
Suitings, serge, 11-ounce, 56-58 inch.....	Yard.....	1.746	1.746	1.959	81	81	81	90	90
Silk, Japan, 13-15.....	Pound.....	2.413	2.512	4.925	48	39	41	83	80
Hosiery, women's pure silk, mill.....	Dozen pair.....	7.250	7.000	9.250	65	63	61	80	80
<b>LEATHER</b>									
Hides, green salted, packers' heavy native steers (Chicago).....	Pound.....	.146	.133	.186	97	104	95	140	132
Hides, calfskins, No. 1, country, 8 to 15 pounds (Chicago).....	Pound.....	.165	.172	.197	93	95	99	118	114
Leather, sole, oak, scoured backs, heavy (Boston).....	Pound.....	.440	.410	.545	105	100	94	122	124
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.....	3.897	3.893	3.961	90	90	90	91	92
Coal, bituminous, prepared sizes (composite price).....	Net ton.....	4.303	4.342	4.525	87	90	91	93	94
Coal, anthracite, chestnut (composite price).....	Long ton.....	12.707	12.740	12.999	91	92	93	94	94
Coke, Connellsville (range of prompt and future), furnace—at ovens.....	Short ton.....	2.600	2.600	2.700	62	63	63	66	66
Petroleum, crude, Kansas-Oklahoma—at wells.....	Barrel.....	1.178	1.098	1.300	63	63	58	69	69
<b>METALS</b>									
Pig iron, foundry No. 2, northern (Pittsburgh).....	Long ton.....	19.560	18.885	20.260	96	95	92	98	98
Pig iron, basic, valley furnace.....	Long ton.....	17.600	17.000	18.500	97	95	92	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.....	.1031	.0960	.1778	77	75	70	129	129
Brass, sheets, mill.....	Pound.....	.176	.169	.233	94	93	89	122	122
Lead, pig, desilverized, for early delivery (New York).....	Pound.....	.0550	.0515	.0687	65	65	61	82	82
Tin, straits (New York).....	Pound.....	.2964	.2886	.4235	46	45	41	69	65
Zinc, slab, western (St. Louis).....	Pound.....	.0427	.0406	.0674	59	58	55	93	92
<b>BUILDING MATERIAL AND MISCELLANEOUS</b>									
Lumber, pine, southern, yellow flooring, mill.....	M feet.....	33.480	34.010	39.500	70	74	75	82	88
Brick, common red, domestic building (New York).....	Thousand.....	9.500	9.500	9.500	58	58	58	64	58
Cement, Portland, net without bags to trade, f. o. b. plant (Chicago district).....	Barrel.....	1.600	1.600	1.493	92	92	92	86	86
Steel beams, mill (Pittsburgh).....	Cwt.....	1.600	1.600	1.900	84	82	82	100	97
Rubber, smoked sheets (New York).....	Pound.....	.084	.083	.196	20	17	17	42	40
Sulphuric acid, 66° (New York).....	Ton.....	15.500	15.500	15.500	07	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 COMMERCIAL AND INDUSTRY TEXTILES

## TEXTILES

The consumption of wool by textile mills in October amounted to 40,975,000 pounds, as compared with 38,083,000 pounds in September and 59,352,000 pounds in October, 1929. For the year to date there were consumed 368,860,000 pounds, as contrasted with 442,387,000 pounds for a similar period in 1928.

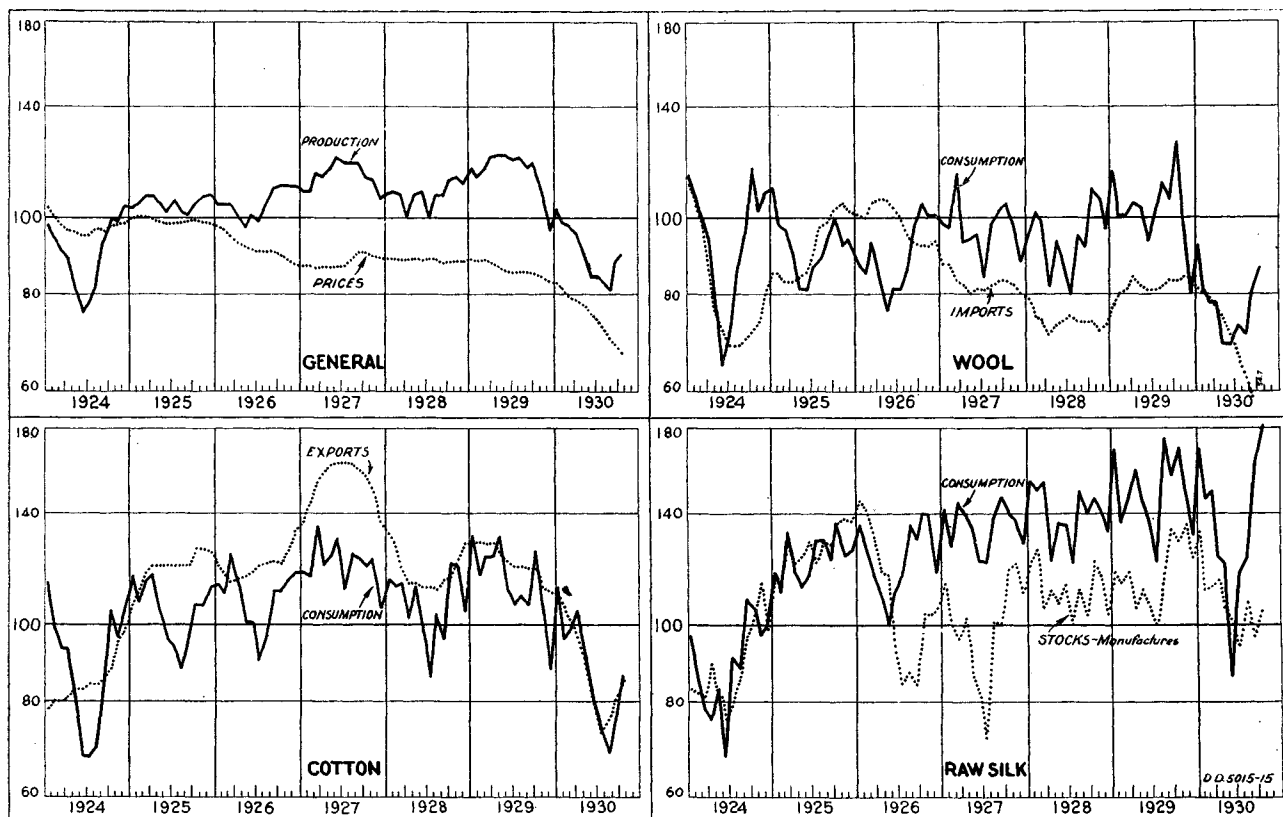
Cotton receipts in sight for the first 10 months of 1930 were 12 per cent smaller than during a like period in 1929. Exports of raw cotton in October registered a gain over the exports of September but were smaller than in October, 1929 and 1928. Consumption of cotton by textile mills showed an increase over the preceding month

comparative periods. Prices for raw Japanese silk of the grade 13-15 at New York, while higher than September, were considerably below the price level of the month of October of last year. Rayon imports in October declined from the preceding month and a year ago. Prices for rayon showing no change from the previous month were lower than a year ago.

Imports of burlaps and unmanufactured fibres were smaller in October than in the previous month or the same period in 1929. For the first 10 months of the year burlap imports amounted to 516,911,000 pounds, as compared with 555,952,000 pounds for the corresponding period in 1929. Fiber imports for the year

## THE TEXTILE INDUSTRIES

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



but was smaller than a year ago. Stocks of this commodity were higher than both comparative periods.

Imports and deliveries of raw silk to mills were substantially larger in October than in either the previous month or the corresponding period of last year. For the year to date, however, both movements were smaller than for a similar period in 1929. Stocks of silk at warehouses and manufacturing plants at the end of October, although greater than at the end of the previous month, were smaller than a year ago.

Silk machinery in the case of broad looms showed greater activity than in September. As compared with the activity of a year ago, October, 1929, the activity of broad and narrow looms was less. The activity of spinning spindles was greater than in both

to date were smaller when compared with a similar period of last year.

Production of pyroxylin-coated textiles was smaller than in September and lower than a year ago. Shipments billed during October increased over the preceding month, while unfilled orders declined. In comparison with a year ago both items were smaller.

Imports of buttons and button material in general showed but slight change from the month of September, but were lower than in 1929. Stocks of fresh-water pearl buttons were smaller than at the end of both comparative periods. The imports of vegetable ivory, or tagua nuts, for the year to date amounted to 11,389,000 pounds, as compared with 22,953,000 pounds for a similar period in 1929

## METALS

Shipments of iron ore from mines were considerably less than during either the previous month or the corresponding month of last year. The consumption of iron ore and the production of pig iron also declined from both prior periods, and the number of furnaces in blast declined proportionately. Stocks of iron ore both at furnaces and at Lake Erie docks exceeded those of the month of September but were smaller than at the end of October, 1929.

The October output of steel ingots was less than for either the previous month or the corresponding month of last year. Total production and new orders of steel and malleable castings also declined from both prior periods. Production and shipments of blue, black, and galvanized steel sheets recorded a gain over

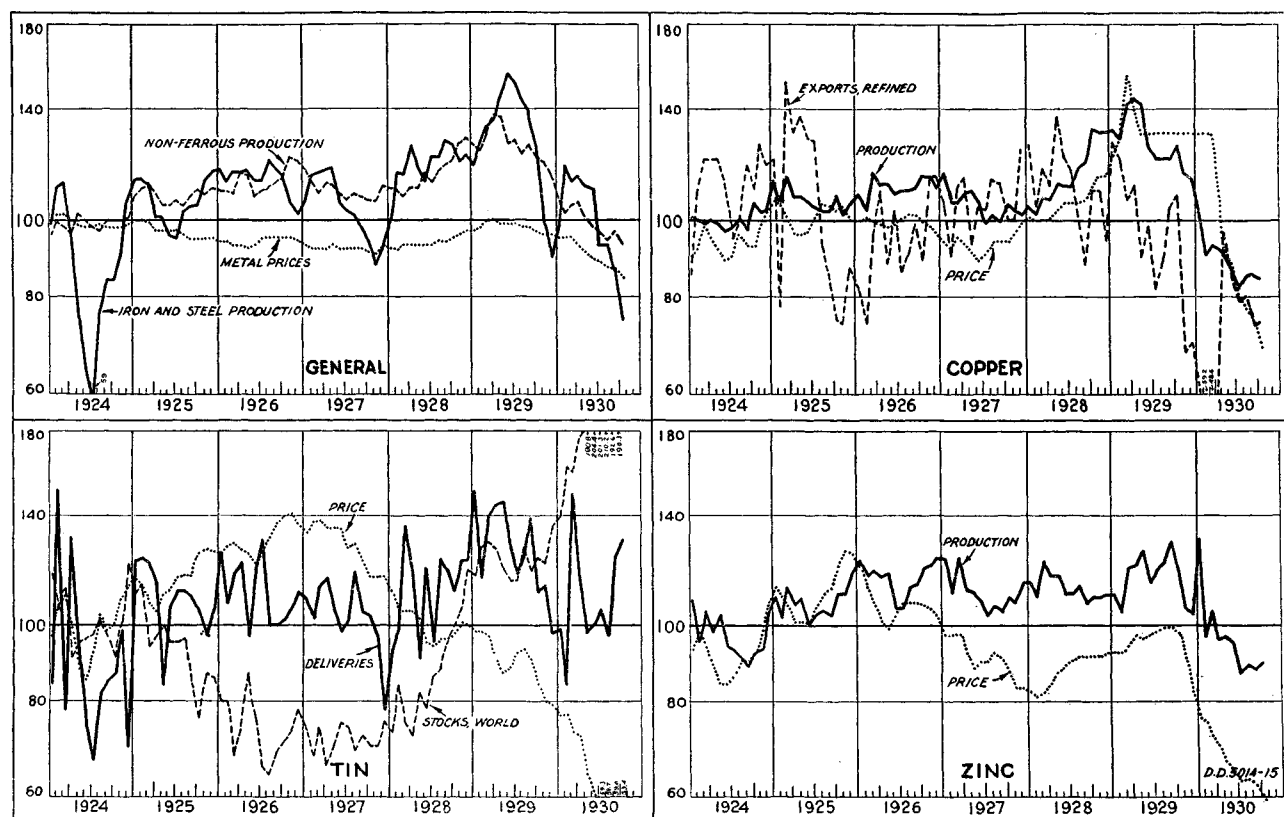
The October output of zinc, while showing a gain over the preceding month, was smaller than a year ago. The number of zinc retorts in operation was smaller than in either prior period. Zinc stocks at the end of October were greater than at the end of the previous month and greater than a year ago.

Babbitt metal consumption by manufacturers, although showing a gain over September, was about half what it was a year ago. Production and shipments of copper wire cloth were greater than the preceding month but were smaller in each case than a year ago. Stocks of this product, while declining from the end of the preceding period, were larger than at the end of October, 1929.

The October production of copper at the mines showed a fractional decline from September but was

## THE METAL INDUSTRIES

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



the previous month, but were lower in each case than a year ago. Production and shipments of steel barrels were greater than the preceding month, while stocks were less. Barrel stocks on hand, although declining from a month ago, were larger than last year.

Unfilled orders of the United States Steel Corporation were less than either for the previous month or for the corresponding month of last year. Production of track work declined from both comparative periods. New orders for fabricated steel plate were smaller at the end of October when compared with the previous month and with October of last year, chiefly because of the decline in orders placed for oil storage tanks.

considerably lower than a year ago. Smelter copper output, on the other hand, was greater than in the preceding month. Stocks of blister copper, while greater than at the end of September, were smaller than a year ago.

Imports of tin were greater than during September and were almost as large as a year ago. Deliveries of tin, indicative of consumption, showed gains over comparative periods. The world visible supply, while fractionally off from a month ago, was larger than at the end of October of last year. Tin prices were uniformly lower than in September and lower than those of a year ago.

## FUELS

The production of bituminous and of anthracite coal was greater than during the previous month, but less than a year ago. Coal prices in general were lower than in either prior period. Beehive and by-product coke output was greater than in September, but was considerably smaller as compared with a year ago.

## AUTOMOBILES AND RUBBER

There were 150,044 passenger cars, trucks, and taxicabs produced in the United States during the month of October. This compares with 216,877 in September and 380,017 in October, 1929. Canadian output

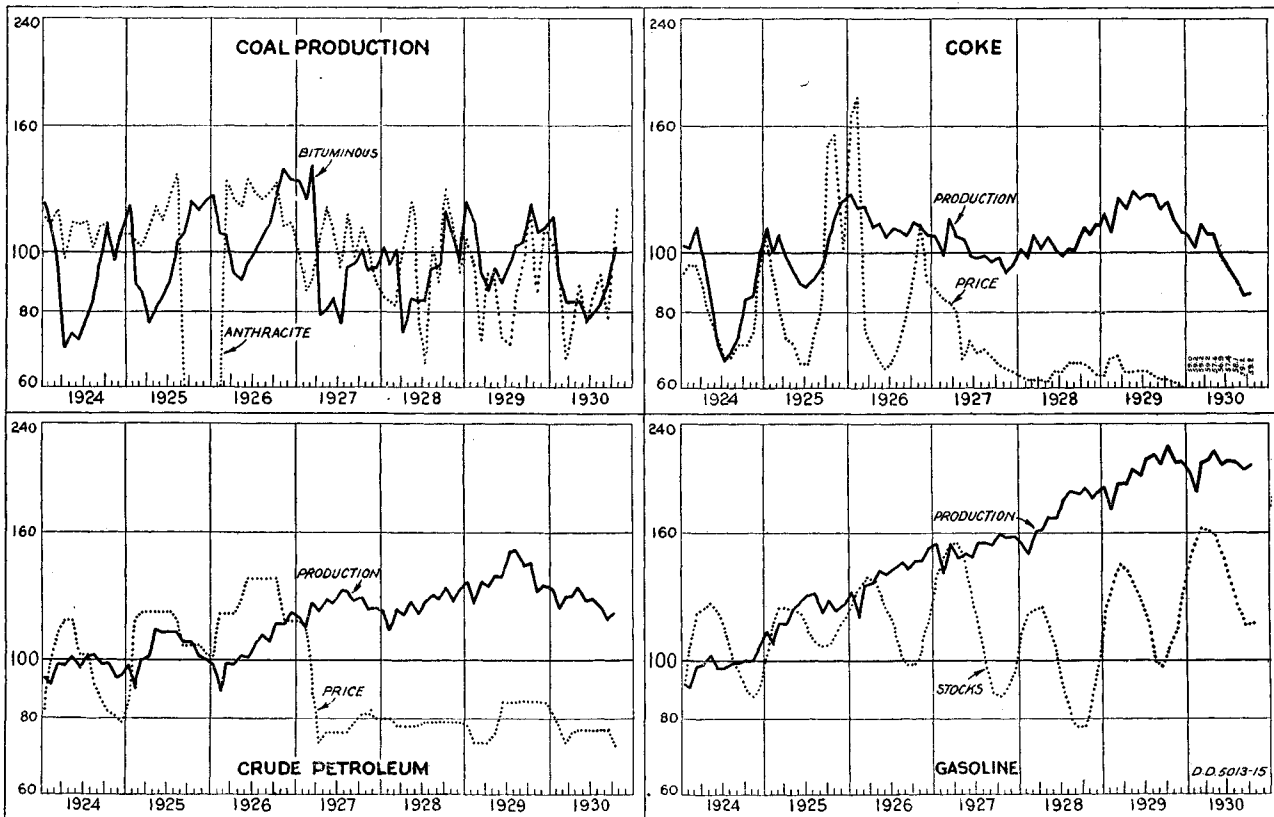
while stocks of tubes increased over the previous periods.

## HIDES AND LEATHER

October imports of hides and skins from foreign countries were less than those during the previous month and less than a year ago. Increased imports of calf and goat skins over September were insufficient to offset declines occurring in imports of cattle hides and sheepskins. As compared with the imports in October, 1929, imports of calfskins were greater and those of goatskins, sheepskins, and cattle hides were less. The production of boots and shoes during October numbered 27,353,200 pairs, as compared with 29,334,000 pairs in September and 37,919,000 in October, 1929.

## THE FUEL INDUSTRIES

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



totalled 4,541 cars and trucks, as compared with 7,957 for September and 14,523 for October a year ago. For the first 10 months of 1930 the output of automobiles was 3,071,869, as compared with 5,020,840 in 1929 and 3,867,503 in 1928.

A larger quantity of rubber was imported during October than during September or a year ago. For the year to date imports of crude rubber, including latex, amounted to 419,419 long tons, as compared with 356,513 long tons during a similar period in 1928. The consumption of crude rubber by tire manufacturers during October, while increasing by approximately 2,750,000 pounds over September, was lower than a year ago. The output of pneumatic casings and inner tubes showed a gain over the preceding month but was lower than last year. Stocks of casings declined,

Production of gloves and mittens showed a gain over the month of September but was lower than a year ago. Exports of both sole and upper leather to foreign lands registered increases over both comparative periods.

## PAPER

The imports of newsprint paper during October, while greater than during September, were lower than a year ago. Newsprint output by mills in both the United States and Canada was greater than during September, although there was a decline as compared with a year ago. Consumption of newsprint by publishers showed gains over comparative periods. For the year to date more newsprint was used in this country than during a similar period in 1929 and 1928. Imports of wood pulp were greater than in either prior period.

### BUILDING AND CONSTRUCTION

Building costs were generally lower in October than in either the month of September or a year ago.

New building in 37 States, as measured by contracts awarded (as compiled by the F. W. Dodge Corporation), showed increases both in total valuation of contracts and in floor space over the month of September. As compared with a year ago, both were lower. In comparison with September, increased valuation of contracts was noted in contracts awarded for commercial, educational, public, social and recreational, and residential buildings, and for public works and utilities, while declines occurred in the

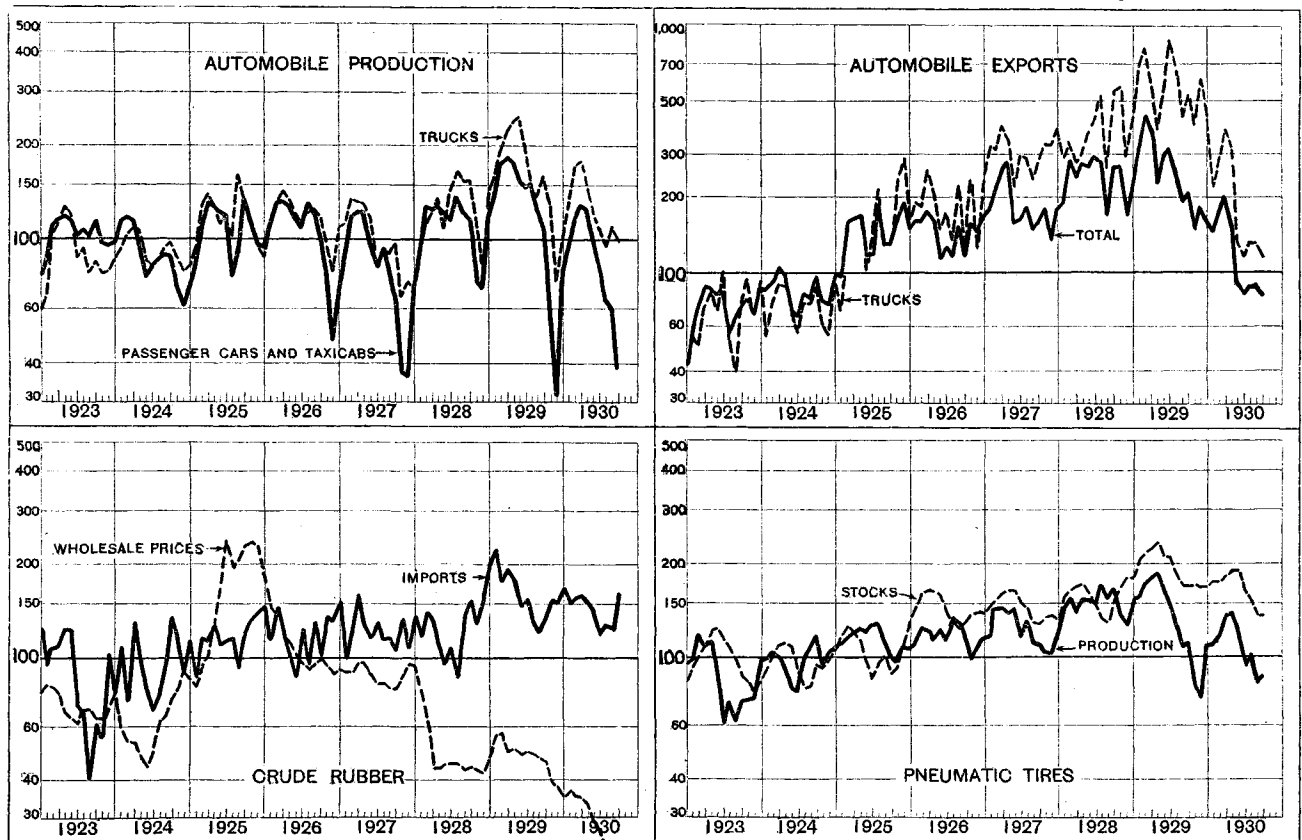
October than during the previous month, the production being somewhat smaller. Shipments of northern hardwoods were greater than in the previous period, but were less than a year ago. The production, shipments, and stocks of maple flooring were all lower than in both prior periods.

### BUILDING MATERIALS

Portland cement output in the United States during October was smaller than during the preceding month and was below production of a year ago. For the year to date the output was 141,329,000 barrels; this compares with 144,930,000 barrels for a similar

### THE AUTOMOBILE AND RUBBER INDUSTRIES

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



industrial, hospital and institutional, and religious building groups. In contrast with a year ago contracts let for all types of buildings, with the exception of public works and utilities, were smaller.

### LUMBER

The production of Douglas fir lumber during October was greater than during September but was less than a year ago. Shipments and unfilled orders, however, were smaller. Production, shipments, and orders were all lower as compared with a year ago. California redwood returns indicated greater production, shipments, and new orders, than in September. As with Douglas fir, all items were lower than in 1929. There was more northern pine lumber shipped in

period in 1929 and 148,711,000 barrels in 1928. Shipments and stocks were also smaller than in both prior periods.

The production of sand-lime and face brick were all greater than during September. In comparison with October of last year the stocks of common brick were greater, while those of face and sand-lime were less. Shipments of all types of brick showed declines from prior periods. Output of polished plate glass during October amounted to 8,583,000 square feet, as compared with 7,979,000 square feet in September and 14,621,000 square feet a year ago. Production of all types of prepared roofing and the output and stocks of roofing felt in October showed declines from the preceding month and from a year ago.



### FOODSTUFFS AND TOBACCO

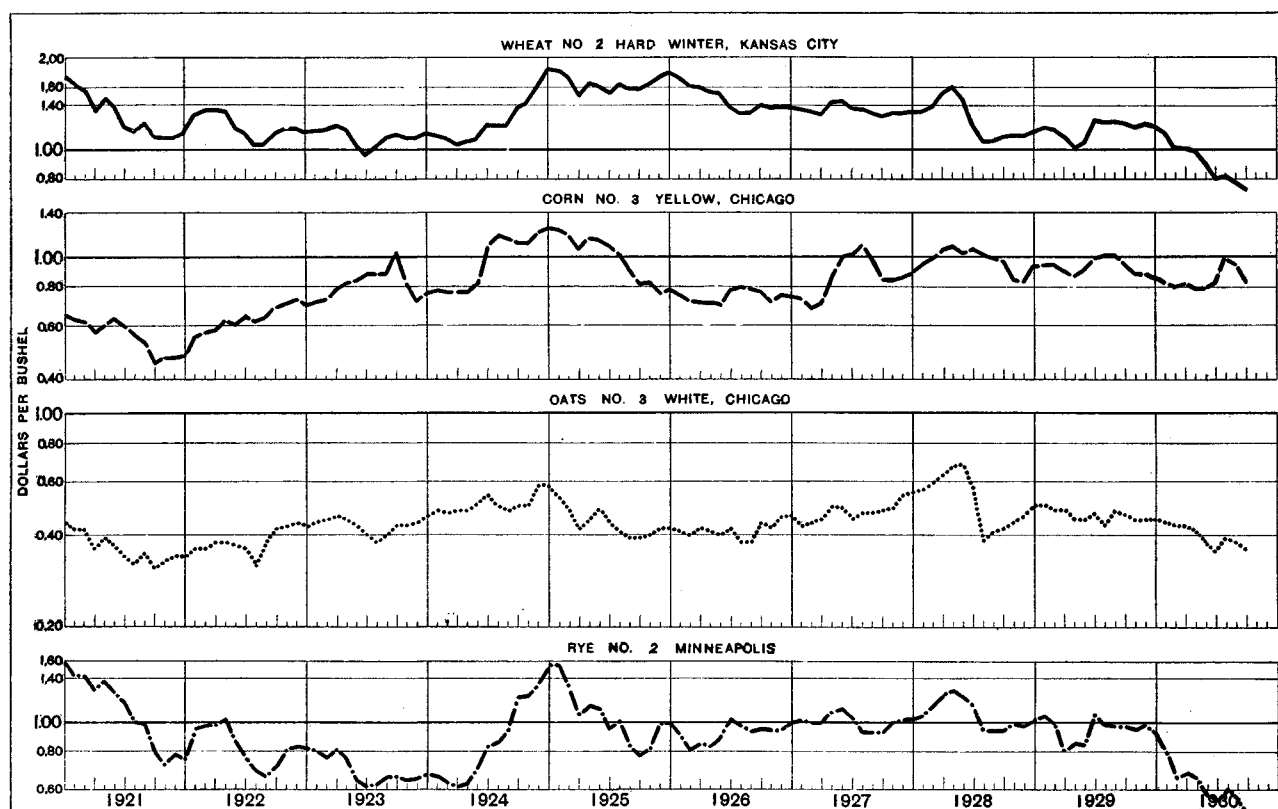
The visible supply of wheat in the United States, while smaller than at the end of September, was larger than a year ago. Wheat receipts, shipments, and exports were smaller than those of the preceding month and those of a year ago. Flour was exported in smaller quantities than during September and a year ago. Exports of flour from Canada, on the other hand, were greater than either prior period. Receipts and shipments of corn were less than during the preceding month or in October of last year. The visible supply of corn, although declining slightly from September, was greater than in 1929. The exports of barley and rye were smaller than during the month of October a

were greater and local slaughter less. The production of pork products, while increasing over September, was lower than a year ago. Holdings in cold storage showed declines from comparative periods, while exports, after advancing over September, were lower than last year.

Shipments and local slaughter of sheep and lambs during October showed a gain over the preceding month but declined from the corresponding month of 1929. Production and consumption of mutton and lamb were greater than during both comparative periods. Prices for ewes and lambs declined as compared with those of the month of September and a year ago.

### MOVEMENT OF GRAIN PRICES

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



year ago. Prices of wheat, corn, oats, barley, and rye showed but slight change from September, but were, without exception, lower than a year ago.

Receipts of livestock of all types were seasonally greater than in September. As compared with October 1929, receipts in each case were smaller. The production of beef and veal under Federal inspection during October was greater than during either prior period. Cold-storage holdings of beef products at the end of October also showed gains over prior periods. Wholesale prices of beef products averaged about the same as in September but were lower than in October, 1929.

Shipments and slaughter of hogs showed gains over September. As compared with a year ago shipments

were seasonally greater than during the month of September; holdings in storage also showed a similar change. In comparison with October, 1929, both receipts and holdings were smaller. Receipts and cold storage holdings of butter, cheese, and eggs were all smaller than in the previous month and a year ago.

The consumption of large cigars and small cigarettes during October indicates an increase over the preceding period. However, in comparison with the corresponding month of last year a decline occurred in each case. Exports of unmanufactured tobacco and cigarettes during October were greater than the previous month but less than in October, 1929.

### TRANSPORTATION

The movement of commodities by rail, as reflected by freight-car loadings, showed a gain over the previous month but was lower than a year ago. For the year to date 38,976,434 freight cars were loaded with all types of commodities. This compares with 44,599,437 cars for a similar period in 1929 and 42,928,633 in 1928. Surplus freight cars, both box and hopper, were more plentiful than in the previous month and a year ago. Clearances of American and foreign vessels for foreign trade in October were fewer than during the previous month or a year ago.

### BANKING AND FINANCE

Bank debits, both in and outside New York City, exceeded those of the preceding month but were smaller than in October, 1929. Bank clearings in Canada also showed a similar comparison. Loans and discounts of Federal reserve member banks showed declines from both the preceding month and a year ago. Brokers' loans at the end of the month were smaller than at the end of both the month of September and a year ago. Interest rates on call-loan renewals showed a slight increase over September, while rates on 60 to 90 day commercial paper remained unchanged. Both rates were considerably lower than a year ago.

More business firms failed during October than during the previous month, and the liabilities of such

firms were also greater than in September. The number of business failures was greater and the liabilities were more than a year ago. Prices of representative stocks were lower than in the preceding month and a year ago. Bond prices, on the other hand, showed substantial gains over comparative periods.

### GOLD AND SILVER AND FOREIGN EXCHANGE

Domestic receipts of gold at the mint were larger than during the previous month and a year ago. Imports showed a similar tendency, while exports, although smaller than during September, were greater than the exports of October, 1929. The production of silver in the United States was more than for the previous month but less than a year ago. Imports of silver were smaller and exports were larger than during September. Both movements were below the level of October, 1929. Silver stocks declined from the previous month and were also less than at the end of October, 1929.

Exchanges on the principal countries showed little change from September, there being a slight advance in the rates on Japan and declines in the rates on Belgium and Argentina. Compared with a year ago, rates of exchange on Sweden, Switzerland, Japan, Canada increased, while rates on England, Belgium, India, and Argentina declined.

## 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		
			August	September	October	August	September	October	August	September	October
<b>PRODUCTION</b>											
<b>TOTAL INDUSTRIAL</b>											
Unadjusted, except for working days.....	125	81	110	116	118	121	123	120	90	92	89
Adjusted for seasonal variations.....	127	83	112	114	115	123	122	117	92	91	88
<b>MANUFACTURING</b>											
Total (adjusted for working days only).....	127	79	110	116	117	121	122	119	88	91	87
Total (adjusted for seasonal variations).....	129	82	113	116	115	125	122	117	91	91	86
Iron and steel.....	155	59	121	128	126	143	140	124	93	86	75
Textiles.....	121	77	107	107	112	120	116	118	81	88	90
Food products.....	110	89	90	95	98	100	98	96	91	96	94
Paper and printing.....	130	91	117	118	116	125	130	126	108	109	-----
Lumber.....	110	78	87	82	81	88	-----	-----	-----	-----	-----
Automobiles.....	166	45	133	136	119	143	133	113	67	68	45
Leather and shoes.....	134	86	112	110	103	117	116	113	102	100	93
Cement.....	126	97	126	130	122	122	118	113	117	111	97
Glass, plate.....	174	65	138	135	131	168	174	172	65	-----	-----
Nonferrous metals.....	137	87	117	117	121	122	125	122	94	96	93
Petroleum refining.....	178	84	160	162	160	176	173	178	164	165	-----
Rubber tires.....	169	66	151	169	167	119	116	114	96	84	-----
Tobacco manufactures.....	143	93	129	128	126	133	136	135	130	125	129
<b>MINERALS</b>											
Total (adjusted for working days only).....	128	84	111	115	123	121	127	127	101	100	104
Total (adjusted for seasonal variations).....	120	90	105	107	114	115	118	118	96	94	97
Bituminous coal.....	125	77	91	94	99	99	103	103	82	85	87
Anthracite coal.....	133	1	94	93	119	78	102	116	88	80	105
Crude petroleum.....	147	88	123	123	126	145	140	140	117	114	114
Iron-ore shipments.....	143	0	104	110	114	121	121	107	96	79	74
Copper.....	142	82	116	123	128	119	125	123	84	89	83
Zinc.....	127	90	120	114	110	127	120	119	94	94	90
Lead.....	125	75	107	115	108	107	119	115	99	-----	-----
Silver.....	123	68	87	79	79	91	89	94	70	73	71
<b>ANIMAL PRODUCTS (Marketing)</b>											
Total.....	124	79	97	92	102	100	99	103	91	91	97
Wool.....	545	14	195	54	35	268	128	52	361	31	79
Livestock.....	131	76	79	92	95	77	96	113	77	94	108
Poultry and eggs.....	148	67	80	76	86	83	86	128	72	78	79
Dairy products.....	164	64	117	95	89	116	94	91	95	86	82
Fish.....	283	44	170	137	153	247	283	187	202	229	172
<b>CROPS (Marketing)</b>											
Total.....	252	45	115	178	252	135	177	246	115	166	198
Grains *.....	214	38	186	165	174	214	117	103	181	139	83
Vegetables *.....	199	60	83	133	151	88	145	171	82	139	168
Fruits *.....	266	43	165	206	266	130	173	245	133	164	249
Cotton products *.....	373	6	45	184	353	72	218	373	78	219	328
Miscellaneous crops *.....	344	3	119	210	213	155	286	344	25	42	20

\* 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		
			August	September	October	August	September	October	August	September	October
<b>PRODUCTION—Continued</b>											
<b>FOREST PRODUCTS</b>											
Total.....	112	60	89	77	87	92	80	89	66	62	68
Lumber.....	112	58	88	77	84	91	79	86	63	58	63
Pulpwood.....	151	54	82	68	108	77	74	110	76	79	94
Gum (rosin and turpentine)*.....	204	18	161	129	128	189	157	130	171	158	143
Distilled wood.....	148	47	78	70	93	100	90	108	49	50	71
<b>NEW ORDERS</b>											
Total.....	138	57	98	95	96	92	89	98	57	60	57
Textiles.....	179	56	92	99	116	93	103	112	62	75	81
Iron and steel.....	158	71	118	125	118	126	106	118	75	71	62
Lumber.....	141	44	100	92	89	83	81	73	50	54	45
Paper and printing.....	128	85	108	109	113	119	117	124	102	101	106
Stone and clay products.....	129	59	97	93	119	85	89	95	59	64	66
<b>STOCKS</b>											
Grand total.....	162	82	108	116	133	127	139	155	133	148	162
Total manufactured goods.....	128	88	116	112	112	116	114	114	121	118	118
Foodstuffs.....	144	79	117	105	93	136	127	111	120	110	99
Textiles.....	139	78	125	118	113	122	115	121	106	97	97
Iron and steel.....	158	78	131	130	135	128	135	134	143	139	140
Nonferrous metals.....	232	74	121	125	123	127	136	143	209	221	232
Lumber.....	125	78	105	104	103	103	104	108	107	108	110
Stone, clay, etc.....	198	62	148	135	121	140	121	126	160	150	144
Leather.....	123	66	72	73	74	70	69	70	79	80	80
Rubber.....	199	77	134	130	149	155	144	145	126	116	116
Paper.....	156	46	156	137	139	98	101	102	117	118	127
Chemicals and oils.....	141	84	96	102	108	107	113	121	117	121	125
Total raw materials.....	193	68	102	119	149	136	158	185	141	170	193
Foodstuffs.....	230	68	136	145	157	212	222	230	184	197	198
Textiles.....	215	43	66	95	149	71	113	173	117	155	215
Metals.....	304	54	92	116	133	105	111	119	137	266	304
Chemicals and oils.....	146	72	93	108	139	97	115	134	98	120	133
<b>UNFILLED ORDERS</b>											
Total.....	157	64	75	75	72	76	77	77	70	67	63
Textiles.....	154	31	66	69	73	67	64	59	34	35	31
Iron and steel.....	159	63	75	75	75	76	79	80	71	68	68
Transportation equipment.....	204	35	60	60	62	79	86	121	118	99	84
Lumber.....	142	52	88	84	69	86	84	66	77	79	72
<b>RETAIL TRADE</b>											
Mail-order houses (2 houses).....	275	68	141	155	194	184	193	242	155	166	211
<b>CHAIN STORES:</b>											
Ten-cent.....	308	62	136	144	164	161	147	176	146	147	168
Restaurant.....	116	87	99	100	104	112	109	114	101	101	106
<b>DEPARTMENT STORES:</b>											
Sales.....	189	71	81	113	118	84	117	122	77	103	112
Stocks.....	117	83	97	103	112	96	104	112	87	95	101
<b>COST OF LIVING</b>											
<b>National Industrial Conference Board Indexes</b>											
(Relative to July, 1914)											
All items weighted.....	172	152	161	163	163	163	163	163	162	153	152
Food (Department of Labor).....	167	141	154	158	157	160	161	161	144	146	144
Shelter.....	186	153	161	161	161	159	160	160	153	154	153
Clothing.....	177	151	173	174	173	169	168	168	152	154	151
Fuel and light (combined).....	179	156	159	160	161	158	159	161	156	158	159
Fuel.....	208	174	178	180	182	177	180	182	176	178	180
Light.....	123	118	121	121	121	120	120	120	119	119	119
Sundries.....	176	165	171	171	171	169	169	170	165	165	166

\* 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		
			August	September	October	August	September	October	August	September	October
<b>EMPLOYMENT</b>											
(Relative to 1923-1925 monthly average as 100)											
Number employed, by industries:											
Total, all classes.....	106	84	98	100	100	102	105	103	85	86	84
Iron and steel.....	108	82	96	96	97	101	101	99	84	82	82
Machinery.....	122	87	100	101	103	119	120	119	91	90	87
Textiles.....	111	77	89	93	96	94	98	100	78	82	82
Food products.....	109	93	97	101	103	100	102	104	93	95	95
Paper and printing.....	107	96	101	101	102	104	106	106	100	99	99
Lumber and products.....	104	64	90	90	91	92	92	90	67	65	64
Transportation equipment—											
Group.....	110	67	94	95	94	96	95	90	72	70	67
Automobiles.....	131	70	118	122	120	115	113	101	76	73	70
Leather and products.....	112	83	96	96	95	98	100	99	87	86	83
Cement, clay, and glass.....	107	73	97	96	94	94	94	92	75	75	73
Nonferrous metals.....	113	72	96	98	100	100	99	98	75	73	72
Chemicals—											
Group.....	119	90	101	107	107	111	115	116	102	103	101
Petroleum refining.....	125	95	104	106	104	122	124	125	112	109	104
Rubber products.....	117	75	112	113	113	112	108	103	81	77	75
Tobacco products.....	109	84	95	97	99	93	94	95	84	88	88
Amount of pay roll, by industries:											
Total, all classes.....	112	81	103	104	108	109	112	111	82	83	81
Iron and steel.....	114	75	100	99	105	109	109	108	78	75	76
Machinery.....	132	81	105	106	111	128	128	129	96	84	81
Textiles.....	111	69	90	95	101	97	103	105	73	81	80
Food products.....	109	94	102	104	106	105	108	109	98	101	98
Paper and printing.....	118	92	108	100	112	113	116	118	107	106	105
Lumber and products.....	107	60	92	93	96	95	97	97	62	61	60
Transportation equipment—											
Group.....	117	63	100	100	105	107	103	100	66	66	63
Automobiles.....	152	58	128	129	134	128	120	108	58	62	58
Leather and products.....	116	70	100	100	96	105	104	100	80	76	70
Cement, clay, and glass.....	108	66	95	93	94	91	91	91	66	66	66
Nonferrous metals.....	128	69	107	109	117	113	112	113	72	71	69
Chemicals—											
Group.....	118	90	104	106	109	113	116	118	101	101	100
Petroleum refining.....	129	90	109	109	108	125	129	129	117	114	109
Rubber products.....	150	66	118	124	120	111	105	101	78	72	66
Tobacco products.....	111	76	89	93	95	91	93	94	77	80	78
<b>WHOLESALE PRICES</b>											
Department of Labor Indexes											
(Relative to 1926 monthly average as 100)											
All commodities.....	105	83	99	100	98	98	98	96	84	84	83
Farm products.....	114	83	107	109	104	107	107	104	85	85	83
Food, etc.....	107	86	104	107	102	103	103	101	87	89	89
Hides and leather products.....	127	97	121	121	118	110	111	111	99	99	97
Textile products.....	114	74	96	96	96	93	93	93	78	76	74
Fuel and lighting.....	112	75	85	85	85	81	81	82	75	76	75
Metals and metal products.....	113	90	100	101	101	104	104	104	93	92	90
Building materials.....	116	86	95	95	95	97	98	98	87	86	86
Chemicals.....	104	86	95	95	96	94	94	94	87	87	86
House-furnishing goods.....	111	95	97	97	97	97	97	97	96	95	95
Miscellaneous.....	127	69	79	80	80	81	82	81	71	70	69
Classified by condition of manufacture:											
Semimanufactured articles.....	128	76	97	97	97	96	98	98	78	77	76
Finished products.....	103	86	99	101	99	97	97	96	86	87	86
Raw materials.....	109	80	99	101	97	99	99	97	82	82	80
All commodities except farm and food products.....	111	82	94	94	94	93	93	93	83	83	82
<b>Commercial Indexes</b>											
(Relative to 1926 monthly average as 100)											
Dun's.....	106	85	103	103	102	102	102	101	91	89	88
Bradstreet's.....	112	78	103	102	101	198	98	96	81	80	78

## INDEXES OF BUSINESS—Continued

Relative to monthly average indicated	Maximum since Jan. 1, 1923	Minimum since Jan. 1, 1923	1928			1929			1930		
			August	September	October	August	September	October	August	September	October
<b>PRICE INDEX NUMBERS</b>											
<b>FARM PRICES</b>											
(Relative to 1909-1914 average as 100)											
All groups.....	152	106	139	141	137	143	141	140	108	111	106
Grains.....	178	92	120	117	116	129	131	128	101	100	92
Fruits and vegetables.....	253	108	137	127	114	160	160	168	149	148	126
Meat animals.....	174	98	162	174	160	165	156	151	119	128	123
Dairy and poultry.....	166	120	136	145	150	141	146	151	115	123	126
Cotton and cottonseed.....	252	76	153	142	147	146	146	141	94	83	76
Unclassified.....	108	67	87	85	83	86	85	89	70	67	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	October.....	\$105,995	5	\$21,199	468,258	93,102
October.....	93,429	5	18,686	419,079	83,816	November.....	83,714	4	20,928	381,106	95,276
November.....	73,844	4	18,461	338,704	84,676	December.....	87,260	4	21,815	407,339	101,835
December.....	74,911	4	18,728	345,595	86,399	<b>1930</b>					
<b>1929</b>						January.....	104,271	5	20,854	492,425	98,485
January.....	91,983	5	18,397	425,590	85,118	February.....	86,122	4	21,530	400,568	100,146
February.....	85,840	4	21,462	396,225	99,056	March.....	83,976	4	20,994	395,331	98,834
March.....	77,712	4	19,428	363,786	90,947	April.....	86,138	4	21,534	404,319	101,080
April.....	77,324	4	19,331	359,129	89,782	May.....	104,671	5	20,934	503,976	100,791
May.....	97,319	5	19,464	451,680	90,336	June.....	82,882	4	20,721	407,085	101,776
June.....	76,653	4	19,163	353,289	88,322	July.....	96,724	5	19,345	488,682	97,735
July.....	93,671	5	18,734	427,431	85,486	August.....	78,363	4	19,591	389,113	97,278
August.....	75,191	4	18,798	335,628	83,907	September.....	77,023	4	19,256	378,627	94,657
September.....	75,246	4	18,811	336,309	84,077	October.....	100,960	5	20,192	495,509	99,102

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

SALES OF LACQUER <sup>1</sup>

(Including sales of package goods to jobbers and dealers)

	TOTAL		FINISHING LAQUERS		LACQUER THINNERS		DOPES <sup>2</sup>	
	Gallons sold	Sales in dollars	Gallons sold	Sales in dollars	Gallons sold	Sales in dollars	Gallons sold	Sales in dollars
First quarter.....	6,522,329	11,637,304	3,390,510	8,031,969	2,817,472	3,142,504	314,347	402,831
Second quarter.....	7,011,729	12,823,118	3,726,119	9,003,353	2,971,628	3,345,676	313,982	474,089
Third quarter.....	5,937,452	10,987,495	3,148,151	7,546,639	2,529,793	2,995,758	259,508	445,098
Total (9 months).....	19,471,510	35,447,917	10,264,780	24,581,961	8,318,893	9,483,938	887,837	1,382,018

<sup>1</sup> Compiled by the *Department of Commerce, Bureau of the Census*, from reports of 106 manufacturers, including the leading producers.

<sup>2</sup> Not including base solutions used by others for manufacturing lacquers.



NUMBER OF FARMS, BY STATES, UNITED STATES: 1930, 1925, AND 1920<sup>1</sup>

Geographic divisions and States	1930, Apr. 1	1925, Jan. 1	1920, Jan. 1	Increase, 1925-1930 <sup>2</sup>		Increase, 1920-1930 <sup>2</sup>	
				Number	Per cent	Number	Per cent
United States.....	6,297,877	6,371,640	6,448,343	-73,763	-1.2	-150,466	-2.3
Geographic divisions:							
New England.....	125,701	159,489	156,564	-33,788	-21.2	-30,863	-19.7
Middle Atlantic.....	356,729	418,868	425,147	-62,139	-14.8	-68,418	-16.1
East North Central.....	968,565	1,051,572	1,084,744	-83,007	-7.9	-116,179	-10.7
West North Central.....	1,114,743	1,111,314	1,096,951	3,429	.3	17,792	1.6
South Atlantic.....	1,060,317	1,108,061	1,158,976	-47,744	-4.3	-98,659	-8.5
East South Central.....	1,062,760	1,006,052	1,051,600	56,708	5.6	11,160	1.1
West South Central.....	1,105,005	1,017,305	996,088	87,700	8.6	108,917	10.9
Mountain.....	241,008	233,392	244,109	7,616	3.3	-3,101	-1.3
Pacific.....	263,049	265,587	234,164	-2,538	-1.0	28,885	12.3
New England:							
Maine.....	39,404	50,033	48,227	-10,629	-21.2	-8,823	-18.3
New Hampshire.....	14,859	21,065	20,523	-6,206	-29.5	-5,664	-27.6
Vermont.....	24,991	27,786	29,075	-2,795	-10.1	-4,084	-14.0
Massachusetts.....	25,600	33,454	32,001	-7,854	-23.5	-6,401	-20.0
Rhode Island.....	3,366	3,911	4,083	-545	-13.9	-717	-17.6
Connecticut.....	17,481	23,240	22,655	-5,759	-24.8	-5,174	-22.8
Middle Atlantic:							
New York.....	160,120	188,754	193,195	-28,634	-15.2	-33,075	-17.1
New Jersey.....	24,563	29,671	29,702	-5,108	-17.2	-5,139	-17.3
Pennsylvania.....	172,046	200,443	202,250	-28,397	-14.2	-30,204	-14.9
East North Central:							
Ohio.....	219,659	244,703	256,695	-25,044	-10.2	-37,036	-14.4
Indiana.....	182,092	195,786	205,126	-13,694	-7.0	-23,034	-11.2
Illinois.....	214,871	225,601	237,181	-10,730	-4.8	-22,310	-9.4
Michigan.....	169,915	192,327	196,447	-22,412	-11.7	-26,532	-13.5
Wisconsin.....	182,028	193,155	189,295	-11,127	-5.8	-7,267	-3.8
West North Central:							
Minnesota.....	185,476	188,231	178,478	-2,755	-1.5	6,998	3.9
Iowa.....	216,361	213,490	213,439	2,871	1.3	2,922	1.4
Missouri.....	256,131	260,473	263,004	-4,342	-1.7	-6,873	-2.6
North Dakota.....	78,050	75,970	77,690	2,080	2.7	360	.5
South Dakota.....	83,138	79,537	74,637	3,601	4.5	8,501	11.4
Nebraska.....	129,532	127,734	124,417	1,798	1.4	5,115	4.1
Kansas.....	166,055	165,879	165,286	176	.1	769	.5
South Atlantic:							
Delaware.....	9,758	10,257	10,140	-499	-4.9	-382	-3.8
Maryland.....	43,313	49,001	47,908	-5,688	-11.6	-4,595	-9.6
District of Columbia.....	106	139	204	-33	-23.7	-98	-48.0
Virginia.....	171,029	193,723	186,242	-22,694	-11.7	-15,213	-8.2
West Virginia.....	82,641	90,380	87,289	-7,739	-8.6	-4,648	-5.3
North Carolina.....	279,723	283,482	269,763	-3,759	-1.3	9,960	3.7
South Carolina.....	157,894	172,767	192,693	-14,873	-8.6	-34,799	-18.1
Georgia.....	256,252	249,095	310,732	7,157	2.9	-54,480	-17.5
Florida.....	59,601	59,217	54,005	384	.6	5,596	10.4
East South Central:							
Kentucky.....	247,011	258,524	270,626	-11,513	-4.5	-23,615	-8.7
Tennessee.....	245,968	252,669	252,774	-6,701	-2.7	-6,806	-2.7
Alabama.....	257,328	237,631	256,099	19,697	8.3	1,229	.5
Mississippi.....	312,453	257,228	272,101	55,225	21.5	40,352	14.8
West South Central:							
Arkansas.....	243,216	221,991	232,604	21,225	9.6	10,612	4.6
Louisiana.....	161,514	132,450	135,463	29,064	21.9	26,051	19.2
Oklahoma.....	204,268	197,218	191,988	7,050	3.6	12,280	6.4
Texas.....	496,007	465,646	436,033	30,361	6.5	59,974	13.8
Mountain:							
Montana.....	47,563	46,904	57,677	659	1.4	-10,114	-17.5
Idaho.....	41,678	40,592	42,106	1,086	2.7	-428	-1.0
Wyoming.....	16,066	15,512	15,748	534	3.6	318	2.0
Colorado.....	60,563	58,020	59,934	2,543	4.4	629	1.0
New Mexico.....	31,393	31,687	29,844	-294	-.9	1,549	5.2
Arizona.....	13,260	10,802	9,975	2,458	22.8	3,285	32.0
Utah.....	27,048	25,992	25,662	1,056	4.1	1,386	5.4
Nevada.....	3,437	3,883	3,163	-446	-11.5	274	8.7
Pacific:							
Washington.....	71,335	73,267	66,288	-1,932	-2.6	5,047	7.6
Oregon.....	55,259	55,911	50,206	-652	-1.2	5,053	10.1
California.....	136,455	136,409	117,670	46	( <sup>3</sup> )	18,785	16.0

<sup>1</sup> Compiled by the *Department of Commerce, Bureau of the Census*, and represents all the land which is directly farmed by one person, either by his own labor alone or with the assistance of members of his household or hired persons. When a landowner has more than one or more tenants, renters, croppers, or managers the land operated by each is considered a farm. Any tract of land less than 3 acres used for agricultural purposes, which produced products to the value of \$250 in the preceding calendar year, is classed as a "farm." The figures for 1930 are preliminary and subject to correction.

<sup>2</sup> A minus sign (-) denotes a decrease.

<sup>3</sup> Less than one-half of 1 per cent.

**RELATIVE BANK DEBITS AT CLEARING-HOUSE CENTERS<sup>1</sup>**  
**GROUPED BY FEDERAL RESERVE DISTRICTS**

[Table continued on p. 21]

YEAR AND MONTH	U. S. TOTAL CENTERS	BOSTON DISTRICT					NEW YORK DISTRICT					PHILADELPHIA DISTRICT				
		Total, 11 centers	Boston	Hart- ford	Provi- dence	New Haven	Total, 7 centers	Albany	Buffalo	Roches- ter	New York	Total, 10 centers	Phila- delphia	Scran- ton	Tren- ton	
1919 av., mills. dolls....	37,446	1,769	1,245	92	144	72	20,917	87	263	120	20,354	1,625	1,373	53	43	
1919 monthly average...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average...	106.0	109.2	105.9	117.4	118.7	118.1	99.4	111.5	114.8	119.2	98.8	113.3	112.4	124.5	125.6	125.6
1921 monthly average...	88.7	102.4	106.7	98.9	93.0	98.6	85.2	119.5	92.8	103.3	84.8	95.8	93.8	122.7	111.6	111.6
1922 monthly average...	97.8	105.5	109.3	103.3	95.1	104.2	98.4	119.5	99.6	110.0	98.2	102.5	101.7	109.4	118.6	118.6
1923 monthly average...	103.2	117.1	120.2	119.6	105.5	122.2	98.2	118.3	114.8	124.2	97.6	114.3	111.9	139.6	137.2	137.2
1924 monthly average...	109.5	120.9	125.6	131.3	104.4	125.8	108.3	134.8	115.0	129.0	107.9	116.8	114.3	142.3	146.5	146.5
1925 monthly average...	126.8	136.7	143.9	141.7	114.9	134.6	128.7	147.7	133.3	144.3	128.3	129.5	123.1	138.9	159.6	159.6
1926 monthly average...	135.3	141.6	157.0	152.3	113.4	139.6	139.0	154.0	136.9	146.3	138.8	134.6	133.1	144.2	168.5	168.5
1927 monthly average...	150.0	158.1	168.9	202.5	113.2	148.6	160.1	168.3	140.6	152.2	160.3	140.0	138.6	145.5	175.6	175.6
1928 monthly average...	179.5	161.3	169.1	232.7	115.5	162.4	203.7	179.0	166.0	157.8	204.8	156.2	155.8	146.6	187.4	187.4
1929 monthly average...	208.2	176.5	184.3	279.4	137.4	173.8	245.4	208.0	199.0	164.6	246.9	171.5	171.5	144.8	201.6	201.6
<b>1929</b>																
January.....	221.3	181.3	187.9	295.7	143.7	195.8	266.7	186.1	191.2	175.0	268.8	179.1	178.9	151.0	200.0	200.0
February.....	189.1	151.2	159.5	220.7	117.3	144.5	225.4	157.4	149.8	141.7	227.4	156.1	155.9	137.8	181.3	181.3
March.....	223.2	171.4	178.4	267.4	134.0	172.2	270.0	233.2	180.2	165.8	272.3	175.1	177.7	143.4	216.3	216.3
April.....	199.7	169.0	168.8	301.1	131.9	172.2	234.4	241.3	181.4	153.3	235.7	178.4	179.9	141.5	193.1	193.1
May.....	204.5	167.4	173.7	254.4	133.3	166.7	244.4	252.7	176.0	149.2	245.9	160.7	167.1	141.5	185.8	185.8
June.....	186.1	162.5	166.5	250.0	137.5	170.8	211.9	212.6	188.2	164.2	212.6	177.1	178.7	139.6	193.1	193.1
July.....	207.4	182.1	189.8	300.0	140.2	180.0	240.8	204.5	217.1	176.7	241.8	175.5	175.3	139.6	227.9	227.9
August.....	206.7	186.7	200.7	287.0	128.4	168.1	239.9	196.5	226.2	159.2	240.9	154.2	153.2	135.9	186.1	186.1
September.....	207.4	174.5	179.5	341.3	127.1	173.6	246.2	178.1	232.3	182.5	247.3	154.0	152.5	135.9	190.7	190.7
October.....	255.3	217.5	231.9	322.8	166.6	201.4	308.9	209.1	256.3	193.3	311.1	186.2	185.6	171.7	211.7	211.7
November.....	219.4	186.3	195.1	273.9	152.1	179.2	261.5	191.9	213.3	158.3	263.4	180.1	181.8	152.8	187.4	187.4
December.....	178.4	171.4	180.2	238.1	136.8	161.1	195.3	232.2	176.4	155.8	195.8	175.5	171.1	147.2	230.3	230.3
<b>1930</b>																
January.....	161.5	172.4	181.4	254.4	131.9	176.4	170.5	176.9	160.4	151.7	170.6	160.6	159.6	143.4	211.7	211.7
February.....	140.6	131.7	136.1	203.3	109.0	141.7	152.7	183.8	143.0	122.5	152.9	137.4	153.8	120.8	216.3	216.3
March.....	175.6	147.8	150.3	237.6	118.7	175.0	199.4	263.1	161.2	136.7	200.2	154.2	153.9	128.3	162.8	162.8
April.....	168.2	152.5	158.6	248.9	116.6	163.9	189.3	237.8	161.6	140.8	189.8	139.9	137.4	130.2	169.8	169.8
May.....	165.2	147.1	151.8	238.1	113.9	165.3	184.3	352.7	178.7	138.3	183.8	139.8	138.4	120.8	176.8	176.8
June.....	166.5	151.7	157.7	235.9	119.4	168.1	185.1	258.5	166.5	150.8	185.2	146.8	145.8	124.5	169.8	169.8
July.....	141.1	140.0	145.9	209.8	101.4	162.5	145.9	228.7	146.8	143.3	145.4	131.4	129.1	126.4	172.1	172.1
August.....	122.9	117.5	120.6	181.5	92.3	141.7	123.7	193.0	140.3	116.7	123.1	117.4	114.5	117.0	153.5	153.5
September.....	129.9	116.8	117.7	153.6	90.3	147.2	134.6	168.9	134.2	117.5	134.5	119.4	116.8	115.1	148.9	148.9
October.....	145.5	156.4	165.5	222.8	114.6	162.5	151.2	174.6	146.4	130.8	151.2	138.2	136.4	128.3	160.5	160.5
November.....																
December.....																
<b>ATLANTA DISTRICT</b>																
YEAR AND MONTH	Total, 15 centers	Atanta	Bir- ming- ham	New Or- leans	Jack- son- ville	Nasb- ville	Au- gusta	<b>CHICAGO DISTRICT</b>								
1919 av., mills. dolls....	928	123	59	304	48	93	37	4,242	2,800	525	136	237	83	75	63	
1919 monthly average...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average...	115.1	108.9	128.8	115.4	125.0	120.4	110.8	118.0	113.0	125.2	123.5	124.0	114.5	128.0	109.5	109.5
1921 monthly average...	84.2	85.4	103.4	82.2	91.7	105.4	64.9	92.0	91.7	91.2	100.0	97.5	84.4	109.3	63.5	63.5
1922 monthly average...	86.0	90.2	133.9	89.5	97.9	71.0	70.3	96.8	96.2	101.3	104.4	101.7	83.1	81.3	101.6	101.6
1923 monthly average...	100.0	108.9	183.1	97.4	112.5	78.5	83.8	108.8	105.0	125.7	115.4	115.6	97.6	89.3	119.0	119.0
1924 monthly average...	105.3	113.1	199.3	106.4	126.5	79.2	74.6	110.8	106.3	130.6	110.9	110.5	108.2	89.2	123.4	123.4
1925 monthly average...	125.0	129.2	226.7	118.2	206.2	87.6	78.2	124.9	120.4	158.3	115.4	119.4	89.8	114.1	136.9	136.9
1926 monthly average...	128.1	132.7	243.8	113.7	232.6	89.7	72.6	132.0	127.5	166.4	135.2	127.3	98.1	115.5	129.1	129.1
1927 monthly average...	123.9	127.8	253.5	114.8	181.6	97.6	74.8	137.9	136.8	162.8	136.2	130.1	98.9	110.3	114.7	114.7
1928 monthly average...	123.1	137.7	255.4	112.6	156.4	108.5	75.0	155.3	152.3	213.2	139.6	131.5	100.2	118.0	92.5	92.5
1929 monthly average...	128.2	173.0	252.1	112.2	157.8	118.8	74.1	174.6	174.8	234.3	153.4	133.5	102.5	123.1	99.7	99.7
<b>1929</b>																
January.....	143.6	186.2	281.4	129.6	168.7	146.2	75.7	173.7	170.1	255.3	155.1	128.3	101.2	133.3	98.4	98.4
February.....	120.2	169.9	215.3	105.6	158.3	119.3	64.9	153.3	154.9	201.4	143.4	115.2	86.8	104.0	88.9	88.9
March.....	134.3	195.9	252.6	117.4	175.0	129.0	75.7	180.3	185.7	220.2	150.7	130.8	100.0	126.6	101.6	101.6
April.....	132.3	188.6	255.9	112.2	183.3	119.3	75.7	163.4	158.9	234.9	143.4	122.8	101.2	118.6	106.3	106.3
May.....	128.3	187.0	252.6	104.3	162.5	109.7	70.3	166.5	160.0	252.4	151.5	117.3	106.0	128.0	104.7	104.7
June.....	120.5	165.9	232.2	95.7	152.1	145.1	62.2	163.7	158.7	233.0	156.6	128.3	103.6	122.6	96.8	96.8
July.....	126.7	180.5	244.1	107.9	162.5	111.8	62.2	178.4	176.6	242.3	165.4	142.6	103.6	126.6	106.3	106.3
August.....	121.4	179.7	239.0	101.6	141.6	112.9	64.9	187.8	192.8	234.5	159.6	143.9	104.8	130.6	101.6	101.6
September.....	117.5	143.9	244.1	102.0	131.2	106.4	78.4	179.9	177.2	260.8	147.8	140.1	103.6	132.0	95.2	95.2
October.....	142.0	171.5	296.6	131.2	158.3	118.3	100.0	206.4	214.6	253.0	164.0	151.9	118.1	134.6	104.7	104.7
November.....	123.8	152.0	254.3	114.5	143.7	101.1	75.7	179.7	185.3	215.1	157.4	147.7	103.6	113.3	90.5	90.5
December.....	129.4	154.5	257.6	125.0	156.2	106.4	83.8	162.5	162.8	208.8	148.5	132.9	97.6	106.6	101.6	101.6
<b>1930</b>																
January.....	130.5	165.0	272.9	118.1	170.8	105.4	67.6	154.7	151.6	201.5	148.5	137.1	106.0	114.6	104.7	104.7
February.....	108.8	123.3	196.6	103.3	166.6	91.4	56.8	129.4	127.1	166.1	125.0	112.6	85.6	85.3	95.2	95.2
March.....	115.1	143.1	215.3	102.0	160.4	104.3	64.9									

RELATIVE BANK DEBITS AT CLEARING-HOUSE CENTERS<sup>1</sup>—Continued

GROUPED BY FEDERAL RESERVE DISTRICTS—Continued

[Table continued on p. 22]

YEAR AND MONTH	CLEVELAND DISTRICT									RICHMOND DISTRICT					
	Total, 13 centers	Akron	Cincinnati	Cleveland	Pittsburgh	Yngstown	Toledo	Columbus	Dayton	Total, 7 centers	Baltimore	Norfolk	Richmond	Greenville <sup>2</sup>	
1919 average millions of dollars...	1,963	90	247	653	746	60	116	116	50	718	404	84	16	37	
1919 monthly average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
1920 monthly average.....	16.4	115.6	113.0	115.9	118.5	110.0	117.2	111.2	104.0	111.8	115.6	102.3	108.7	102.7	
1921 monthly average.....	89.6	63.3	107.7	81.9	94.9	78.3	100.0	102.6	110.0	95.5	104.9	71.4	98.3	87.6	
1922 monthly average.....	94.6	63.3	117.4	84.1	97.2	83.3	123.8	112.1	112.0	89.6	89.1	78.5	100.9	87.6	
1923 monthly average.....	110.9	80.0	133.6	99.2	112.7	103.4	133.5	128.5	138.0	98.6	93.3	88.1	112.9	89.4	
1924 monthly average.....	109.4	81.4	128.0	96.8	113.2	101.6	155.7	116.0	136.0	96.3	93.4	82.2	109.1	69.4	
1925 monthly average.....	122.0	100.0	142.7	106.6	126.4	117.0	179.2	126.9	156.0	106.7	104.6	85.8	122.0	73.0	
1926 monthly average.....	127.4	104.5	150.3	115.9	126.7	118.0	189.5	138.3	176.5	108.4	107.4	94.2	121.5	76.2	
1927 monthly average.....	136.6	112.9	167.2	124.9	137.1	118.5	205.2	144.8	188.8	107.1	104.2	89.0	120.2	75.0	
1928 monthly average.....	141.4	124.5	181.2	130.0	136.1	124.1	241.0	148.3	194.5	105.4	102.0	85.4	123.6	64.8	
1929 monthly average.....	152.9	133.7	184.8	145.9	150.9	137.4	198.9	166.6	216.2	108.9	107.6	83.5	127.4	61.3	
<b>1929</b>															
January.....	154.2	136.7	202.5	138.9	147.1	138.4	244.0	174.1	242.0	113.3	106.2	94.0	133.6	73.0	
February.....	139.6	125.5	176.5	134.1	139.9	115.0	170.7	150.0	190.0	96.4	93.3	73.8	114.7	62.2	
March.....	150.0	133.3	184.2	140.4	148.7	135.0	199.1	158.6	232.0	108.4	104.4	85.7	125.0	64.9	
April.....	158.5	140.0	201.2	153.1	154.0	138.4	219.0	173.3	216.0	110.3	109.1	80.9	121.6	59.5	
May.....	145.7	134.4	172.5	135.8	147.7	120.0	185.4	159.5	198.0	104.9	101.2	82.1	115.5	59.5	
June.....	148.1	136.7	179.0	141.3	143.6	143.4	190.5	163.8	214.0	105.0	106.9	80.9	117.2	56.8	
July.....	165.4	148.9	184.6	151.1	167.9	151.7	219.8	175.0	248.0	109.1	111.6	83.3	123.3	56.8	
August.....	152.3	127.8	165.2	149.6	148.7	143.4	191.4	164.7	210.0	113.9	120.3	80.1	134.5	54.1	
September.....	145.7	130.0	166.0	145.6	138.6	135.0	175.0	156.0	214.0	101.5	103.0	73.8	120.7	51.4	
October.....	170.4	140.0	206.5	165.5	170.2	155.0	218.1	187.1	220.0	120.5	117.8	89.3	146.6	73.0	
November.....	152.1	124.4	189.5	140.9	161.6	125.0	179.3	160.4	198.0	112.1	110.1	88.1	141.4	64.9	
December.....	153.1	126.7	189.5	154.9	143.0	148.4	194.8	176.7	212.0	110.9	107.2	90.4	134.5	59.5	
<b>1930</b>															
January.....	144.0	125.5	183.4	141.8	131.6	135.0	184.5	167.2	228.0	108.7	107.7	80.9	126.7	73.0	
February.....	118.4	100.0	133.6	110.4	116.7	100.0	148.3	139.7	176.0	91.1	92.1	70.2	105.2	54.1	
March.....	135.9	112.2	146.6	131.5	135.5	113.4	157.8	162.1	190.0	106.4	113.4	77.4	112.9	54.1	
April.....	139.2	122.2	175.7	138.9	131.7	130.0	162.1	172.4	190.0	105.3	105.9	75.0	109.5	51.4	
May.....	139.5	113.3	151.8	128.6	145.4	123.4	159.5	167.1	184.0	107.4	111.9	77.4	114.7	51.4	
June.....	146.3	117.8	166.4	131.7	150.6	123.4	153.5	162.2	194.0	103.4	106.9	75.0	116.4	43.2	
July.....	116.0	98.9	128.8	104.0	119.5	101.7	144.8	137.9	148.0	92.6	98.3	65.5	109.5	43.2	
August.....	123.5	104.4	134.0	113.0	128.1	106.7	135.3	149.1	166.0	98.6	101.5	64.3	126.7	40.5	
September.....	135.2	104.4	149.8	132.7	135.2	115.0	155.2	166.4	170.0	112.1	115.1	75.0	135.3	48.7	
October.....															
November.....															
December.....															
YEAR AND MONTH	DALLAS DISTRICT				ST. LOUIS DISTRICT					MINNEAPOLIS DISTRICT					
	Total, 11 centers	Dallas	Houston	Fort Worth	Summary for 5 centers	Louisville	St. Louis	Memphis	Little Rock	Total, 9 centers	Duluth	Minneapolis	St. Paul	Helena	Billings
1919 av., mill. dolls. ....	521	161	138	92	965	156	617	136	36	659	90	354	162	11	9
1919 monthly average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average.....	117.4	114.3	115.2	119.6	105.4	92.3	106.5	107.4	125.0	108.5	120.0	109.6	98.2	100.0	111.1
1921 monthly average.....	94.2	90.7	86.2	109.8	89.0	82.0	91.9	73.5	116.7	82.7	84.4	84.2	75.3	100.0	88.9
1922 monthly average.....	97.9	96.9	81.2	119.6	94.5	87.8	94.2	87.5	127.8	88.0	82.2	85.0	97.5	90.9	77.8
1923 monthly average.....	101.3	107.5	89.0	93.5	110.4	101.9	108.4	106.6	169.5	94.8	85.5	91.5	106.8	81.8	88.9
1924 monthly average.....	101.5	112.7	91.2	78.0	110.6	106.7	108.2	101.1	186.1	104.2	117.7	103.8	101.6	85.6	78.7
1925 monthly average.....	112.4	130.8	103.6	82.4	124.2	120.8	120.8	111.7	204.9	114.3	118.2	119.4	104.7	85.6	84.3
1926 monthly average.....	119.1	131.5	126.0	92.1	127.3	128.7	122.7	111.5	226.4	104.9	88.3	110.3	102.2	82.6	88.0
1927 monthly average.....	124.5	135.6	131.9	103.2	127.4	123.6	120.9	119.6	220.8	110.0	103.0	113.9	106.7	83.3	92.6
1928 monthly average.....	134.6	148.5	140.1	115.8	133.8	131.3	129.0	117.0	230.4	117.5	101.3	124.6	110.6	87.9	110.2
1929 monthly average.....	147.1	162.2	153.2	124.7	138.5	134.8	132.9	134.6	236.8	128.2	101.1	141.5	116.3	93.9	111.1
<b>1929</b>															
January.....	154.7	178.3	149.3	132.6	146.8	150.6	137.5	144.9	236.1	113.0	74.4	122.3	113.0	90.9	100.0
February.....	131.8	146.0	136.2	104.4	125.6	133.3	117.2	120.6	200.0	100.0	66.7	107.4	103.1	72.7	77.8
March.....	147.6	168.3	152.9	117.4	140.7	136.5	133.2	136.0	238.9	113.0	75.5	120.9	117.3	81.8	100.0
April.....	142.2	154.0	145.6	120.7	134.6	127.6	131.5	121.3	225.0	112.0	77.8	119.8	111.1	100.0	100.0
May.....	140.3	145.3	157.2	115.2	132.1	136.5	128.2	114.7	216.7	116.1	91.1	126.8	105.6	81.8	111.1
June.....	129.3	134.8	136.9	115.2	141.2	135.3	145.7	108.1	191.7	120.0	97.8	130.0	111.7	81.8	100.0
July.....	139.9	139.1	152.9	142.4	136.9	138.5	138.3	102.9	211.1	138.7	122.2	154.8	117.3	100.0	111.1
August.....	138.7	147.8	147.8	122.8	126.5	123.1	125.3	110.3	211.1	150.2	132.2	171.8	120.4	100.0	111.1
September.....	150.3	165.8	160.9	118.5	134.0	128.8	125.6	141.2	258.4	147.8	127.8	169.8	116.1	100.0	122.2
October.....	179.4	208.1	188.4	142.4	163.7	153.2	147.5	202.2	338.9	154.0	125.5	172.3	130.3	109.1	166.7
November.....	155.8	175.8	161.6	131.5	142.5	136.5	131.5	165.4	263.9	138.4	116.7	151.7	124.7	109.1	122.2
December.....	154.9	182.6	148.5	133.7	137.9	117.9	133.9	147.8	250.0	135.0	105.5	150.0	124.7	100.0	111.1
<b>1930</b>															
January.....	142.2	155.3	149.3	110.9	132.7	127.6	129.0	130.1	225.0	113.9	71.1	128.0	111.1	81.8	88.9
February.....	124.0	131.1	130.4	98.9	108.8	109.6	104.1	107.4	188.9	100.7	66.7	111.9	99.4	72.7	77.8
March.....	140.9	173.9	134.8	105.4	123.1	116.0	119.3	119.9	222.2	110.7	76.7	120.3	112.3	72.7	88.9
April.....	130.7	147.8	132.6	103.3	120.1	114.1	118.7	105.1	211.1	110.7	68.9	123.7	107.0	90.9	88.9
May.....	123.4	127.3	136.9	97.8	127.5	122.4	129.8	103.7	197.2	108.6	80.0	119.5	103.1	72.7	90.0
June.....	118.6	119.9	131.0	76.7	126.9	129.5	128.9	97.1	180.6	109.7	82.2	118.4	108.0	81.8	88.9
July.....	115.1	117.4	126.1	97.8	14.8	116.0	114.1	90.4	97.2	103.0	67.8	12.4	101.9	100.0	88.9
August.....	111.7	118.6	126.8	90.2	103.3	113.5	100.5	82.4	172.2	110.7	87.8	126.3	93.8	92.7	77.8
September.....	123.4	137.9	138.4	96.7	105.2	131.4	100.0	93.4	113.9	117.1	111.1	126.8	101.9	72.7	88.9
October.....	133.2														

RELATIVE BANK DEBITS AT CLEARING-HOUSE CENTERS<sup>1</sup>—Continued

GROUPED BY FEDERAL RESERVE DISTRICTS—Continued

YEAR AND MONTH	KANSAS CITY DISTRICT							SAN FRANCISCO DISTRICT					
	Total, 14 centers	Denver	Kansas City, Mo.	Omaha	St. Joseph, Mo.	Oklahoma City	Tulsa	Total, 15 centers	Los Angeles	Portland, Oreg.	San Francisco	Seattle	Oakland, Calif.
1919 average, millions of dolls.	1,231	146	413	264	85	68	94	1,909	314	181	760	206	63
1919 monthly average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average	109.8	139.7	94.9	95.5	97.6	153.0	131.9	123.2	139.2	108.8	124.6	96.1	160.3
1921 monthly average	82.0	98.6	74.6	67.4	81.1	129.4	88.3	104.4	143.0	82.3	101.9	67.0	128.5
1922 monthly average	84.2	102.7	74.3	73.1	69.4	119.2	105.3	107.2	165.0	76.2	94.8	73.3	144.4
1923 monthly average	90.6	111.6	84.3	77.7	72.9	114.7	104.3	126.3	223.6	86.2	104.0	83.0	192.0
1924 monthly average	85.7	112.9	81.4	69.7	71.6	112.4	89.5	128.9	236.7	89.4	107.1	87.7	186.3
1925 monthly average	95.5	121.5	90.1	76.9	73.4	127.4	112.6	142.9	251.1	92.0	126.1	98.0	227.3
1926 monthly average	100.4	123.2	93.4	75.4	73.7	139.1	136.0	155.7	273.1	101.0	138.2	103.2	273.0
1927 monthly average	102.3	120.4	93.8	76.0	66.9	154.6	139.2	172.3	297.2	94.2	165.0	105.8	356.7
1928 monthly average	108.9	125.4	102.4	82.1	70.0	167.1	147.0	198.7	342.7	101.4	201.6	119.7	399.1
1929 monthly average	120.5	138.9	115.0	87.4	68.9	192.3	177.0	203.7	388.1	109.1	186.3	133.3	376.5
<b>1929</b>													
January	117.1	136.3	107.3	84.1	74.1	185.3	184.1	209.4	404.2	101.1	189.1	133.0	407.9
February	102.3	118.5	94.4	75.8	61.2	175.0	147.9	187.4	371.4	97.2	172.3	112.1	349.1
March	117.9	148.6	111.6	89.4	69.4	176.5	159.6	223.3	435.1	110.5	210.6	140.3	417.4
April	116.0	145.2	104.8	86.0	68.2	185.3	172.4	191.5	383.8	98.3	164.0	128.6	366.6
May	112.7	135.6	105.3	83.0	65.9	186.8	161.7	197.7	394.9	111.6	174.0	125.7	372.9
June	115.3	133.6	110.4	83.7	65.9	183.9	169.2	190.3	365.0	105.0	167.4	125.7	385.6
July	140.4	137.7	145.3	96.6	78.8	219.2	202.2	196.7	365.0	108.8	175.9	138.3	385.6
August	128.1	149.3	127.1	98.1	76.4	182.4	170.2	205.3	393.3	115.5	191.0	141.7	382.5
September	116.7	130.1	112.6	87.5	65.9	189.8	173.4	197.3	366.3	114.9	184.2	133.0	325.3
October	135.8	166.4	129.5	98.1	71.7	216.2	197.9	241.6	433.2	121.0	244.8	159.7	388.8
November	124.5	139.7	118.1	85.2	62.3	208.9	190.5	209.8	394.0	121.6	191.2	140.3	358.7
December	119.8	125.3	113.1	81.1	67.0	201.5	194.7	191.2	351.0	103.9	171.3	121.4	377.7
<b>1930</b>													
January	114.5	121.9	103.9	84.9	68.2	208.9	174.5	186.9	352.9	96.7	170.3	122.3	319.0
February	99.3	107.5	90.3	77.3	56.4	170.6	143.6	161.9	308.6	82.9	150.4	105.8	269.8
March	108.5	123.3	101.7	85.6	57.6	191.2	157.5	198.2	346.5	100.0	201.5	126.7	353.9
April	106.8	124.7	99.7	79.9	56.4	179.5	158.5	183.0	344.0	98.3	171.2	123.3	301.5
May	107.2	119.2	98.8	81.1	54.4	189.8	161.7	181.7	348.1	122.2	166.9	114.1	309.5
June	107.7	114.4	101.9	79.2	52.9	183.9	171.3	178.9	326.5	98.9	170.3	120.9	306.3
July	113.4	113.0	111.9	81.1	55.2	192.7	158.5	172.9	321.7	98.4	162.3	106.8	266.3
August	104.8	114.4	100.2	81.4	54.1	164.8	153.2	166.4	295.1	92.3	165.3	103.3	274.7
September	104.1	116.4	99.3	78.4	54.1	167.7	150.0	161.1	288.2	100.0	151.3	110.2	277.7
October	112.7	127.4	108.5	80.3	52.9	197.1	157.5	178.3	326.1	101.7	167.8	118.4	323.7
November													
December													
<b>DISTRICT TOTALS—SEASONAL VARIATIONS ELIMINATED</b>													
YEAR AND MONTH	U. S. total	Boston	New York	Phila-delphia	Cleve-land	Rich-mond	Atlanta	Chicago	St. Louis	Minne-apolis	Kansas City	Dallas	San Francisco
1919 monthly average	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920 monthly average	106.0	109.5	99.3	105.1	116.4	112.1	115.1	116.1	105.5	108.5	109.8	118.0	123.4
1921 monthly average	88.7	101.9	85.1	95.9	89.8	97.6	84.4	92.0	89.1	82.9	82.1	94.3	105.4
1922 monthly average	97.8	105.4	98.5	102.5	94.5	89.5	85.9	96.8	94.2	87.9	84.1	97.9	107.1
1923 monthly average	103.3	117.1	98.0	114.4	111.1	98.8	99.9	109.0	110.3	95.0	89.7	101.1	126.4
1924 monthly average	109.5	121.1	108.3	116.8	109.5	96.5	105.3	110.8	110.5	103.1	87.0	102.1	129.4
1925 monthly average	126.7	136.6	128.6	129.4	122.0	106.8	124.8	123.8	124.1	114.4	95.4	112.4	142.9
1926 monthly average	135.4	146.0	139.0	132.1	127.4	108.5	128.4	132.1	127.3	105.3	100.3	119.4	156.2
1927 monthly average	150.0	158.1	160.2	140.0	136.7	107.3	124.1	137.9	127.3	109.5	102.1	124.5	172.4
1928 monthly average	179.1	181.3	203.1	155.9	141.3	105.6	123.2	155.1	133.3	117.3	108.5	134.5	199.7
1929 monthly average	208.8	177.1	246.5	171.7	154.0	109.1	128.5	174.8	138.6	128.2	120.4	147.5	204.2
<b>1929</b>													
January	212.0	170.7	252.8	175.2	148.1	109.3	132.4	170.6	136.8	112.3	113.2	144.4	211.3
February	219.9	175.8	263.6	181.9	160.8	112.5	135.4	175.6	139.1	125.9	116.5	149.6	223.6
March	220.8	171.9	265.5	174.6	152.7	112.2	133.2	176.4	140.1	120.5	115.5	151.1	218.3
April	204.4	171.1	237.2	183.0	159.8	117.3	139.1	168.3	140.1	119.3	121.1	157.0	200.5
May	204.3	168.2	239.6	168.2	150.4	108.7	130.7	167.8	134.8	121.3	114.2	150.9	204.7
June	180.0	156.2	203.0	168.3	142.3	102.3	124.6	160.0	139.9	122.3	115.5	138.0	191.8
July	209.3	180.1	244.5	174.5	160.3	108.4	133.6	176.1	140.8	145.7	140.0	156.1	199.1
August	224.4	211.9	267.1	162.7	160.0	117.5	134.6	192.6	138.7	156.9	125.5	154.3	214.5
September	218.3	192.0	265.9	159.3	158.1	106.3	121.9	182.1	141.1	133.8	115.2	145.2	195.3
October	239.0	199.5	291.1	175.5	166.2	110.9	128.0	195.5	149.5	130.1	128.1	152.4	221.9
November	215.1	176.6	255.4	182.5	156.0	107.6	116.5	182.6	139.8	128.5	125.0	140.9	201.9
December	158.2	151.4	171.9	155.3	133.2	96.4	112.6	149.6	122.7	121.6	115.5	130.8	167.4
<b>1930</b>													
January	154.7	162.3	161.6	157.1	138.3	104.8	120.3	152.0	123.7	113.2	110.7	132.8	188.6
February	163.5	153.1	178.6	160.1	136.4	106.3	122.5	148.2	120.5	126.8	113.1	140.7	193.2
March	173.7	148.2	196.1	153.7	138.4	110.1	114.2	153.0	122.6	118.0	107.2	144.2	193.7
April	172.2	157.2	191.6	143.5	140.3	112.0	119.3	157.5	125.0	117.9	111.5	144.3	191.6
May	165.0	147.8	180.7	141.1	144.0	111.3	114.5	154.7	130.1	113.5	108.6	132.7	188.1
June	161.0	145.9	177.3	139.5	140.5	100.8	104.2	154.5	125.8	111.8	107.9	126.6	180.3
July	142.3	138.5	148.3	130.6	136.4	102.6	104.3	142.8	118.1	108.2	113.1	128.5	175.0
August	133.4	133.4	137.8	123.8	121.8	95.6	101.3	135.3	113.1	115.7	102.6	124.2	171.7
September	136.7	128.5	145.4	123.5	126.8	103.2	103.7	134.1	110.7	106.0	102.8	119.2	159.5
October	136.2	143.5	142.5	130.3	131.9	103.1	103.0	133.0	105.2	97.5	106.3	113.2	163.7
November													
December													

<sup>1</sup> Compiled from data collected by the Federal Reserve Board, this table supplements similar data published in Nos. 26, 35, 56, 62, 67, 75, and 87 of this publication. The district total table represents the data of 141 identical centers.  
<sup>2</sup> Greenville, S. C., substituted for Charleston, S. C., since May, 1928.

## 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 133 of the August, 1930 "Survey"	1930			1929			1928			CUMULATIVE TOTAL FROM JANUARY 1 THROUGH OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>TEXTILES</b>												
<b>Wool</b>												
Receipts at Boston:												
Total.....thous. of lbs.	51,672	7,074	12,739	40,476	19,444	12,148	29,720	10,315	8,090	294,857	276,513	273,622
Domestic.....thous. of lbs.	47,826	4,094	10,494	35,594	16,975	6,931	25,802	7,156	4,598	234,034	188,404	193,906
Foreign.....thous. of lbs.	3,846	2,980	2,245	4,882	2,469	5,217	3,918	3,159	3,492	60,823	88,109	79,716
Imports:												
In condition imported.....thous. of lbs.	10,145	8,817	8,994	17,068	18,158	19,463	14,472	14,510	20,730	144,063	240,606	208,718
Consumption by textile mills, grease equivalent.....thous. of lbs.	33,761	38,083	40,975	52,644	49,755	59,352	45,103	43,492	51,477	363,860	501,062	442,387
Machinery activity, hourly:												
Looms—												
Wide.....per ct. of hours active	44	46	47	60	64	65	55	59	67	-----	-----	-----
Narrow.....per ct. of hours active	43	41	44	62	63	66	48	53	66	-----	-----	-----
Carpet and rug.....per ct. of hours active	34	36	38	66	66	71	63	62	67	-----	-----	-----
Set of cards.....per ct. of hours active	48	53	54	80	83	85	77	85	93	-----	-----	-----
Combs.....per ct. of hours active	75	81	74	93	94	91	65	74	82	-----	-----	-----
Spinning spindles—												
Woolen.....per ct. of hours active	48	55	53	77	77	78	74	80	88	-----	-----	-----
Worsted.....per ct. of hours active	55	60	62	69	70	72	58	62	68	-----	-----	-----
Prices:												
Raw, territory, fine, scoured.....dolls. per lb.	.76	.76	.75	.93	.92	.90	1.14	1.14	1.10	-----	-----	-----
Raw, Ohio and Pa. fleeces, 1/4 blood, combing, grease.....dolls. per lb.	.31	.31	.30	.43	.43	.43	.54	.54	.54	-----	-----	-----
Worsted yarns.....dolls. per lb.	1.20	1.20	1.20	1.45	1.48	1.48	1.60	1.58	1.58	-----	-----	-----
Women's dress goods, French serge, 39 in.....dolls. per yd.	.90	.99	.90	.98	.98	.98	1.03	.98	.98	-----	-----	-----
Suiting, 13-oz.....dolls. per yd.	1.601	1.601	1.601	1.901	1.901	1.901	2.008	2.008	2.008	-----	-----	-----
<b>Cotton</b>												
Production, crop estimate.....thous. of bales	-----	-----	<sup>2</sup> 14,438	-----	-----	<sup>3</sup> 14,825	-----	-----	<sup>4</sup> 14,478	-----	-----	-----
Ginnings.....thous. of bales	-----	-----	<sup>5</sup> 11,962	-----	-----	<sup>6</sup> 11,890	-----	-----	<sup>7</sup> 11,321	-----	-----	-----
Receipts into sight.....thous. of bales	865	2,410	3,670	823	2,431	4,184	527	2,078	3,982	9,691	11,184	10,237
Imports, unmanufactured.....bales	5,901	3,394	1,747	24,793	23,974	19,815	25,258	18,508	27,840	248,875	374,859	264,153
Exports, unmanufactured (excl. hinters).....bales	366,036	902,956	1,004,120	226,018	725,876	1,251,300	252,627	809,953	1,240,702	4,801,647	5,458,653	6,059,108
Consumption by textile mills.....bales	352,335	394,321	444,494	558,754	545,334	<sup>8</sup> 639,759	526,340	492,307	616,238	4,562,480	6,056,033	5,427,596
Stocks, domestic, end of month:												
Totals, mills and warehouses.....thous. of bales	4,476	6,215	8,895	2,183	3,990	<sup>9</sup> 6,652	1,970	3,358	5,828	-----	-----	-----
Mills.....thous. of bales	1,011	968	1,353	801	791	<sup>10</sup> 1,356	782	720	1,196	-----	-----	-----
Warehouses.....thous. of bales	3,465	5,247	7,542	1,382	3,208	<sup>11</sup> 5,296	1,188	2,638	4,632	-----	-----	-----
Stocks, world visible, end of month:												
Total.....thous. of bales	5,190	6,707	8,413	3,458	4,381	6,677	3,480	4,114	6,198	-----	-----	-----
American.....thous. of bales	3,159	4,892	6,617	1,629	2,652	4,982	1,790	2,563	4,645	-----	-----	-----
Machinery activity of spindles:												
Active spindles.....thousands	25,874	26,087	26,154	30,230	30,035	<sup>12</sup> 30,107	28,217	28,209	30,302	-----	-----	-----
Total activity.....millions of hours	5,134	5,663	6,239	8,130	7,881	9,004	7,424	6,963	8,698	-----	-----	-----
Activity per spindle.....hours	151	167	184	234	226	258	209	196	246	-----	-----	-----
Ratio to capacity.....per cent.	65.2	<sup>13</sup> 73.4	77.1	97.3	103.5	<sup>14</sup> 108.8	87.1	90.1	103.5	-----	-----	-----
Prices:												
To producer.....dolls. per lb.	.114	.099	.092	.180	.182	.175	.188	.176	.181	-----	-----	-----
In New York, middling.....dolls. per lb.	.121	.109	.107	.187	.189	.186	.193	.185	.196	-----	-----	-----
<b>Cotton Yarn</b>												
Carded sales yarn:												
Production.....thous. of lbs.	10,031	11,148	12,278	19,639	17,122	18,199	14,046	18,839	17,621	127,001	185,055	175,712
Stocks, end of month.....thous. of lbs.	13,633	12,819	12,813	8,185	7,423	7,173	11,574	10,248	8,476	-----	-----	-----
Unfilled orders, end of mo.....thous. of lbs.	29,103	33,194	35,611	32,175	35,833	40,749	27,044	34,836	39,041	-----	-----	-----
Prices:												
22/1 cones, Boston.....dolls. per lb.	.252	.242	.235	.349	.357	.359	.369	.358	.372	-----	-----	-----
40/1s. southern spinning.....dolls. per lb.	.435	.420	.413	.510	.510	.503	.514	.501	.495	-----	-----	-----
<b>Cotton Goods</b>												
Cotton textiles:												
Production.....thous. of yds.	218,815	182,385	228,866	307,538	268,611	283,064	302,470	253,688	284,899	2,379,038	2,938,501	2,942,048
New orders.....thous. of yds.	235,272	291,980	335,801	312,635	371,485	222,196	340,810	387,151	401,953	2,408,989	2,894,424	2,989,637
Shipments.....thous. of yds.	231,348	232,975	270,383	326,398	287,628	265,450	324,073	278,110	307,402	2,489,162	2,967,587	2,883,807
Stocks, end of month.....thous. of yds.	442,996	392,406	350,889	364,060	345,043	362,657	441,667	417,245	394,742	-----	-----	-----
Unfilled orders, end of month.....thous. of yds.	226,422	285,427	350,849	355,095	438,952	395,698	288,964	398,005	492,556	-----	-----	-----
Cotton cloth:												
Imports.....thous. of sq. yds.	1,664	1,920	1,976	3,927	3,972	5,936	3,754	3,139	3,676	32,129	51,593	51,065
Exports.....thous. of sq. yds.	34,285	32,626	34,804	42,366	42,274	43,709	44,913	35,558	57,105	355,693	487,031	432,504
Fabric for tire manufacture:												
Consumption.....thous. of lbs.	13,223	10,917	11,730	15,803	13,469	13,707	21,854	17,797	20,295	142,036	189,730	189,835
Elastic webbing, shipments.....thous. of lbs.	1,127	1,200	1,356	1,399	1,419	1,600	1,399	1,478	1,624	12,948	15,592	14,003
Prices:												
Print cloth, 64 x 60.....dolls. per yd.	.050	.053	.055	.075	.076	.078	.075	.074	.078	-----	-----	-----
Sheeting, brown.....dolls. per yd.	.070	.070	.066	.086	.086	.087	.091	.089	.090	-----	-----	-----
Cotton goods (Fairchild).....rel. to 1911-1913	126	124	-----	160	160	160	163	160	163	-----	-----	-----

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>TEXTILES—Continued</b>												
<b>Cotton Finishing</b>												
White, dyed and printed (outside mills):												
Billings, finished goods...thous. of yds..	37,907	40,631	53,003	75,845	73,116	81,549	70,748	69,805	83,935	542,669	832,059	739,382
New orders, gray yard-												
age.....thous. of yds..	35,576	41,618	47,133	69,168	67,991	78,806	71,743	74,483	87,175	496,348	790,233	734,512
Shipments, finished goods.....cases..	228,843	26,691	29,260	45,238	43,586	46,173	46,283	45,767	50,984	338,220	509,456	462,027
Stocks, finished goods, end mo.....cases..	7,198	22,079	22,392	36,320	35,062	37,635	35,819	33,410	32,046			
Operating activity per ct. of capacity..	36	46	48	60	61	65	54	61	66			
Unfilled orders, end of month.....days..	2.1	2.6	2.1	4.9	4.6	3.9	4.4	5.0	6.0			
Printed only (mills and outside):												
Production.....thous. of yds..	42,185	55,387	69,764	69,315	66,766	82,724	54,495	66,079	77,320	578,716	780,154	644,150
Stocks, end of month.....thous. of yds..	70,395	64,788	63,876	87,918	88,864	87,446	74,682	75,161	73,687			
<b>Silk</b>												
Imports, raw.....thous. of lbs..	8,244	7,887	8,940	9,620	8,811	9,396	9,320	7,218	8,272	65,167	80,628	73,191
Deliveries (consumption).....bales..	41,734	55,649	61,937	59,704	53,274	57,489	50,821	47,797	49,940	469,469	525,026	478,275
Stocks, end of month:												
At warehouses.....bales..	44,978	47,621	51,278	48,408	55,104	64,129	50,975	50,464	49,381			
At manufacturing plants.....bales..	20,511	21,243	22,954	25,854	29,594	28,200	24,429	22,786	26,676			
Silk machinery activity:												
Broad looms.....per cent of normal..	73.1	80.0	88.2	101.9	100.7	102.6	89.8	92.7	102.0			
Narrow looms.....per cent of normal..	35.4	42.9	36.6	65.5	63.1	58.1	54.1	54.0	50.5			
Spinning spindles per cent of normal..	49.1	57.7	70.2	65.2	66.8	66.9	52.1	66.9	69.3			
Prices:												
Raw, Japanese, 13-15,												
N. Y.....dolls. per lb..	2.955	2.413	2.512	5.073	5.122	4.925	4.851	5.096	5.145			
Silk goods, composite.....dolls. per lb..	1.06	1.04		1.18	1.18	1.18	1.16	1.16	1.16			
<b>Rayon</b>												
Imports.....thous. of lbs..	171	153	101	1,032	1,044	1,540	1,001	924	1,229	5,370	13,699	9,971
Price, 150 denier, A grade,												
N. Y.....dolls. per lb..	.95	.95	.95	1.15	1.15	1.15	1.50	1.50	1.50			
<b>Clothing</b>												
Men's and boy's garments cut:												
Suits.....thous. of garments..	1,878	1,662	1,654	2,616	2,173	2,067				19,853	25,411	
Separate trousers.....thous. of garments..	1,891	2,071	2,163	2,637	2,490	2,511				21,267	26,103	
Overcoats.....thous. of garments..	437	567	555	901	926	877				3,739	6,114	
Overalls:												
Cut.....thous. of dozen garments..	288	326	279	374	386	414	245	332	373	2,879	3,567	3,159
Net ship-												
ments.....thous. of dozen garments..	250	289	249	360	352	348	319	313	312	2,640	3,233	2,986
Unfilled orders, end												
of mo.....thous. of dozen garments..	74	69	51	113	142	138	153	150	162			
Hosiery:												
Production.....thous. of dozen pairs..	2,408	2,789	3,440	3,552	3,586	4,255	3,474	3,255	3,852	29,244	36,242	34,414
Net shipments.....thous. of dozen pairs..	2,766	3,406	3,783	3,673	4,046	4,427	3,735	3,755	4,166	29,175	36,169	34,654
Stocks, end of												
month.....thous. of dozen pairs..	8,647	7,864	7,627	8,356	7,902	7,736	8,656	8,128	7,849			
New orders.....thous. of dozen pairs..	2,633	3,292	3,889	3,586	4,038	4,521	3,207	3,810	4,342	28,904	36,804	34,477
Unfilled orders, end of												
month.....thous. of dozen pairs..	2,096	1,876	2,618	4,299	4,160	4,139	4,079	3,957	3,888			
Knit underwear:												
Production.....thous. of dozen garments..	828	913	1,094	1,152	1,098	1,414	1,098	1,016	1,297	10,329	11,099	11,073
Net ship-												
ments.....thous. of dozen garments..	1,024	1,261	1,315	1,382	1,532	1,564	1,306	1,402	1,514	10,347	12,057	11,299
Stocks, end of												
month.....thous. of dozen garments..	1,759	1,497	1,348	1,689	1,416	1,295	1,570	1,370	1,228			
New orders.....thous. of dozen garments..	609	1,649	1,415	1,149	1,459	1,405	1,236	1,213	1,483	10,307	12,353	11,182
Unfilled orders, end of												
month.....thous. of dozen garments..	1,398	1,140	1,228	1,870	1,783	1,620	1,896	1,696	1,645			
<b>Burlaps and Fibers</b>												
Imports:												
Burlaps.....thous. of lbs..	39,038	39,578	37,940	74,698	33,568	42,067	47,766	43,622	30,874	516,911	555,952	536,821
Fibers (unmanufactured).....long tons..	13,941	13,803	17,958	25,670	22,210	26,613	20,657	21,004	25,615	216,384	277,405	250,799
<b>Pyroxylin-Coated Textiles</b>												
Pyroxylin spread.....thous. of lbs..	2,795	2,963	2,722	4,294	3,812	3,875	5,596	4,844	5,712	32,533	49,817	51,005
Shipments billed.....thous. of linear yards..	2,109	2,460	2,480	3,540	3,315	3,529	4,241	3,914	4,499	27,358	41,829	39,701
Unfilled orders, end of												
month.....thous. of linear yards..	1,179	1,508	1,441	2,468	2,599	2,403	3,853	4,561	3,824			
<b>Fur</b>												
Sales by dealers.....thous. of dolls..	5,425	7,301	5,787	11,335	11,434	8,187	12,110	10,244	12,576	63,332	118,726	120,575
<b>Buttons</b>												
Fresh-water pearl buttons:												
Production.....ratio to capacity..	25.7	36.2	38.8	45.5	46.6	47.4	44.5	47.5	51.0			
Stocks, end of month.....thous. of gross..	9,258	9,061	8,808	10,051	10,926	10,730	10,667	10,593	10,521			
Imports:												
Buttons--												
Product of Philip-												
pines.....thous. of gross..	69	78	72	52	64	66	72	49	71	690	548	824
All other.....thous. of gross..	14	3	12	9	26	6	2	5	7	352	302	100
Shells--												
Mother of pearl.....thous. of pounds..	844	802	354	632	1,073	828	392	586	676	5,328	6,333	4,822
All other pearl.....thous. of pounds..	56	164	586	212	116	52	156	59	50	2,901	1,615	1,993
Tagua nuts.....thous. of pounds..	708	1,286	1,204	3,053	2,264	3,015	1,356	1,492	1,361	11,389	22,953	18,159

\* 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>IRON AND STEEL</b>												
<b>Iron</b>												
Manganese ore, imports.....thous. of long tons..	8	22	18	32	13	25	26	13	26	241	282	169
Iron ore: Imports.....thous. of long tons..	178	215	186	298	247	270	226	211	170	2,523	2,584	2,025
Shipments from mines.....thous. of long tons..	8,252	6,488	5,531	10,807	9,547	7,989	9,243	8,748	8,454	44,595	61,253	49,720
Receipts—												
Lake Erie ports and furnaces.....thous. of long tons..	5,586	4,721	4,011	7,518	6,619	6,052	6,390	5,827	6,002	30,416	42,627	33,344
Other ports.....thous. of long tons..	2,492	1,891	1,675	3,284	2,710	2,267	2,819	2,710	2,580	13,370	17,106	14,900
Consumption.....thous. of long tons..	3,673	3,282	3,050	5,779	5,362	5,366	4,761	4,608	5,025	40,213	54,868	46,929
Stocks, end of month—												
Total.....thous. of long tons..	34,938	38,366	41,092	33,831	38,125	41,135	31,754	35,808	39,555			
At furnaces.....thous. of long tons..	29,397	32,323	34,750	28,720	32,360	34,770	26,036	29,708	33,082			
On Lake Erie docks.....thous. of long tons..	5,541	6,043	6,342	5,111	5,765	6,365	5,718	6,100	6,473			
Pig-iron production:												
Total, United States.....thous. of long tons..	2,524	2,277	2,165	3,756	3,498	3,588	3,137	3,062	3,374	27,867	36,268	31,166
Merchant furnaces.....thous. of long tons..	513	407	373	690	635	685	575	585	644	5,536	7,356	6,256
Canada.....thous. of long tons..	57	48	40	113	99	91	92	91	93	662	921	839
Furnaces in blast, end of month:												
Furnaces.....number..	139	123	111	210	205	203	183	197	197			
Capacity.....long tons per day..	80,620	73,525	65,965	119,130	116,405	113,600	98,730	106,755	108,800			
Malleable castings:												
Production.....short tons..	25,614	26,505	28,641	69,173	59,087	65,526	68,606	62,665	70,054	457,291	732,368	656,489
Operating activity, per ct. of capacity..	26.2	27.2	28.8	70.6	61.2	66.7	72.1	66.3	73.4			
Shipments.....short tons..	31,845	29,157	29,176	69,824	62,571	58,733	66,962	61,736	63,516	466,257	723,974	637,520
New orders.....short tons..	25,409	26,228	23,848	62,541	52,647	61,164	66,128	61,163	65,780	421,595	702,258	638,044
Wholesale prices:												
Foundry, No. 2, northern.....dolls. per long ton..	19.76	19.56	18.89	20.26	20.26	20.26	18.26	18.64	18.86			
Basic (valley furnace).....dolls. per long ton..	18.00	17.60	17.00	18.50	18.50	18.50	16.00	16.19	17.10			
Composite pig iron.....dolls. per long ton..	17.99	17.79	17.30	19.18	19.00	19.03	17.78	18.04	18.40			
<b>Cast-iron Boilers and Radiators</b>												
Round boilers:												
Production.....thous. of lbs..	4,603	6,321	8,291	12,189	11,602	15,407	12,881	13,655	17,953	80,226	116,153	131,857
Shipments.....thous. of lbs..	8,736	12,162	17,774	15,092	18,263	23,487	14,422	17,021	22,621	81,786	123,341	132,919
New orders.....thous. of lbs..	7,392	11,894	14,521	13,916	16,936	19,583	12,551	14,504	19,816	74,341	112,493	132,346
Stocks, end of month.....thous. of lbs..	72,967	68,182	59,134	81,162	74,254	66,509	86,141	82,931	78,349			
Square boilers:												
Production.....thous. of lbs..	10,066	15,920	23,068	19,014	20,766	32,819	38,693	26,760	30,098	174,874	232,738	300,469
Shipments.....thous. of lbs..	24,178	31,595	39,158	28,757	34,671	43,185	36,212	41,989	52,505	181,147	217,841	274,038
New orders.....thous. of lbs..	22,271	32,259	33,760	27,242	36,481	35,715	31,809	36,527	53,522	176,173	213,369	283,106
Stocks, end of month.....thous. of lbs..	155,184	140,598	121,666	159,661	145,716	135,030	182,367	167,063	145,051			
Radiators:												
Production.....thous. sq. ft. heating surface..	5,366	4,643	5,852	10,365	9,545	12,299	15,914	13,770	12,853	69,261	111,671	142,846
Shipments.....thous. sq. ft. heating surface..	9,520	10,347	12,390	13,665	14,980	18,214	16,951	18,092	23,062	69,556	104,996	128,338
New orders.....thous. sq. ft. heating surface..	8,933	11,350	11,220	14,267	15,680	16,148	15,753	16,533	23,394	71,979	108,110	136,339
Stocks, end of month.....thous. sq. ft. heating surface..	57,590	51,964	45,626	65,792	59,794	53,715	77,267	72,902	63,082			
Gas-fired boilers:												
Shipments.....dollars..	430,365	396,788	445,101	486,659	549,424	522,400	288,954	395,265	351,367	2,684,648	3,097,556	2,259,878
Shipments.....thous. B. t. u..	364,861	334,266	359,206	365,280	459,124	427,629	239,048	322,000	274,760	2,236,581	2,432,981	1,822,285
Production.....thous. B. t. u..	268,664	286,748	250,001	235,877	306,158	317,234	168,547	169,376	187,196	2,463,264	2,595,015	1,627,600
Stocks, end of month.....thous. B. t. u..	948,557	939,650	884,859	951,598	885,625	808,223	778,337	622,687	596,143			
<b>Crude Steel</b>												
Steel ingots, production:												
United States, total.....thous. of long tons..	3,095	2,868	2,720	4,939	4,528	4,534	4,179	4,148	4,650	35,409	47,888	41,580
Ratio to capacity.....per cent..	59	55	50	93	92	86	82	88	91			
Canada.....thous. of long tons..	58	56	65	120	99	116	89	100	109	876	1,203	1,030
U. S. Steel Corporation:												
Unfilled orders, end of month.....thous. of long tons..	3,580	3,424	3,482	3,658	3,903	4,087	3,624	3,698	3,751			
Steel castings—												
Production—												
Total.....short tons..	64,449	61,919	59,506	121,238	106,995	120,937	87,742	75,761	87,952	903,115	1,138,765	857,368
Ratio to capacity.....per cent..	45	43	41	83	73	83	60	51	60			
Railroad specialties.....short tons..	20,728	17,823	15,677	53,328	44,609	50,012	27,157	25,311	29,471	342,643	491,719	314,281
Miscellaneous.....short tons..	43,721	44,096	43,829	67,910	62,382	70,835	60,585	50,450	58,481	500,472	646,952	543,087
New Orders—												
Total.....short tons..	50,516	49,542	45,546	101,777	86,584	136,208	81,286	82,762	78,860	788,651	1,151,859	819,168
Ratio to capacity.....per cent..	35	34	32	70	59	94	55	56	54			
Railroad specialties.....short tons..	15,285	11,148	13,206	38,986	33,463	72,432	25,171	35,234	26,736	297,446	522,558	311,390
Miscellaneous.....short tons..	35,231	38,394	32,340	62,791	53,121	63,776	56,115	47,528	52,124	491,205	629,301	507,778
Sheets, black, blue, galvanized, and full finished—												
Production—												
Total.....net tons..	173,956	179,928	193,934	366,734	302,490	319,660	329,396	318,907	369,243	2,350,046	3,501,390	3,287,369
Ratio to capacity.....per cent..	48.6	48.8	50.6	109.7	97.7	95.3	92.8	101.0	103.5			
Stocks, end of month—												
Total.....net tons..	182,240	185,791	189,213	143,323	154,928	169,390	154,461	146,832	150,600			
Unsold.....net tons..	82,315	88,363	91,024	34,436	43,886	63,174	51,636	44,519	49,800			
Shipments.....net tons..	205,774	186,639	193,516	365,649	301,330	291,135	324,691	322,876	354,925	2,310,016	3,472,114	3,175,619
New orders.....net tons..	148,969	214,454	158,700	282,107	274,568	258,810	254,397	370,936	344,614	2,306,871	3,430,790	3,125,164
Unfilled orders, end of month.....net tons..	373,148	388,599	319,518	570,613	522,803	478,038	498,023	539,960	525,161			

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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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
	<b>IRON AND STEEL—Continued</b>											
<b>Crude Steel—Continued</b>												
Wholesale prices:												
Steel billets, Bessemer.....dolls. per long ton..	31.00	31.00	31.00	35.00	35.00	35.00	32.00	32.00	32.80	-----	-----	-----
Iron and steel comp.....dolls. per long ton..	33.01	32.67	32.31	36.57	36.50	36.27	34.93	35.17	35.48	-----	-----	-----
Structural steel beams.....dolls. per 100 lbs..	1.65	1.60	1.60	1.95	1.95	1.90	1.85	1.85	1.85	-----	-----	-----
Composite finished steel.....dolls. per 100 lbs..	2.26	2.24	2.22	2.55	2.54	2.51	2.48	2.50	2.52	-----	-----	-----
<b>Fabricated Steel Products</b>												
Steel barrels:												
Production.....barrels..	553,842	564,927	616,121	806,574	663,531	629,976	677,313	593,255	636,021	6,531,176	7,141,013	6,283,025
Ratio to capacity.....per cent..	39.6	40.3	44.1	65.2	54.1	51.4	57.8	50.2	56.4	-----	-----	-----
Shipments.....barrels..	552,265	565,204	619,558	809,860	655,314	638,681	675,600	595,640	661,009	6,527,635	7,129,266	6,285,460
Stocks, end of month.....barrels..	74,138	73,861	70,424	56,700	64,917	56,212	57,544	55,059	50,071	-----	-----	-----
Unfilled orders, end of month.....barrels..	1,114,080	1,011,211	986,110	1,205,659	1,071,150	901,643	1,064,358	996,820	823,872	-----	-----	-----
Track work, production.....short tons..	6,812	5,642	5,192	14,818	12,962	12,902	11,040	10,767	9,493	100,730	139,963	120,205
Iron, steel, and heavy hardware, sales.....rel. to Jan., 1921	162	161	165	240	229	243	215	207	236	-----	-----	-----
Lock washers, shipments.....thous. of dolls.	173	160	153	320	298	263	282	257	269	2,372	3,372	2,652
Steel plate, fabricated, new orders:												
Total.....short tons..	29,235	33,602	24,002	39,702	41,653	32,099	47,245	40,281	53,983	339,848	447,235	437,951
Ratio to capacity.....per cent..	-----	-----	-----	51	53	39	60	50	68	-----	-----	-----
Oil storage tanks.....short tons..	9,388	14,106	4,400	11,150	15,189	8,786	24,807	18,572	23,960	87,157	126,148	195,230
Steel bars, cold finished, shipments.....short tons..	19,086	19,338	20,521	46,747	40,889	39,296	42,993	43,893	50,867	287,218	512,666	417,961
Steel boilers, new orders:												
Quantity.....number..	1,371	1,254	1,189	1,859	1,910	1,712	2,018	1,749	1,803	11,575	16,258	16,669
Area.....thous. of sq. ft..	1,357	1,282	852	1,782	1,957	1,871	1,691	1,453	1,500	12,175	17,428	14,917
Iron and steel:												
Exports.....long tons..	151,235	131,211	131,850	242,856	222,406	247,646	287,297	228,056	256,870	1,771,069	2,575,281	2,384,301
Imports.....long tons..	27,408	29,793	29,730	61,087	46,346	49,502	54,062	48,117	50,176	364,798	483,849	497,970
<b>Machinery</b>												
Shipments:												
Water softening apparatus.....units..	774	755	738	1,581	1,484	1,450	1,402	1,187	1,505	10,406	14,064	14,136
Water systems.....units..	9,663	8,611	7,831	14,200	12,600	12,254	11,248	10,200	11,367	94,067	111,438	99,967
Pumps:												
Domestic shipments—												
Pitcher, hand, etc.....units..	43,138	39,885	29,162	52,451	48,039	41,566	50,689	42,538	42,315	394,840	454,316	469,355
Power, horizontal type.....units..	2,476	1,975	2,088	2,902	2,262	2,532	2,531	2,017	2,732	23,114	25,160	22,273
Steam, power, and centrifugal—												
New orders.....thous. of dolls..	1,362	1,212	1,027	1,819	1,628	1,868	1,579	1,405	1,708	13,517	18,059	14,490
Shipments.....thous. of dolls..	1,367	1,183	1,167	1,978	1,774	1,954	1,520	1,369	1,634	14,121	17,543	14,277
Unfilled orders, end of mo.....thous. of dolls..	3,259	3,267	3,124	4,115	4,053	3,981	3,023	3,056	3,128	-----	-----	-----
Foundry equipment:												
New orders.....rel. to 1922-24..	85.2	91.0	50.0	229.5	216.3	245.3	278.0	170.0	185.0	-----	-----	-----
Shipments.....rel. to 1922-24..	82.6	66.0	62.0	150.8	176.8	214.1	154.1	129.7	254.3	-----	-----	-----
Unfilled orders, end of mo.....rel. to 1922-24..	140.2	170.8	159.1	441.1	480.8	492.5	467.2	520.5	462.6	-----	-----	-----
Stokers, mechanical, sales:												
Quantity.....number..	115	128	92	199	155	178	162	161	100	1,055	1,530	1,272
Power.....horsepower..	29,988	42,899	38,276	54,929	45,685	56,108	51,572	65,060	27,219	332,835	515,140	428,538
Machine tools:												
New orders.....rel. to 1922-24..	114	136	90	298	241	322	241	265	284	-----	-----	-----
Shipments.....rel. to 1922-24..	120	96	103	277	257	315	205	205	221	-----	-----	-----
Unfilled orders, end of mo.....rel. to 1922-24..	223	268	238	693	700	697	428	441	504	-----	-----	-----
Electric hoists:												
New orders—												
Quantity.....number..	238	212	214	437	423	461	402	447	405	3,073	5,352	4,248
Value.....dollars..	100,456	114,119	101,818	264,888	230,543	231,372	180,365	228,510	209,594	1,546,304	2,659,605	2,000,410
Shipments.....dollars..	121,698	104,856	97,811	339,881	281,439	233,215	193,248	172,986	202,829	1,726,368	2,572,193	1,836,257
Electric overhead cranes:												
Shipments.....thous. of dolls..	729	942	677	1,060	1,048	1,322	564	464	809	8,823	9,748	5,802
New orders.....thous. of dolls..	522	614	353	1,165	701	1,142	821	713	775	6,398	12,480	6,314
Unfilled orders, end of mo.....thous. of dolls..	2,527	2,124	1,948	5,193	4,879	4,699	-----	2,188	2,165	-----	-----	-----
Woodworking machinery:												
New orders.....thous. of dolls..	498	648	605	1,748	1,297	1,251	1,641	1,639	1,585	7,996	16,698	14,306
Cancellations.....thous. of dolls..	12	17	17	25	15	47	6	26	140	247	338	367
Unfilled orders, end of mo.....thous. of dolls..	470	588	636	2,130	1,829	1,461	2,058	2,265	2,035	-----	-----	-----
Shipments.....thous. of dolls..	606	516	564	1,974	1,555	1,568	1,436	1,413	1,666	8,360	16,874	13,361
Shipments.....number of machines..	694	488	441	1,386	1,129	1,246	1,170	1,050	1,170	6,170	11,882	10,060
Electric industrial trucks and tractors:												
Shipments, domestic.....number of vehicles..	81	75	90	144	151	134	90	113	114	972	1,625	1,059
Exports.....number of vehicles..	11	6	3	10	7	33	6	5	20	123	125	122
Fire-extinguishing equipment, shipments:												
Motor vehicles.....number..	118	86	96	116	122	118	125	143	139	971	1,108	1,089
Hand types.....number..	34,958	37,482	36,303	63,648	51,193	48,835	47,490	42,193	49,128	447,724	540,419	473,767
Oil burners:												
Shipments, total.....number of burners..	8,088	12,025	14,064	10,663	13,723	15,037	-----	-----	-----	66,215	69,753	-----
Stocks, end of mo.....number of burners..	8,993	7,606	5,939	8,403	7,900	7,480	-----	-----	-----	-----	-----	-----
New orders.....number of burners..	8,062	11,413	13,985	11,081	12,633	13,346	-----	-----	-----	66,574	71,220	-----
Unfilled orders, end of mo.....number of burners..	1,969	1,357	1,278	5,099	4,009	2,318	-----	-----	-----	-----	-----	-----
Pulverized fuel equipment:												
New orders, central system—												
Furnaces and kilns.....no. of pulverizers..	1	2	None.	-----	-----	-----	-----	-----	-----	-----	-----	-----
New orders, unit system—												
Water-tube boilers.....no. of pulverizers..	4	24	10	-----	-----	-----	-----	-----	-----	223	-----	-----
Fire-tube boilers.....no. of pulverizers..	3	6	None.	-----	-----	-----	-----	-----	-----	-----	-----	-----
Marine boilers.....no. of pulverizers..	None.	2	None.	-----	-----	-----	-----	-----	-----	-----	-----	-----
Furnaces and kilns.....no. of pulverizers..	3	3	2	-----	-----	-----	-----	-----	-----	32	-----	-----

**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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>IRON AND STEEL—Continued</b>												
<b>Machinery—Continued</b>												
Patents issued:												
Total, all classes..... number	2,423	2,871	2,871	3,533	3,081	4,462	3,390	3,039	4,323	37,968	37,168	35,572
Agricultural implements..... number	27	43	41	51	51	63	29	40	59	514	523	423
Internal-combustion engines..... number	30	35	49	55	44	86	43	42	67	622	569	523
<b>NONFERROUS METALS</b>												
<b>Copper</b>												
Production:												
Mines..... short tons	56,136	56,584	55,804	78,885	79,402	82,575	76,952	78,341	86,450	588,454	855,497	738,092
Smelter..... short tons	66,898	68,487	70,419	91,735	92,538	97,405	88,517	85,795	100,720	782,369	994,619	853,571
Refined (N. and S. America)..... short tons	120,778	116,004	118,229	148,648	134,343	152,840	143,560	137,018	149,199	1,240,358	1,528,278	1,324,496
World production, blister..... short tons	149,843	152,405	152,544	173,430	174,135	175,360	161,838	157,518	176,623	1,483,844	1,800,692	1,553,418
Domestic shipments, refined..... short tons	56,810	65,169	75,703	96,970	98,043	105,729	83,398	88,707	100,371	676,237	992,280	798,749
Exports..... short tons	33,141	30,478	30,715	36,811	42,978	44,502	41,186	36,191	45,168	295,966	427,579	466,381
Stocks (North and South America), end mo.: Refined..... short tons	347,688	360,650	364,930	104,372	94,751	88,401	54,793	51,812	45,648			
Blister..... short tons	234,135	236,464	240,145	241,678	253,519	254,786	238,923	239,142	241,732			
Wholesale price, electrolytic.....dolls. per lb.	.1069	.1031	.0960	.1778	.1778	.1773	.1453	.1472	.1520			
<b>Tin</b>												
Deliveries (consumption)..... long tons	5,695	7,250	7,580	7,185	8,120	6,515	7,200	6,885	6,475	64,460	76,775	64,565
Stocks, end of month: World visible supply..... long tons	43,805	40,150	39,676	26,400	24,556	25,580	18,456	19,024	20,907			
United States..... long tons	7,533	25,178	4,823	2,858	2,479	2,720	1,718	3,508	4,598			
Imports..... long tons	5,979	6,523	5,929	7,504	7,712	6,201	6,584	8,222	8,048	67,649	76,056	66,499
Wholesale price, pig tin.....dolls. per lb.	.3002	.2964	.2886	.4665	.4538	.4235	.4808	.4807	.4901			
<b>Zinc</b>												
Retorts in operation, end of mo. .... number	50,404	44,974	41,004	50,408	69,468	67,636	66,428	61,965	59,832			
Production..... short tons	41,029	40,485	40,940	55,708	51,994	54,513	52,157	49,361	50,259	439,800	535,114	518,744
Stocks, end of month..... short tons	122,635	132,947	141,232	49,064	53,856	59,592	44,416	47,915	46,068			
Ore, Joplin district: Shipments..... short tons	37,994	32,122	33,474	63,127	45,084	48,810	43,466	41,429	41,165	374,788	530,748	468,828
Stocks, mines, end of mo. .... short tons	38,565	41,663	45,689	42,876	43,832	44,622	39,303	48,474	53,209			
Price, slab, prime western.....dolls. per lb.	.0436	.0427	.0406	.0680	.0680	.0674	.0625	.0625	.0625			
<b>Lead</b>												
Ore shipments: Joplin district..... short tons	3,673	2,746		7,808	7,461	7,588	6,125	9,326	10,514	38,969	85,115	79,207
Utah..... short tons	60,978	52,907	63,584	92,668	73,927	77,693	78,811	65,353	71,887	644,333	805,454	694,884
Receipts in U. S. ore..... short tons	45,542	48,854	46,237	54,365	54,623	58,364	53,575	51,978	55,610	485,488	553,380	528,724
Price, pig, desilverized, N. Y. ....dolls. per lb.	.0549	.0550	.0515	.0675	.0689	.0687	.0625	.0645	.0650			
<b>Other Metal Products</b>												
Babbitt metal, consumption: Total apparent..... thous. of lbs.	2,737	2,765	2,989	5,433	5,225	5,519	4,756	5,308	5,796	35,789	57,270	49,061
Direct by producers..... thous. of lbs.	954	1,035	1,027	1,435	1,337	1,512	939	999	1,191	9,932	12,711	10,227
Sale to consumers..... thous. of lbs.	1,783	1,730	1,962	3,997	3,888	4,007	3,817	4,309	4,605	25,857	44,559	38,833
Copper-wire cloth: Production..... thous. of sq. ft.	387	384	385	498	373	422	430	403	466	4,048	4,577	4,378
Shipments..... thous. of sq. ft.	353	317	356	434	394	417	387	423	442	3,705	4,225	4,123
Stocks, end of month..... thous. of sq. ft.	1,117	1,173	1,160	978	928	933	1,120	1,099	1,068			
New orders..... thous. of sq. ft.	336	299	363	302	333	454	408	412	419	3,767	4,145	3,878
Unfiled orders, end of month..... thous. of sq. ft.	264	241	199	211	242	257	285	320	266			
Make and hold orders, end of month..... thous. of sq. ft.	516	533	606	480	435	499	457	453	459			
Pails and tubs, galvanized: Production..... dozens	103,050	103,177	130,906	107,004	113,698	129,282	127,797	150,845	153,813	1,164,159	1,409,449	1,550,910
Shipments..... dozens	103,354	116,875	115,155	108,461	120,297	135,197	142,487	139,183	152,250	1,170,700	1,448,855	1,557,309
Other galvanized ware: Production..... dozens	46,730	38,218	40,084	53,250	46,594	45,117	37,846	55,850	56,469	403,263	475,147	445,833
Shipments..... dozens	43,827	46,310	41,126	54,860	52,970	49,511	44,377	50,606	54,596	384,897	460,795	423,842
Enameled sheet-metal ware: Shipments..... dozen pieces	309,645	297,022	329,337	385,162	338,169	371,292	358,811	352,484	417,387	3,012,366	3,806,865	3,540,547
<b>Electrical Equipment</b>												
Electrical porcelain, shipments: Standard..... dollars	69,656	65,581	73,659	97,631	135,487	123,222	111,803	112,210	128,255	792,756	1,165,805	846,889
Special..... dollars	111,029	99,576	131,815	165,385	171,668	176,323	129,813	129,587	148,999	1,213,730	1,620,443	1,278,983
Glazed nail knobs..... thous. of pieces	2,218	2,453	2,044	2,794	4,146	4,404	4,328	4,213	5,257	27,945	43,217	31,954
Unglazed nail knobs..... thous. of pieces	1,605	1,222	1,615	1,968	2,250	1,605	2,401	2,796	3,042	16,101	23,492	17,705
Tubes..... thous. of pieces	1,146	334	1,156	1,870	1,729	1,645	2,542	2,694	2,867	10,763	18,449	17,736
Laminated phenolic products, shipments..... dollars	788,671	853,978	1,022,660	1,915,381	1,514,902	1,644,570	1,356,179	1,243,476	1,365,690	8,643,519	15,070,101	10,080,800
Motors (direct current): New orders..... dollars	719,846	820,444	393,674	1,082,845	916,794	1,214,044	920,083	957,093	926,133	7,842,731	9,928,769	8,267,603
Billings (shipments)..... dollars	708,095	596,670	621,114	853,961	806,813	1,089,590	894,690	781,472	950,707	7,283,621	8,657,605	7,752,357
Power switching equipment, new orders: Indoor..... dollars	121,930	118,431	84,160	169,384	181,078	175,077	148,156	118,301	108,478	1,403,323	1,760,141	1,390,636
Outdoor..... dollars	319,668	298,354	342,771	605,273	400,343	503,226	413,435	281,502	313,285	3,979,394	4,706,297	3,796,602
Outlet boxes and covers, shipments..... pieces	1,490,756	2,179,259	1,677,038	2,719,688	2,542,931	2,850,984	3,049,567	2,915,560	3,123,321	18,615,645	26,883,610	27,939,148
Vulcanized fiber: Shipments, total..... thous. of dolls.	430	447	465	1,029	883	942	591	568	649	5,422	8,539	6,288
Consumption..... thous. of lbs.	1,828	1,945	1,824	3,803	3,411	4,013	2,805	2,362	2,971	22,255	34,534	27,396
Industrial reflectors, sales..... units	127,608	125,786	113,316	157,473	131,720	179,068	122,124	126,151	156,243	1,198,797	1,424,892	1,248,038
Welding sets, new orders: Single operator..... units	221	194	200	296	341	302	228	234	297	2,372	3,327	2,321
Multiple operator..... units	8	9	34	7	9	7	8	7	58	89	74	183
Panel boards and cabinets, shipments (qty.)..... dollars		1,396		1,650				1,357		3,900	4,130	3,479
Nonmetallic conduits, shipments..... thous. of ft.	3,397	4,235	4,067	6,364	6,954	8,015	6,960	7,376	8,804	49,965	69,328	77,067
Electric furnaces, new orders..... kilowatts	5,012	2,866	3,317	5,114	4,105	7,208	6,493	4,226	4,719	64,544	80,779	48,852

Revised.

Quarter ended in month indicated.

Cumulative through Sept. 30.

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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>NONFERROUS METALS—Contd.</b>												
<b>Electrical Equipment—Continued</b>												
Manufactured mica:												
Shipments.....thous. of dolls.	122	141	150	273	263	274	283	247	302	1,799	2,821	
Unfilled orders, end of mo.....thous. of dolls.	109	107	104	275	235	206	290	285	326			
Delinquent accounts, electrical trade:												
Amount.....dollars.	127,006	93,898	122,150	174,436	128,059	167,089	165,138	140,637	162,564			
Delinquent firms.....number.	1,155	939	1,101	1,176	1,117	1,392	1,367	1,220	1,245			
<b>AUTOMOBILES</b>												
Production:												
United States—												
Total.....number of cars.	6 223,036	6 216,877	150,044	498,628	415,912	380,017	461,298	415,314	397,284	3,071,869	5,020,840	3,867,503
Passenger cars.....number of cars.	187,037	6 175,311	112,209	440,780	363,471	318,462	398,253	357,428	338,224	2,592,022	4,310,954	3,390,345
Taxicabs.....number of cars.	251	409	591	1,040	865	1,646	469	276	659	6,013	14,460	4,977
Trucks.....number of cars.	6 35,748	641,157	7,244	56,808	51,576	60,687	62,576	57,610	58,401	473,834	695,426	472,181
Canada—												
Total.....number of cars.	9,792	7,957	4,541	14,214	13,817	14,523	31,245	21,193	18,536	143,163	248,376	221,188
Passenger cars.....number of cars.	6,946	5,623	3,206	11,037	10,710	8,975	24,274	16,572	13,016	117,690	195,935	181,853
Trucks.....number of cars.	2,846	2,334	1,335	3,177	3,107	5,548	6,971	4,621	5,520	25,473	52,441	39,335
Exports (assembled):												
From United States—												
Total.....number of cars.	13,274	13,437	11,215	42,829	33,919	32,443	49,007	30,559	46,524	211,754	486,647	431,098
Passenger cars.....number of cars.	7,956	8,125	7,136	22,123	20,934	20,931	32,815	22,494	29,951	137,953	312,683	318,444
Trucks.....number of cars.	5,318	5,312	4,079	20,706	12,985	11,512	16,192	8,065	16,573	73,801	173,964	112,654
From Canada—												
Total.....number of cars.	3,922	6,641	2,868	7,629	6,641	9,637	11,011	8,670	9,705	40,416	90,940	64,319
Passenger cars.....number of cars.	2,552	4,293	2,003	4,901	4,293	5,635	7,985	6,279	6,696	26,838	58,326	46,556
Trucks.....number of cars.	1,370	2,348	865	2,728	2,348	4,002	3,026	2,391	3,009	13,578	32,614	17,763
Sales (General Motors Co.):												
Total to dealers, incl. Canadian and overseas.....number of cars.												
	85,610	78,792	28,253	168,185	146,483	122,104	186,653	167,460	120,876	1,036,850	1,798,068	1,727,778
To consumers, U. S.....number of cars.												
	86,426	75,805	57,757	151,722	124,723	114,408				957,964	1,385,683	
To dealers, U. S.....number of cars.												
	76,140	69,901	22,924	147,351	127,220	98,559				919,253	1,459,625	
Accessories and parts, shipments:												
Original equipment.....rel. to Jan., 1925.												
	87	79	75	193	186	160	230	218	200			
Replacement parts.....rel. to Jan., 1925.												
	132	134	140	169	173	166	176	185	184			
Accessories.....rel. to Jan., 1925.												
	60	76	79	88	84	91	147	122	91			
Service parts.....rel. to Jan., 1925.												
	104	105	99	170	147	147	148	140	141			
Rim production.....thous. of rims.												
	1,504	1,052	864	1,570	2,110	6 1,650	2,319	2,316	2,115	15,873	21,429	21,930
New passenger-car registration:												
Total.....number of cars.	203,737	175,286	150,219	376,886	304,452	6 288,697	329,674	271,821	284,939	2,436,939	3,557,895	2,766,960
Automobile financing:												
Wholesale, dealers.....thous. of dolls.												
	6 45,382	45,384		69,959	59,992					560,137	547,213	
Total, consumers.....thous. of dolls.												
	6 102,210	90,320		163,763	138,507	124,767	120,556	101,564	103,276	1,013,610	1,322,221	919,677
New cars.....thous. of dolls.												
	6 62,851	53,346		110,894	93,579	79,967	78,107	64,277	64,545	642,751	896,973	597,188
Used cars.....thous. of dolls.												
	6 36,922	34,960		46,437	39,193	40,610	29,604	25,896	27,649	342,921	367,142	226,552
Unclassified.....thous. of dolls.												
	6 2,437	2,014		6,432	3,730	4,190	12,844	11,391	11,082	27,938	58,106	95,936
<b>FUELS</b>												
<b>Coal and Coke</b>												
Bituminous:												
Production—												
United States.....thous. of short tons.												
	35,661	38,632	44,150	44,695	45,334	6 52,174	41,774	41,971	51,176	383,792	441,429	409,874
Canada.....thous. of short tons.												
	1,101	1,230	1,630	1,344	1,379	1,560	1,552	1,412	1,739	12,117	4,220	14,313
Exports.....thous. of long tons.												
	1,433	1,462	1,317	1,440	1,631	1,596	1,606	1,578	1,497	12,052	12,977	11,721
Consumption—												
By vessels.....thous. of long tons.												
	261	269	230	339	347	343	356	313	333	2,714	3,228	3,199
By electric-power plants.....thous. of short tons.												
	3,658	6 3,723	3,934	3,929	3,903	4,061	3,438	3,418	3,826	35,385	37,119	29,916
By railroads.....thous. of short tons.												
	6,408	6,349		7,504	6 7,583	8,444	7,409	7,635	8,444	61,359	69,416	68,314
By coke plants—												
United States												
.....thous. of short tons.	5,559	5,214	5,270	7,571	7,153	7,389	6,194	6,180	6,726	60,916	73,057	62,712
Canada.....thous. of short tons.	244	233	249	315	310	324	269	270	294	2,729	3,092	2,633
Stocks, end of month, held by consumers												
.....thous. of short tons.		35,900			37,500	39,800		41,100	42,400			
Prices—												
Mine aver. (spot).....dolls. per short ton.												
	1.68	1.75	1.80	1.77	1.83	1.90	1.74	1.81	1.83			
Wholesale, comp.....dolls. per short ton.												
	3.892	3.897	3.893	3.913	3.930	3.961	4.009	4.019	4.020			
Retail, composite.....dolls. per short ton.												
	8.70	8.79	8.88	8.69	8.87	8.98	8.74	8.84	8.96			
Anthracite:												
Production.....thous. of short tons.												
	6,190	5,293	7,576	5,735	6,543	6 8,026	6,759	5,927	8,400	58,509	60,631	61,912
Exports.....thous. of long tons.												
	205	198	253	222	323	396	278	263	405	1,920	2,460	2,414
Stocks, end of mo. in yards of dealers.....no. of days.												
		61			55	48		87	53			
Prices—												
Wholesale, comp.....dolls. per long ton.												
	12.578	12.707	12.740	12.848	12.924	12.999	12.853	13.040	13.040			
Retail, composite.....dolls. per short ton.												
	14.57	14.80	14.87	14.67	14.87	14.98	14.76	14.93	14.98			
Coke:												
Production, U. S.—												
Bechive.....thous. of short tons.												
	170	168	178	604	543	506	297	322	431	2,417	5,656	3,658
By-product.....thous. of short tons.												
	3,637	3,401	3,432	4,637	4,408	4,605	4,004	3,967	4,229	39,300	44,921	39,844
Production, Canada												
.....thous. of short tons.	182	170	185	227	220	233	191	194	210	1,988	2,228	1,890
Exports.....thous. of long tons.												
	64	66	83	86	98	126	70	78	100	759	896	762
Price, furnace, Connellsville.....dolls. per short ton.												
	2.55	2.60	2.60	2.76	2.70	2.70	2.88	2.88	2.91			

6 Revised.

8 Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>FUELS—Continued</b>												
<b>Petroleum</b>												
Crude petroleum:												
Production.....thous. of bbls.	74,853	70,977	72,696	92,165	87,453	88,430	77,807	76,474	79,751	760,397	847,648	745,848
Stocks at end of month—												
Total (comparable).....thous. of bbls.	375,140	370,089	369,062	386,214	386,365	384,511	368,707	366,720	367,949			
Tank farms and pipe lines.....thous. of bbls.	328,355	324,644	323,030	339,050	340,844	339,333	326,290	326,123	328,143			
Refineries.....thous. of bbls.	46,785	45,445	46,032	47,164	45,521	45,178	42,417	40,597	39,806			
California—												
Light.....thous. of bbls.	40,671	40,582	40,738	37,853	40,627	42,676	18,310	16,870	16,684			
Heavy.....thous. of bbls.	103,701	103,647	102,643	108,445	110,132	111,685	95,057	96,563	97,025			
Imports.....thous. of bbls.	5,059	5,808	5,061	5,800	6,953	5,766	6,141	7,139	6,703	52,935	68,493	66,052
Consumption (run to stills).....thous. of bbls.	79,289	75,950	74,016	86,733	84,099	88,390	81,581	79,894	79,663	785,557	825,984	756,626
Refinery operations.....per ct. of capacity	70	69	65	81	80	79	83	84	82			
Price, Kansas-Oklahoma.....dolls. per bbl.	1.178	1.178	1.098	1.360	1.300	1.300	1.210	1.210	1.210			
Oil wells completed.....number	692	782	896	1,669	1,438	1,556	1,233	1,185	1,206	10,391	13,105	10,269
Mexico—												
Production.....thous. of bbls.	3,449	3,243	3,243	4,091	3,986	3,085	4,047	3,716	3,904	30,567	32,941	38,768
Exports.....thous. of bbls.	2,630	2,419	2,419	2,511	2,586	2,395	2,212	2,244	2,731	20,468	20,886	26,884
Venezuela—												
Production.....thous. of bbls.	11,378	11,311	11,785	11,394	11,338	11,591	9,031	9,478	10,520	113,438	113,147	84,538
Exports.....thous. of bbls.	12,182	11,674	12,208	10,897	10,146	10,718	8,933	8,615	9,283	112,810	101,444	80,947
Gasoline:												
Production—												
Raw (at refineries).....thous. of bbls.	37,844	36,944	37,400	38,968	37,605	40,246	33,937	33,670	34,415	373,566	363,959	309,946
Natural gas (at plants).....thous. of bbls.	4,212	4,079	4,326	4,507	4,574	4,912	3,438	3,488	3,931	43,296	43,410	34,828
Exports.....thous. of bbls.	6,375	3,826	6,131	5,509	4,244	5,896	4,452	4,648	3,919	55,145	49,970	43,422
Consumption.....thous. of bbls.	37,433	37,823	32,267	37,981	34,680	33,238	33,173	29,766	30,696	336,000	317,234	275,972
Stocks, end of month—												
Raw (at refineries).....thous. of bbls.	41,624	38,254	38,684	33,795	33,181	35,116	27,075	26,378	26,440			
Natural gas (at plants).....thous. of bbls.	744	534	559	893	661	490	414	436	402			
Retail distribution, 41 States.....thous. of gals.	1,109,954	1,058,206	1,058,206	1,158,378	1,039,475	1,014,027	983,898	919,055	893,735	8,640,652	8,243,015	7,312,974
Prices—												
Wholesale, New York.....dolls. per gal.	.163	.148	.143	.188	.166	.165	.180	.180	.180			
Retail, wagon, 50 cities.....dolls. per gal.	.147	.146	.143	.157	.160	.158	.160	.163	.163			
Kerosene:												
Production.....thous. of bbls.	3,975	3,846	3,876	4,908	4,600	5,162	5,339	4,960	5,145	42,043	46,368	49,650
Exports.....thous. of bbls.	1,687	1,949	1,873	2,034	1,101	2,237	1,653	2,068	1,749	14,423	16,838	18,536
Consumption.....thous. of bbls.	2,373	2,768	2,599	3,034	3,320	2,974	3,246	3,164	3,405	28,937	29,986	30,207
Stocks at refineries, end of month.....thous. of bbls.	8,030	7,771	7,633	8,394	8,569	8,515	8,887	8,593	8,633			
Price, 150° water white.....dolls. per gal.	.050	.053	.054	.068	.070	.072	.086	.086	.082			
Gas and fuel oils:												
Production.....thous. of bbls.	29,862	29,923	20,818	39,189	37,546	39,048	37,517	37,104	37,029	314,424	376,464	353,873
Consumption—												
By vessels.....thous. of bbls.	4,702	4,333	4,463	4,734	4,424	4,540	4,564	4,053	4,558	43,111	44,068	42,803
By electric power plants.....thous. of bbls.	6751	6835	877	820	1,079	1,083	614	612	619	7,423	8,181	5,680
By railroads.....thous. of bbls.	3,817	3,841	3,841	4,322	4,381	4,961	4,087	4,363	4,877	36,370	39,031	36,508
Stocks at refineries, end of month.....thous. of bbls.	39,729	41,480	41,293	39,316	40,646	38,717	39,236	39,900	39,599			
Price, Okla. 24-26, refineries.....dolls. per bbl.	.600	.580	.594	.744	.775	.838	.650	.650	.650			
Lubricating oil:												
Production.....thous. of bbls.	2,971	2,723	2,546	3,143	2,852	2,885	2,891	2,833	2,979	29,283	29,039	28,918
Consumption.....thous. of bbls.	1,940	1,944	1,569	2,248	2,053	1,739	2,035	1,995	2,122	18,557	20,034	19,475
Stocks at refineries, end of month.....thous. of bbls.	10,161	10,257	10,502	7,478	7,589	8,021	7,711	7,742	7,830			
Price, cylinder oil.....dolls. per gal.	.193	.190	.186	.238	.269	.365	.229	.236	.240			
Asphalt:												
Production.....thous. of short tons.	346	306	306	379	365	356	316	306	320	2,821	3,035	2,884
Stocks, end of month.....thous. of short tons.	316	270	267	247	231	227	247	203	210			
Imports.....thous. of short tons.	3	5	7	20	13	17	14	5	12	47	102	96
Coke:												
Production.....thous. of short tons.	172	170	177	169	161	172	136	119	125	1,611	1,495	1,162
Stocks, end of month.....thous. of short tons.	994	1,045	1,045	672	711	733	402	402	404			
Wax:												
Production.....thous. of lbs.	39,760	43,960	38,080	53,377	44,513	56,377	54,429	50,428	54,546	475,720	530,195	518,794
Stocks, end of month.....thous. of lbs.	254,980	248,940	240,060	194,649	187,319	190,727	79,622	85,417	92,814			
<b>RUBBER</b>												
<b>Crude Rubber</b>												
World shipments, plantation.....long tons.	73,509	74,941	74,941	70,532	77,997	73,853	58,345	48,338	43,748	621,149	646,505	624,044
Imports (including latex).....long tons.	36,657	35,783	46,375	37,851	34,814	38,454	31,204	39,838	44,072	419,419	476,683	356,513
Consumption by tire mfrs.....thous. of lbs.	40,736	33,382	36,097	45,459	39,981	41,775	62,224	55,351	58,302	424,966	541,081	510,000
World stocks, end of month:												
World total.....long tons.	400,796	427,089	427,089	261,721	277,151	282,840	193,896	188,355	170,884			
United States.....long tons.	162,283	171,285	188,310	92,686	90,729	91,806	61,813	58,725	59,529			
Europe.....long tons.	112,798	120,389	120,389	45,016	54,417	63,929	35,755	35,243	27,966			
Producing countries.....long tons.	42,910	37,714	36,802	36,802	37,753	37,905	21,828	17,687	15,489			
A float.....long tons.	82,805	97,701	97,701	87,217	94,252	89,200	74,500	76,700	67,900			
Wholesale price, smoked sheets, New York.....dolls. per pound.	.099	.084	.083	.206	.202	.196	.193	.182	.187			

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8 Cumulative through Sept. 30.

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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>RUBBER—Continued</b>												
<b>Tires and Tubes</b>												
Pneumatic casings:												
Production..... thousands.....	3,332	2,692	2,866	4,354	3,568	3,689	5,607	5,101	5,495	36,398	49,832	49,779
Stocks, end of month..... thousands.....	8,678	7,849	7,842	10,669	9,656	9,633	7,539	7,324	8,640			
Shipments—												
Domestic..... thousands.....	3,976	3,360	2,613	5,667	4,330	3,520	6,131	5,191	4,096	36,159	48,230	47,041
Export..... thousands.....	164	165	186	217	168	199	179	168	191	1,798	2,025	1,571
Inner tubes:												
Production..... thousands.....	3,837	3,053	3,161	4,385	4,152	4,000	6,264	5,327	5,197	37,343	49,441	52,089
Stocks, end of month..... thousands.....	8,589	8,052	8,414	10,618	10,068	10,242	10,466	10,158	11,464			
Shipments—												
Domestic..... thousands.....	4,492	3,525	2,659	6,028	4,562	3,629	6,886	5,245	4,138	37,865	49,668	49,490
Export..... thousands.....	118	108	119	109	125	122	132	121	108	1,126	1,298	1,004
Solid and cushion:												
Production..... thousands.....	16	14	18	32	28	35	52	43	47	178	351	446
Stocks, end of month..... thousands.....	90	82	78	118	111	111	149	151	153			
Shipments—												
Domestic..... thousands.....	22	22	19	40	34	34	49	42	43	207	364	416
Exports..... thousands.....	1	1	1	3	2	2	5	2	3	15	24	37
<b>Other Rubber Products</b>												
Rubber-proofed fabrics, production:												
Total..... thous. of yds.....	3,458	5,046	5,209	5,085	5,507	6,118	4,613	4,966	5,914	37,950	44,047	34,948
Auto fabrics..... thous. of yds.....	678	733	915	1,349	1,120	778	764	780	609	8,970	9,845	7,823
All other..... thous. of yds.....	975	1,064	1,254	1,317	1,324	1,720	1,251	1,007	1,296	10,716	13,175	8,924
Raincoat fabrics..... thous. of yds.....	1,805	3,249	3,040	2,419	3,063	3,618	2,598	3,179	4,009	18,264	21,025	18,201
Rubber heels:												
Production..... thous. of pairs.....	13,735	14,322	16,460	23,095	21,702	22,386	21,289	21,451	21,932	153,875	199,482	200,673
Shipments—												
To shoe manufac- turers..... thous. of pairs.....	8,813	9,244	9,354	14,942	13,645	13,746	11,642	9,207	9,813	94,283	123,821	101,105
To repair trade..... thous. of pairs.....	6,822	6,681	8,291	8,025	7,859	7,904	9,244	9,199	9,580	60,501	74,052	80,624
For export..... thous. of pairs.....	780	1,083	966	1,098	1,054	920	729	875	1,262	9,504	10,628	8,979
Stocks, end of month..... thous. of pairs.....	33,226	31,601	29,353	43,960	42,958	42,109	49,511	49,751	50,111			
Rubber soles:												
Production..... thous. of pairs.....	1,473	2,193	3,056	2,948	2,841	3,502	3,461	2,725	2,297	25,067	28,096	32,225
Shipments—												
To shoe manufac- turers..... thous. of pairs.....	1,161	1,691	2,638	2,548	2,185	2,691	2,209	1,703	1,655	21,417	22,322	18,842
To repair trade..... thous. of pairs.....	317	333	492	517	618	647	917	893	958	3,817	6,046	9,300
For export..... thous. of pairs.....	74	74	82	78	47	90	46	29	328	598	571	2,246
Stocks, end of month..... thous. of pairs.....	2,289	2,729	2,520	3,319	3,316	3,443	5,633	5,501	5,212			
Mechanical rubber goods, shipments:												
Total..... thous. of dolls.....	4,552	4,083	4,186	6,792	5,906	5,887	6,306	5,393	5,837	51,727	65,087	58,632
Belting..... thous. of dolls.....	1,248	1,045	954	1,940	1,490	1,477	1,888	1,412	1,387	12,278	15,895	14,477
Hose..... thous. of dolls.....	1,682	1,473	1,554	2,196	1,964	2,135	2,068	1,731	2,026	20,784	24,063	21,798
All other..... thous. of dolls.....	1,622	1,565	1,678	2,656	2,452	2,274	2,360	2,250	2,424	18,663	25,129	22,376
Rubber bands, shipments..... thous. of lbs.....	164	172	197	196	189	216	193	186	216	1,996	2,163	1,935
Rubber flooring, shipments..... thous. of sq. ft.....	559	529	682	598	630	543	583	754	559	5,618	5,644	5,819
Calendered rubber clothing:												
Production..... no. coats and sundries.....	44,952	37,097	41,291	96,281	93,444	99,588	74,509	92,588	106,005	590,264	854,308	1,018,344
Net orders..... no. coats and sundries.....	26,348	39,364	25,082	37,906	49,940	76,194	64,695	108,156	75,482	510,010	599,557	709,038
<b>HIDES AND LEATHER</b>												
<b>Hides</b>												
Imports:												
Total hides and skins..... thous. of lbs.....	26,681	27,598	21,512	47,956	51,903	48,489	47,056	34,448	35,982	361,331	422,576	450,802
Calfskins..... thous. of lbs.....	1,403	2,835	3,264	4,900	3,178	4,886	4,053	2,707	4,310	28,516	39,655	38,351
Cattle hides..... thous. of lbs.....	11,889	12,743	6,898	28,132	28,264	26,540	18,604	17,883	17,561	173,561	211,331	252,260
Goatskins..... thous. of lbs.....	8,075	6,807	7,268	7,692	8,893	6,434	7,951	6,728	7,993	82,204	83,960	78,455
Sheepskins..... thous. of lbs.....	4,460	3,289	2,821	4,405	7,836	5,091	6,773	4,902	3,785	49,044	56,949	54,632
Stocks, end of month:												
Total hides and skins..... thous. of lbs.....	276,225	279,472	288,617	253,415	253,680	259,050	243,591	249,272	253,921			
Cattle hides..... thous. of lbs.....	212,980	218,446	227,099	202,564	203,304	208,910	197,086	203,227	209,902			
Calf and kip skins..... thous. of lbs.....	27,166	25,536	26,972	28,141	27,071	27,596	25,758	24,059	23,118			
Sheep and lamb skins..... thous. of lbs.....	36,079	35,490	34,546	22,710	23,305	22,544	20,747	21,986	20,901			
Prices:												
Green salted, packers' heavy native steers..... dolls. per lb.....	.136	.146	.133	.188	.196	.186	.236	.246	.219			
Calfskins country, No. 1..... dolls. per lb.....	.161	.165	.172	.198	.204	.197	.275	.275	.246			
Inspected slaughter of livestock:												
United States—												
Cattle..... thous. of animals.....	700	760	836	726	753	839	717	764	801	6,874	6,935	7,038
Calves..... thous. of animals.....	363	374	438	388	365	398	369	352	405	3,873	3,834	3,961
Swine..... thous. of animals.....	2,724	2,773	3,492	3,130	3,104	3,857	2,545	2,508	3,713	35,595	38,864	39,486
Sheep..... thous. of animals.....	1,413	1,591	1,727	1,298	1,317	1,365	1,196	1,307	1,409	13,964	11,773	11,245
Canada—												
Cattle and calves ..... thous. of animals.....	75	84	97	99	98	120	105	96	111	825	932	938
Swine..... thous. of animals.....	124	140	160	160	142	207	140	161	200	1,589	1,896	2,077
Sheep..... thous. of animals.....	79	114	185	77	93	178	62	86	142	595	541	454
<b>Leather</b>												
Sole and belting leather:												
Production—												
Sole only ..... thous. of backs, bends, sides.....	1,316	1,330	1,333	1,300	1,178	1,302	1,463	1,324	1,447	13,216	12,055	13,660
Sole and belting..... thous. of lbs.....	23,223	23,137	23,418	25,501	23,460	25,665	25,701	23,510	25,711	239,970	236,959	246,613
Stocks, end of month—												
In process of tanning..... thous. of lbs.....	84,367	80,895	78,815	80,587	81,674	82,679	89,508	85,990	83,388			
Finished..... thous. of lbs.....	80,018	81,569	84,036	66,276	61,974	60,044	72,439	72,243	75,188			
Exports..... thous. of sq. ft.....	374	673	691	782	539	583	996	733	825	6,112	8,842	8,346
Price oak, scoured backs..... dolls. per lb.....	.46	.44	.41	.52	.54	.53	.67	.65	.63			

## 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 OCTOBER 31.		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>HIDES AND LEATHER—Continued</b>												
<b>Leather—Continued</b>												
Upper leather:												
Production.....thous. of sq. ft..	61,477	63,304	65,339	82,954	70,054	80,473	73,150	66,380	72,092	636,919	695,544	684,906
Stocks, end of month—												
In process of tanning												
.....thous. of sq. ft..	143,063	141,495	137,513	147,678	147,478	147,328	147,602	146,010	143,265			
Finished.....thous. of sq. ft..	254,020	255,787	270,902	216,406	209,520	217,384	253,854	247,386	251,350			
Exports.....thous. of lbs.	8,367	8,813	9,838	7,736	8,264	9,007	9,000	9,093	11,174	90,693	96,144	114,261
Chrome, calf, black "B" grade, composite price, 6 centers.doll.per sq. ft.	.371	.372	.372	.393	.393	.388						
<b>Leather Products</b>												
Shoes:												
Production.....thous. of pairs..	28,429	29,334	27,353	36,445	34,831	37,191	34,974	31,000	33,393	267,711	311,204	296,000
Exports.....thous. of pairs..	263	256	268	291	321	426	331	275	340	2,549	3,645	3,573
Wholesale prices—												
Men's black calf												
blucher, Boston..doll. 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.....doll. 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.....doll. per pair..	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25			
Gloves, cut.....dozen pairs..	241,146	219,548	236,911	292,545	285,094	318,041	237,043	213,945	236,907	2,446,412	2,637,961	2,149,070
<b>PAPER AND PRINTING</b>												
<b>Wood Pulp</b>												
Ground wood:												
Production.....short tons..	97,895	92,872	96,465	111,878	102,202	122,923	114,668	108,166	131,558	1,297,359	1,354,864	1,325,014
Consumption and shipments.....short tons..	116,886	109,860	121,335	145,432	133,514	146,600	138,309	122,771	146,383	1,275,990	1,396,764	1,366,136
Stocks, end of month.....short tons..	124,063	107,075	82,205	137,982	106,669	88,762	147,611	133,006	118,182	1,188,284	1,209,106	1,204,081
Imports.....short tons..	21,261	29,502	31,305	24,731	20,660	27,020	17,233	21,953	23,884	250,711	209,106	204,081
Sulphite, unbleached:												
Production.....short tons..	19,608	18,888	22,218	20,116	19,734	21,662	20,904	20,034	20,982	206,120	201,528	203,560
Consumption and shipments.....short tons..	19,122	18,938	22,424	20,090	19,314	21,218	20,882	19,736	21,084	204,996	201,776	202,594
Stocks, end of month.....short tons..	5,792	5,742	5,536	2,600	3,020	3,464	4,242	4,540	4,438	604,135	649,196	581,559
Imports.....short tons..	60,198	52,426	52,286	70,654	61,534	68,974	57,913	57,847	74,610			
Sulphite:												
Bleached—												
Production.....short tons..	48,340	49,830	47,264	53,028	49,512	57,626	50,880	45,408	53,594	511,698	522,692	498,182
Consump. and ship.....short tons..	48,094	49,050	47,650	53,634	48,928	57,248	49,854	46,018	54,772	509,042	522,134	498,846
Stocks, end of month.....short tons..	8,596	9,376	8,990	5,174	5,758	6,136	6,600	5,990	4,812	300,966	310,726	280,124
Imports.....short tons..	26,880	30,567	30,484	33,485	26,338	31,663	30,650	28,511	30,848			
Total sulphite—												
Production.....short tons..	131,382	129,242	139,790	153,250	142,530	163,442	151,776	135,950	154,866	1,415,114	1,500,946	1,455,986
Consump. and ship.....short tons..	131,454	128,936	141,492	152,912	144,272	162,132	151,806	137,346	156,878	1,411,834	1,505,598	1,461,158
Stocks, end of month.....short tons..	29,178	29,484	27,782	22,876	21,134	22,444	29,670	28,274	26,262			
Sulphate:												
Production.....short tons..	44,374	42,378	44,454	44,056	40,752	42,994	34,740	32,830	36,868	431,922	424,556	343,020
Consumption and shipments.....short tons..	41,970	38,990	41,446	43,184	41,586	44,122	35,088	33,896	38,878	411,394	428,066	348,254
Stocks, end of month.....short tons..	8,498	8,966	8,974	7,884	7,568	7,030	6,430	5,870	4,602			
Soda:												
Production.....short tons..	29,962	30,052	30,684	40,300	35,584	39,142	35,488	32,720	36,548	342,280	380,592	351,510
Consumption and shipments.....short tons..	28,868	28,638	28,954	39,108	33,984	38,470	34,018	32,964	35,864	321,096	369,872	349,406
Stocks, end of month.....short tons..	5,166	5,248	5,642	6,506	6,890	6,180	8,336	8,144	8,974			
Other grades:												
Production.....short tons..	188	128	168	156	116	124	112	146	152	1,492	788	1,116
Consumption and shipments.....short tons..	174	150	136	106	0	68	96	170	180	1,488	674	1,252
Stocks, end of month.....short tons..	38	16	48	88	204	260	246	222	194			
Total (all grades):												
Production.....short tons..	205,906	201,800	215,096	237,762	218,982	245,702	222,116	201,646	228,434	2,190,808	2,306,982	2,151,628
Consumption and shipments.....short tons..	202,466	196,714	212,028	235,310	219,842	244,792	221,008	204,376	231,800	2,145,812	2,303,864	2,160,072
Stocks, end of month.....short tons..	42,880	43,714	42,446	37,354	35,796	35,914	44,682	42,510	40,032			
<b>Newsprint Paper</b>												
Production:												
United States, total.....short tons..	101,601	95,261	105,450	120,868	108,155	122,099	116,120	102,821	122,415	1,092,183	1,160,342	1,170,017
Ratio to capacity.....per cent.	72	70	72	80	80	81	77	74	81			
Canada.....short tons..	202,043	195,490	213,817	225,873	227,665	251,914	200,480	186,396	217,290	2,110,635	2,244,518	1,949,853
Consumption by publishers.....short tons..	200,005	217,262	256,867	172,239	193,045	207,218	162,184	169,625	189,240	2,068,858	1,882,201	1,671,685
Shipments:												
United States.....short tons..	99,236	96,048	102,808	118,789	107,495	122,040	114,768	107,834	121,729	1,076,703	1,170,527	1,153,359
Canada.....short tons..	197,870	193,835	221,748	224,254	226,623	252,591	197,224	197,532	222,430	2,085,046	2,147,763	1,950,853
Imports.....short tons..	169,280	175,996	209,944	209,901	196,123	221,010	173,872	164,648	200,362	1,859,643	1,969,248	1,745,787
Exports.....short tons..	170,107	194,820	200,776	217,638	201,250	232,441	179,334	170,840	214,228	1,932,367	2,061,322	1,797,238
Stocks, end of month:												
At mills—												
United States.....short tons..	30,691	30,879	33,318	25,656	26,490	26,573	40,838	35,687	36,380			
Canada.....short tons..	59,007	62,495	52,547	29,785	30,742	30,064	52,108	43,800	37,018			
At publishers.....short tons..	227,443	215,685	211,716	205,532	190,331	188,570	209,044	191,287	188,980			
In transit to publishers.....short tons..	38,885	41,970	41,017	44,676	52,535	51,864	39,744	48,229	45,289			
Price, roll. f. o. b. mill....doll. per 100 lbs..	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25			
<b>Box Board</b>												
Operation.....thous. of inch hours..	8,030	7,134		9,806	8,745	9,707	9,564	8,645	9,827	\$74,245	\$83,781	\$78,114
Operation.....per ct. of capacity..	68.1	62.9		77.5	76.7	76.7	75.4	77.1	77.9			
Production.....short tons..	224,391	226,724		265,063	242,032	269,611	237,776	231,324	253,180	\$2,068,118	\$2,261,811	\$2,042,375
New orders.....short tons..	222,372	227,252		269,951	249,559	269,884	241,228	242,028	250,744	\$2,070,844	\$2,245,618	\$2,055,710
Unfilled orders, end of month.....short tons..	64,052	62,576		80,634	85,866	84,237	84,726	89,907	83,979			
Consumption of waste paper.....short tons..	215,879	221,534		256,339	231,029	254,163	218,429	223,009	245,734	\$1,989,290	\$2,132,115	\$1,896,548
Shipments.....short tons..	224,141	228,387		267,039	245,957	270,929	238,885	236,004	254,530	\$2,063,424	\$2,256,279	\$2,040,066
Stocks, end of month.....short tons..	71,900	69,889		61,268	59,364	60,331	50,150	47,788	46,062			
Stocks of waste paper, end of month:												
On hand.....short tons..	187,508	165,226		171,218	175,279	186,806	121,529	120,857	132,712			
In transit and unshipped purchases.....tons..	36,108	46,380		59,480	87,700	70,020	48,118	53,354	73,245			

\* Revised.

\* Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>PAPER AND PRINTING—Continued</b>												
<b>Other Paper</b>												
Binder's board, production.....short tons..	1,620	1,342	1,894	3,443	2,903	2,682	3,092	2,431	2,644	17,621	30,103	30,750
Book paper:												
Production.....short tons..	105,017	102,602	103,525	135,614	135,842	154,860	130,416	117,374	132,633	1,175,665	1,359,546	1,258,712
Ratio to capacity.....per cent..	78	81	74	93	103	104	89	86	87			
Shipments.....short tons..	105,907	100,345	105,838	135,951	135,434	128,290	133,024	120,895	133,429	1,147,746	1,315,820	1,252,348
Stocks, end of month.....short tons..	115,995	118,315	114,766	77,248	78,020	79,580	85,836	82,403	81,579			
New orders—												
Coated												
.....p. ct. of normal production..	70	62		85	87	89	77	81	83			
Uncoated												
.....p. ct. of normal production..	79	76		77	86	92	79	80	81			
Unfilled orders, end of month—												
Coated												
.....p. ct. of normal production..	7	8		9	10	11	8	16	19			
Uncoated												
.....p. ct. of normal production..	6	6		8	8	8	7	7	8			
Wrapping paper:												
Production.....short tons..	77,476	74,704	83,905	91,849	82,355	89,021	100,779	83,582	93,053	809,603	901,530	940,095
Ratio to capacity.....per cent..	81	81	84	83	84	80	89	84	85			
Shipments.....short tons..	71,687	77,916	84,744	90,655	83,939	93,650	100,174	85,174	94,900	819,736	907,717	931,814
Stocks, end of month.....short tons..	75,949	72,732	71,916	87,104	86,518	82,491	93,340	91,977	93,416			
Fine paper:												
Production.....short tons..	31,616	31,608	34,482	38,943	36,166	41,830	39,331	34,885	39,680	337,640	393,926	386,037
Ratio to capacity.....per cent..	67	67	72	91	88	91	80	80	84			
Shipments.....short tons..	30,826	29,996	34,624	39,644	34,936	40,808	38,938	34,885	39,839	354,699	396,080	382,806
Stocks, end of month.....short tons..	65,524	67,136	67,009	46,840	48,058	48,830	53,535	53,361	53,788			
All other grades:												
Production.....short tons..	81,660	84,954	87,455	105,055	97,715	113,250	110,677	100,138	112,529	898,588	1,043,957	1,032,470
Shipments.....short tons..	83,735	85,708	88,985	104,638	97,209	114,395	109,154	102,437	115,563	899,135	935,215	1,020,281
Stocks, end of month.....short tons..	65,186	64,432	62,903	58,009	58,515	55,189	72,438	70,140	61,422			
Total paper (inc. newsprint and box board):												
Production.....short tons..	621,761	613,853		760,392	703,236	790,591	735,099	670,124	757,314	5,996,975	6,585,647	6,326,396
Ratio to capacity.....per cent..	72	74	74	86	89	89	83	81	83			
Shipments.....short tons..	619,532	618,400		757,761	704,970	780,172	734,943	688,228	759,990	5,943,414	6,604,531	6,297,145
Stocks, end of month.....short tons..	425,245	423,083		356,125	343,843	346,032	396,137	381,356	372,565			
<b>Paper-board Shipping Boxes</b>												
Operating activity:												
Total.....per cent of normal..	70	73	76	89	89	91	79	79	88			
Corrugated.....per cent of normal..	72	76	80	91	91	93	77	78	89			
Solid fiber.....per cent of normal..	63	65	65	82	82	86	84	80	83			
Production:												
Total.....thous. of sq. ft..	473,354	506,628	518,388	550,170	544,276	574,171	464,255	455,931	477,926	4,879,124	5,095,555	4,314,735
Corrugated.....thous. of sq. ft..	388,030	415,623	425,900	448,920	434,351	457,425	364,756	359,553	374,342	3,946,483	4,040,315	3,329,527
Solid fiber.....thous. of sq. ft..	85,324	90,955	92,488	101,250	109,925	116,746	99,499	96,378	103,584	915,030	1,055,240	985,208
Rope paper sacks, shipments												
.....rel. to 1921-22..	78	88	87	101	95	115	111	102	113			
<b>Printing</b>												
Sales books:												
New orders.....thous. of books..	11,026	11,652	12,217	12,839	12,977	13,834	12,538	11,837	13,958	118,939	125,864	124,951
Shipments.....thous. of books..	11,918	12,363	13,428	13,631	12,226	14,147	13,738	11,976	14,605	119,781	127,081	122,406
Book publication:												
American manufacture.....no. of titles..	657	643	712	819	739	807	551	835	933	5,890	6,983	6,929
Imported.....no. of titles..	155	150	95	177	57	134	169	261	160	1,678	1,331	1,495
Blank forms, new orders.....thous. of sets..	55,779	60,812	78,707	54,054	56,428	75,622	58,108	50,114	57,957	633,979	605,363	488,386
Printing activity.....relative to 1924..	85	93		103	107	108	105	113	113			
<b>BUILDING CONSTRUCTION AND HOUSING</b>												
<b>Building Costs</b>												
Building materials:												
Frame house, 6-rm.												
1st of mo.....rel. to 1913..	169	168	171	177	176	178	177	177	179			
Brick house, 6-rm. 1st of mo. rel. to 1913..	175	174	176	182	182	183	181	181	184			
Bldg. costs, 1st of mo.....rel. to 1913..	201.0	199.6	198.7	205.9	207.6	206.3	207.3	207.3	207.7			
Bldg. costs (A. G. C.), 1st of mo. rel. to 1913..	198	198	200	203	201	202	200	201	202			
Construction costs (Am. Appraisal):												
Frame.....rel. to 1913..	194	191	188	204	205	205	204	204	204			
Brick, steel frame.....rel. to 1913..	190	188	186	197	197	198	198	198	197			
Brick, wood frame.....rel. to 1913..	208	206	202	214	214	215	213	213	213			
Reinforced concrete.....rel. to 1913..	195	193	190	201	201	202	201	201	201			
<b>Building and Engineering Construction</b>												
Total construction, all types:												
Projects.....number..	11,622	11,495	12,158	16,053	14,262	15,097	17,947	15,653	17,929	118,754	154,408	173,980
Floor space.....thous. of sq. ft..	39,933	41,193	39,484	66,720	59,872	65,609	78,873	76,348	85,703	448,429	696,509	827,601
Valuation.....thous. of dolls..	347,318	331,864	337,301	488,882	444,402	445,642	516,970	581,674	597,104	4,022,024	5,046,910	5,724,048
Commercial buildings:												
Projects.....number..	1,919	1,841	2,015	2,187	2,067	2,226	2,035	1,788	2,113	19,943	21,023	20,217
Floor space.....thous. of sq. ft..	7,914	5,721	6,673	14,322	13,514	13,274	12,553	11,875	14,097	89,572	142,698	133,841
Valuation.....thous. of dolls..	50,860	31,137	35,653	71,955	76,921	67,733	58,911	60,068	67,330	574,209	797,527	749,528
Industrial buildings:												
Projects.....number..	483	410	427	579	543	679	506	514	626	4,576	5,747	5,094
Floor space.....thous. of sq. ft..	3,699	5,732	2,705	10,425	7,748	9,297	8,748	10,580	10,004	48,789	88,169	82,138
Valuation.....thous. of dolls..	20,695	31,722	16,150	75,255	52,640	60,864	42,607	114,780	62,259	427,138	649,446	558,477
Educational buildings:												
Projects.....number..	548	380	283	603	376	346	611	396	289	4,372	4,122	4,316
Floor space.....thous. of sq. ft..	4,141	4,150	3,584	5,428	5,075	5,669	5,762	6,019	4,965	50,264	53,484	54,298
Valuation.....thous. of dolls..	25,897	28,233	28,554	32,349	29,826	36,893	35,713	38,801	31,293	321,995	336,364	343,604
Hospital and institutional buildings:												
Projects.....number..	120	136	110	117	106	147	117	112	102	1,082	1,036	956
Floor space.....thous. of sq. ft..	1,782	1,753	1,052	1,964	2,401	2,597	1,659	2,354	1,970	17,752	16,307	16,220
Valuation.....thous. of dolls..	14,090	16,547	11,556	14,382	17,898	19,992	11,913	23,845	17,148	150,491	126,479	130,456

\* Cumulative through Sept. 30.



## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BUILDING CONSTRUCTION AND HOUSING—Continued</b>												
<b>Building and Engineering Construction—Continued</b>												
Public buildings:												
Projects.....number.....	137	137	137	152	124	110	143	132	123	1,256	1,181	1,175
Floor space.....thous. of sq. ft..	2,031	1,300	1,176	948	2,225	1,405	945	1,354	822	14,668	11,510	9,486
Valuations.....thous. of dolls..	12,547	11,661	14,553	8,293	15,575	14,197	6,294	5,189	5,495	115,031	108,116	62,600
Religious and memorial buildings:												
Projects.....number.....	206	189	162	225	179	208	256	200	203	1,831	2,002	2,226
Floor space.....thous. of sq. ft..	852	860	667	1,431	837	1,241	1,572	1,128	1,094	9,923	11,383	13,985
Valuation.....thous. of dolls..	6,879	6,576	5,386	10,058	6,249	11,024	12,283	9,092	8,097	83,096	94,720	114,004
Social and recreational buildings:												
Projects.....number.....	220	222	227	254	190	207	236	185	220	2,256	2,211	2,347
Floor space.....thous. of sq. ft..	1,462	804	1,047	1,832	1,780	2,549	2,573	1,594	2,775	12,726	17,275	23,612
Valuation.....thous. of dolls..	9,478	6,040	9,583	11,204	10,683	12,133	16,654	14,078	17,093	100,029	121,945	191,100
Residential buildings, all types:												
Projects.....number.....	5,979	6,097	6,822	9,727	8,687	9,300	11,868	10,489	12,461	65,005	99,877	120,557
Floor space.....thous. of sq. ft..	16,843	19,683	22,337	29,544	25,551	28,823	44,575	40,726	49,579	196,491	348,513	489,018
Valuation.....thous. of dolls..	82,670	98,535	104,670	146,088	117,381	137,690	213,705	196,807	239,692	949,622	1,688,155	2,409,768
Public works and utilities:												
Projects.....number.....	2,010	2,083	1,975	2,209	1,990	1,874	2,175	1,828	1,792	18,433	17,209	17,092
Floor space.....thous. of sq. ft..	1,208	1,185	244	825	740	754	486	715	396	8,249	7,168	5,182
Valuation.....thous. of dolls..	124,202	101,413	111,196	119,288	117,229	85,117	118,890	119,014	148,697	1,300,416	1,124,160	1,164,509
Contracts awarded, Canada, thous. of dolls..	40,409	32,407	33,332	58,622	46,959	57,064	39,449	45,439	44,585	384,148	498,728	424,090
Building volume (A. G. C.)...rel. to 1913..	206	199	186	239	259	233	239	266	243			
Fire losses:												
United States.....thous. of dolls..	36,044	35,230	36,839	30,447	29,249	31,652	17,724	17,183	22,414	385,260	353,427	249,476
Canada (Monetary Times).....thous. of dolls..	5,877	2,507	2,796	3,776	2,040	3,777	2,356	1,739	1,795	34,573	30,417	20,971
<b>BUILDING MATERIALS</b>												
<b>Softwood Lumber</b>												
Douglas fir:												
Production (computed).....M ft. b. m..	296,813	199,651	208,156	353,642	315,592	312,011	358,566	296,343	337,527	2,499,665	3,293,347	4,325,623
Shipments (computed).....M ft. b. m..	218,452	200,546	199,651	333,498	293,209	300,372	389,454	315,144	301,267	2,475,940	3,337,664	4,539,211
New orders (computed).....M ft. b. m..	222,929	217,557	203,232	327,678	293,209	303,953	381,396	322,754	302,610	2,467,436	3,392,275	4,630,606
Unfilled orders, end of month.....M ft. b. m..	134,742	176,373	137,876	245,311	299,924	295,895	257,845	293,657	297,686			
Exports, lumber.....M ft. b. m..	42,129	48,097	43,801	72,811	64,085	80,888	59,236	64,265	65,795	542,384	779,895	647,695
Exports, timber.....M ft. b. m..	25,850	16,114	12,511	48,303	38,493	50,558	40,837	44,264	39,330	308,708	469,594	466,687
Price, No. 1 common.....dolls. per M ft. b. m..	13.44	13.14	12.98	18.57	18.36	17.82	17.75	17.32	18.06			
Price, flooring, 1 x 4, "B" and better, V. G.....dolls. per M ft. b. m..	35.65	34.58	33.77	42.96	42.79	42.42	37.19	38.85	40.61			
California redwood:												
Production (computed).....M ft. b. m..	28,835	28,337	35,063	44,923	35,291	36,745	41,137	34,329	27,851	333,171	376,781	388,428
Shipments (computed).....M ft. b. m..	25,044	27,505	31,808	48,648	37,363	36,064	43,983	33,107	32,744	308,351	381,562	377,614
New orders (computed).....M ft. b. m..	25,293	27,153	30,003	44,930	34,086	33,080	39,855	33,519	33,115	307,677	394,690	383,601
Unfilled orders, end of month (computed).....M ft. b. m..	26,573	26,150	24,277	44,590	41,837	37,097	45,093	47,916	40,350			
Northern pine:												
Lumber—												
Production.....M ft. b. m..	27,583	22,925	9,853	49,846	41,882	38,422	57,335	51,618	55,031	251,367	398,340	451,017
Shipments.....M ft. b. m..	21,516	17,791	20,498	43,704	37,054	43,737	47,754	44,618	51,378	238,507	410,789	425,869
New orders.....M ft. b. m..	19,503	17,697	21,033	42,485	30,291	35,578	41,435	44,200	41,109	216,975	371,858	395,520
Lath—												
Production.....thousands.....	3,968	3,229	1,273	8,442	6,268	5,739	12,318	12,419	11,777	27,842	64,428	96,031
Shipments.....thousands.....	4,833	6,047	3,671	9,258	6,509	6,892	11,099	8,897	8,937	42,019	80,086	85,536
North Carolina pine:												
Production (computed).....M ft. b. m..	27,349	27,832	29,386	48,993	48,132	45,878	45,437	37,457	48,090	354,732	552,447	489,412
Shipments (computed).....M ft. b. m..	33,481	35,322	35,049	48,230	45,605	47,264	48,643	39,900	51,590	363,769	540,974	511,839
Northern hemlock:												
Production.....M ft. b. m..	8,223	6,876	4,374	14,908	17,079	11,943	20,449	15,315	16,425	94,449	148,971	166,748
Shipments.....M ft. b. m..	7,007	6,751	7,436	16,020	12,859	12,378	22,661	19,951	21,042	77,837	135,694	171,740
<b>Hardwood Lumber</b>												
Walnut lumber:												
Production.....M ft. b. m..	1,174	1,121	1,386	4,608	4,649	5,284	2,931	2,749	2,857	18,083	39,891	29,251
Shipments.....M ft. b. m..	1,511	1,861	1,907	3,607	3,289	4,017	2,863	3,299	3,419	17,585	36,530	29,848
Stocks, end of month.....M ft. b. m..	20,090	19,334	18,796	14,303	15,347	15,817	13,166	12,825	12,249			
New orders.....M ft. b. m..	1,698	1,735	1,809	3,266	3,398	3,313	2,990	2,635	4,174	16,624	36,500	30,170
Unfilled order, end of month.....M ft. b. m..	4,025	4,085	3,646	6,892	7,000	6,562	5,270	4,741	5,483			
Walnut logs:												
Purchased.....M ft. log measure..	886	1,171	1,294	3,667	3,367	4,158	2,736	2,274	2,702	12,987	31,007	24,809
Made into lumber and veneer.....M ft. log measure..	1,029	1,109	1,421	3,358	3,724	3,996	2,579	2,643	2,606	15,346	30,543	25,309
Stocks, end of mo.....M ft. log measure..	745	805	670	2,441	2,148	2,265	3,006	2,684	2,636			
Northern hardwoods:												
Production.....M ft. b. m..	9,225	4,371	4,772	22,459	17,195	14,643	20,073	16,624	16,727	172,429	296,397	301,111
Shipments.....M ft. b. m..	11,167	11,862	11,285	27,469	24,275	22,604	27,597	25,086	31,473	150,393	265,991	276,215
Gum:												
Stocks, total, end of month.....mill. ft. b. m..	610	601	608	460	482	482	543	529	532			
Stocks, unsold, end of month.....mill. ft. b. m..	497	494	504	325	328	339	410	396	398			
Unfilled orders, end of month.....mill. ft. b. m..	113	107	104	144	154	143	132	133	134			
Oak:												
Stocks, total, end of month.....mill. ft. b. m..	1,036	1,016	1,021	982	1,004	1,022	959	954	918			
Stocks, unsold, end of month.....mill. ft. b. m..	927	918	924	802	808	823	800	775	746			
Unfilled orders, end of month.....mill. ft. b. m..	109	98	97	181	195	199	159	161	171			

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BUILDING MATERIALS—Continued</b>												
<b>Hardwood Lumber—Continued</b>												
All hardwoods:												
Production.....mill. ft. b. m..	165	161	158	334	334	296	263	270	285	2,141	3,132	2,653
Shipments.....mill. ft. b. m..	154	180	169	296	311	278	285	293	315	1,899	3,024	2,735
New orders.....mill. ft. b. m..	139	176	154	300	323	281	289	293	323	1,780	3,080	2,818
Stocks, total, end of month.....mill. ft. b. m..	3,308	3,261	3,270	2,772	2,848	2,887	2,771	2,731	2,722			
Stocks, unsold, end of month.....mill. ft. b. m..	2,808	2,787	2,805	2,122	2,239	2,227	2,211	2,164	2,132			
Unfilled orders, end of month.....mill. ft. b. m..	500	475	466	645	678	660	557	566	589			
<b>Flooring</b>												
Maple flooring:												
Production.....M ft. b. m..	3,724	3,591	3,128	6,918	7,334	7,813	8,413	7,675	8,204	47,119	66,904	76,812
Shipments.....M ft. b. m..	4,762	3,700	3,375	8,435	7,239	6,896	9,515	7,929	8,543	44,763	68,612	81,110
Stocks, end of month.....M ft. b. m..	26,909	26,275	25,921	20,480	20,827	22,421	23,232	22,554	21,352			
New orders.....M ft. b. m..	3,805	3,256	2,821	6,927	4,750	4,297	8,851	7,110	7,230	38,548	61,827	77,841
Unfilled orders, end of month.....M ft. b. m..	3,613	3,036	3,518	8,881	7,641	7,095	10,187	10,106	7,940			
<b>Fabricated Structural Steel</b>												
New orders (prorated).....short tons..	264,000	162,000	215,600	340,725	297,990	319,550	352,660	318,010	260,645	2,485,200	3,088,085	2,797,410
Ratio to capacity.....per cent..	66.0	40.5	53.9	88.5	77.4	83.0	91.6	82.6	67.7			
Shipments (prorated).....short tons..	277,600	258,400	253,600	314,930	293,370	323,785	289,135	274,120	318,780	2,770,000	2,796,640	2,569,490
Ratio to capacity.....per cent..	69.4	64.6	63.4	81.8	76.2	84.1	75.1	71.2	82.8			
<b>Portland Cement</b>												
Production.....thous. of bbls..	17,821	16,124	14,410	18,585	17,223	16,731	18,759	17,884	17,533	141,329	144,930	148,711
Operation.....per ct. of capacity..	81.0	75.7	65.4	86.1	81.8	77.0	93.1	91.7	87.1			
Shipments.....thous. of bbls..	20,299	18,083	15,599	23,052	19,950	18,695	21,970	20,460	19,836	144,265	152,264	156,120
Stocks, end of month.....thous. of bbls..	23,824	21,889	20,699	20,056	17,325	15,381	19,374	16,799	14,579			
Stocks, clinker, end of month.....thous. of bbls..	15,244	14,577	13,895	8,995	7,009	5,934	9,357	7,566	5,944			
Wholesale prices, composite,dolls. per bbl..	1.600	1.600	1.600	1.664	1.500	1.493	1.633	1.650	1.650			
Common brick:												
Stocks, end of month—												
Burned.....thousands..	350,940	373,485	405,082	290,265	217,451	395,919	491,088	498,691	454,931			
Unburned.....thousands..	222,710	271,577	273,309	110,904	224,530	284,402	206,938	257,692	91,226			
Shipments.....thousands..	105,493	115,251	103,390	130,982	93,677	151,723	218,339	167,078	122,078	958,826	1,322,496	1,914,267
Unfilled orders, end of month.....thousands..	149,034	132,689	101,906	109,564	110,215	133,083	221,625	213,274	145,427			
Plants closed down.....number..	62	70	76	56	26	58	14	21	49	826	438	347
Price, red, New York,dolls. per thous..	9.50	9.50	9.50	10.13	10.50	9.50	13.50	12.50	12.50			
Sand-lime brick:												
Production.....thousands..	9,636	7,877	7,925	16,838	14,121	17,563	21,680	17,267	21,590	87,499	140,698	170,772
Shipments by rail.....thousands..	2,921	3,278	3,437	4,684	3,960	5,150	8,284	6,767	5,562	30,540	42,060	57,325
Shipments by truck.....thousands..	6,437	6,553	6,169	11,615	10,951	10,866	13,215	11,281	15,802	58,184	107,788	116,537
Stocks, end of month.....thousands..	15,496	14,151	12,260	9,714	9,326	12,957	14,446	15,304	14,446			
Unfilled orders, end of month.....thousands..	7,762	8,957	7,567	9,925	13,286	12,943	14,503	14,455	13,435			
Face brick:												
Production.....thousands..	854	730	748	1,258	1,000	1,095	1,247	1,099	1,240	6,819	11,158	10,893
Shipments.....thousands..	779	794	767	1,011	1,011	1,064	1,283	1,158	1,166	7,600	10,763	11,239
Stocks, end of month.....thousands..	3,717	3,677	3,662	4,142	4,050	4,110	3,172	2,974	2,826			
Unfilled orders, end of month.....thousands..	1,059	1,067	901	1,480	1,295	1,285	1,658	1,506	1,483			
Floor and wall tile:												
Production.....thous. of sq. ft..	3,813	3,929		6,356	5,595	5,416	6,841	6,621	7,636	33,263	48,123	51,798
Shipments, quantity.....thous. of sq. ft..	4,860	4,472		6,797	5,569	5,089	7,403	6,755	7,260	36,814	50,544	52,578
Shipments, value.....thous. of dolls.	1,663	1,515		2,684	2,149	2,097	2,847	2,572	2,731	13,445	19,975	19,995
Stocks, end of month.....thous. of sq. ft..	15,031	14,488		18,693	18,720	19,047	12,636	12,502	12,877			
Terra cotta, new orders:												
Quantity.....net tons..	5,594	5,718	5,930	8,606	7,784	6,566	12,058	10,570	15,597	67,493	103,059	129,304
Value.....thous. of dolls..	520	465	556	940	817	716	1,123	1,005	1,460	6,532	11,251	12,240
Plate glass:												
Production, polished.....thous. of sq. ft..	5,523	7,979	8,583	14,722	14,011	14,621	12,159	10,897	11,140	93,778	129,885	108,423
<b>Roofing</b>												
Roofing, felt:												
Production, dry felt.....tons..	18,285	25,631	21,470	26,665	23,997	25,502	25,574	24,343	23,930	210,225	268,169	249,521
Stocks, end of month, dry felt.....tons..	5,500	5,005	4,799	3,974	4,465	4,790	3,356	3,427	3,367			
Prepared roofing, shipments:												
Total.....thous. of sqs..	2,544	3,506	3,259	2,903	3,011	3,308	3,071	3,187	3,453	25,264	35,500	32,396
Smooth roll.....thous. of sqs..	1,021	1,438	1,575	1,077	1,231	1,502	1,257	1,394	1,604	11,036	15,786	14,022
Grit roll.....thous. of sqs..	655	872	922	829	826	836	853	841	824	6,533	8,948	8,740
Shingles—												
Strip, patented, and hexa- gon.....thous. of sqs..	692	1,001	572	813	781	795	784	785	851	6,299	8,968	7,965
Individual and single thickness.....thous. of sqs..	176	196	191	184	173	175	176	167	173	1,398	1,798	1,657
<b>BUILDING EQUIPMENT</b>												
<b>Enameled Ware</b>												
Baths:												
Shipments.....pieces..	51,836	47,970	48,518	101,766	78,117	65,530	103,878	86,209	93,174	520,456	841,285	989,750
Stocks, end of month.....pieces..	165,687	162,302	165,695	152,261	151,999	162,465	122,167	134,749	147,656			
New orders.....pieces..	48,449	41,799	43,518	115,621	58,991	57,054	84,581	65,356	82,893	504,827	848,828	1,011,634
Unfilled orders, end of month.....pieces..	36,110	29,939	24,939	75,127	56,001	47,525	72,263	61,410	41,129			
Lavatories:												
Shipments.....pieces..	59,130	62,369	58,126	126,763	97,254	85,856	114,070	94,251	99,250	647,678	984,962	1,114,836
Stocks, end of month.....pieces..	187,150	185,515	204,446	192,302	172,189	176,246	161,276	168,211	180,651			
New orders.....pieces..	55,062	54,369	52,143	146,894	73,195	72,039	88,165	74,044	87,524	629,506	1,013,522	1,138,524
Sinks:												
Shipments.....pieces..	62,454	64,044	63,493	121,677	104,969	98,642	116,497	101,673	111,740	666,949	1,024,789	1,154,699
Stocks, end of month.....pieces..	254,426	243,845	245,813	252,635	231,410	243,567	216,338	216,255	230,725			
New orders.....pieces..	55,755	57,606	60,475	142,557	84,985	78,430	72,755	89,122	103,109	644,722	1,046,342	1,167,699

\* Revised.

\* Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BUILDING EQUIPMENT—Continued.</b>												
<b>Enameled Ware—Continued</b>												
Miscellaneous sanitary ware:												
Shipments.....pieces...	\$ 29,807	31,485	29,020	\$ 48,256	\$ 36,184	\$ 40,277	54,003	\$ 44,943	46,129	207,441	399,024	479,911
Stocks, end of month.....pieces...	101,920	100,585	106,899	\$ 122,643	\$ 121,382	\$ 124,339	95,958	103,509	116,110			
New orders.....pieces...	\$ 28,365	28,449	27,258	\$ 52,399	\$ 28,005	\$ 35,468	\$ 44,297	\$ 44,202	\$ 40,157	290,499	405,951	481,580
Small ware (all except baths):												
Unfiled orders, end of month.....pieces...	\$ 101,720	84,246	73,483	\$ 260,200	\$ 207,978	\$ 174,140	\$ 188,984	155,483	129,154			
Vitreous china plumbing fixtures:												
New orders.....pieces...	142,254	140,882	140,274	242,596	195,931	240,606	217,305	180,758	222,190	1,597,641	2,496,426	2,626,329
Shipments.....pieces...	166,156	155,330	158,262	268,619	237,788	215,033	267,610	215,284	236,781	1,796,478	2,516,204	2,644,536
Unfiled orders, end of month.....pieces...	275,367	260,919	242,931	385,632	343,775	369,348	353,034	318,508	303,917			
Stocks, end of month.....pieces...	615,931	586,915	593,364	559,418	566,776	601,832	477,593	510,864	531,119			
Porcelain plumbing fixtures:												
Net new orders.....pieces...	8,232	6,815	8,657	12,168	9,524	8,548	12,960	9,939	22,665	78,994	114,858	232,518
Shipments.....pieces...	7,214	7,564	6,455	13,873	9,560	8,269	22,970	16,525	17,018	63,565	106,904	165,806
Unfiled orders, end of month.....pieces...	33,493	31,973	31,309	26,911	26,115	25,376	65,029	54,583	50,558			
Stocks, end of month.....pieces...	32,696	29,367	25,145	40,343	39,708	40,682	47,690	50,953	50,956			
Plumbing fixtures, 6 pieces.....dollars...	98.32	96.88	97.40	98.84	98.97	99.20	101.21	101.13	100.67			
<b>Illuminating Glassware</b>												
Production:												
Total.....number of turns...	2,083	1,961	2,185	2,819	3,225	4,265	2,985	3,190	4,193	24,138	32,715	30,850
Ratio to capacity.....per ct. of capacity...	33.6	31.7	35.3	36.4	45.3	50.2	36.5	43.0	50.5			
New orders.....per ct. of capacity...	29.9	33.7	34.5	42.9	46.8	52.9	44.5	44.2	53.2			
Shipments.....per ct. of capacity...	30.4	33.0	34.4	43.8	49.6	51.1	42.5	43.0	51.9			
Unfiled orders, end of month.....number of weeks' supply...	.7	.8	.8	1.4	1.4	1.5	1.8	1.7	1.7			
Stocks, end of mo. number of weeks' supply...	4.6	4.6	4.7	4.7	4.6	4.6	4.3	4.3	4.1			
<b>Furniture</b>												
Household furniture and case goods:												
Southeastern district:												
Shipments.....dolls., av. per firm...	56,456	63,343	53,091	70,482	75,319	82,440	65,947	65,010	70,030	496,904	617,364	524,965
Unfiled orders.....dolls., av. per firm...	33,432	25,830	17,335	77,568	84,138	62,355	57,288	53,576	50,266			
Grand Rapids district:												
Unfiled orders, end of month.....No. days' production...	24	26	20	64	58	45	53	49	38			
New orders.....No. days' production...	18	29	21	30	37	29	30	31	31			
Shipments.....No. days' production...	18	27	26	30	32	35	31	30	37			
Outstanding accounts, end of month.....No. days' sales...	40	52	51	53	58	61	56	65	65			
Cancellations.....per ct. new orders...	6.0	5.0	8.5	5.0	6.0	23.0	7.0	9.0	10.0			
Plant operations.....per ct. full time...	79.0	89.0	85.0	97.0	101.0	104.0	92.0	101.0	103.0			
Steel furniture:												
Business group:												
Shipments.....thous. of dolls...	1,985	1,879	1,901	2,483	2,314	2,984	2,865	2,754	3,159	22,682	28,687	29,072
New orders.....thous. of dolls...	1,788	1,795	1,855	2,418	2,294	2,842	2,619	2,689	3,193	22,003	28,552	29,687
Unfiled orders, end of month.....thous. of dolls...	1,331	\$ 1,249	1,203	2,171	2,054	2,059	2,118	2,062	2,095			
Shelving:												
Shipments.....thous. of dolls...	\$ 555	\$ 497	592	890	843	979	836	678	954	6,690	9,605	7,590
New orders.....thous. of dolls...	\$ 526	\$ 512	547	931	880	928	863	800	959	6,724	10,018	7,897
Unfiled orders, end of month.....thous. of dolls...	\$ 704	\$ 720	674	1,041	1,079	1,015	734	754	760			
<b>PLYWOOD AND VENEER</b>												
Rotary-cut veneer:												
Receipts.....number of carloads...	100	147	101	174	223	251	259	244	337	1,416	2,074	1,791
Purchases.....number of carloads...	106	139	101	122	287	306	325	199	255	1,323	2,447	2,106
Bushel baskets:												
Production.....dozens...	203,492	220,986	264,212	190,939	225,014	243,056	177,982	156,521	\$ 1,899,533	\$ 1,817,606	\$ 1,819,706	
Shipments.....dozens...	227,120	364,993	360,050	314,904	257,942	262,810	285,813	156,407	\$ 1,798,920	\$ 1,744,713	\$ 1,891,623	
Stocks, end of month.....dozens...	513,488	371,481	584,410	461,717	428,789	570,726	409,110	420,671				
<b>GLASS CONTAINERS</b>												
Actual production:												
Quantity.....gross...	2,439	2,202	2,461	2,715	2,246	2,572	2,686	2,322	2,389	24,025	24,894	24,331
Relation to capacity.....per cent...	72.5	68.1	70.4	77.5	74.5	75.6	80.9	78.7	71.6			
New orders.....gross...	2,630	2,585	2,451	1,922	2,942	2,996	1,909	2,122	2,721	26,271	25,547	23,768
Shipments.....gross...	2,459	2,623	2,297	2,659	2,700	2,445	2,654	2,433	2,261	24,108	25,294	24,148
Unfiled orders, end of month.....gross...	10,024	9,404	9,097	8,078	8,072	8,320	8,467	8,084	8,415			
Stocks, end of month.....gross...	6,768	6,412	6,578	6,447	5,994	6,121	6,297	6,173	6,302			
<b>CHEMICALS AND OILS</b>												
<b>Chemicals</b>												
Sulphuric acid:												
Exports.....thous. of lbs...	176,023	465,766	703,787	641,492	516,264	544,462	291,035	581,760	441,867	4,723,151	5,585,050	6,046,230
Price, wholesale.....dolls. per 100 lbs...	.78	.78	.78	.78	.78	.78	.78	.78	.78			
Nitrate of soda:												
Imports.....long tons...	9,083	19,362	27,207	51,684	31,539	54,821	75,318	36,644	48,385	496,908	821,842	901,943
Production in Chile.....metric tons...	202,466	181,467	179,357	270,300	253,200	207,800	275,000	259,400	282,300	2,146,979	2,614,100	2,584,000
Potash salts:												
Imports (commercial).....long tons...	48,183	45,857	36,796	45,505	40,088	51,757	57,327	43,313	28,242	357,884	305,695	310,652
Sales in Germany (K <sub>2</sub> O content).....metric tons...	98,722	127,660	71,660	95,372	123,465	79,159	108,696	140,818	76,507	1,221,018	1,217,182	1,231,607
Superphosphate (acid phosphate):												
Production.....short tons...	295,790	282,710	335,494	309,749	253,181	\$ 349,976	304,857	251,190	343,213	3,299,458	2,957,089	3,141,077
Stocks, end of month.....short tons...	1,526,934	\$ 1,479,091	1,697,085	1,362,679	\$ 1,283,706	\$ 1,481,367	1,380,278	1,347,735	1,546,290			
Shipments.....short tons...	64,756	149,899	92,769	88,230	163,242	\$ 106,495	87,688	149,002	89,767	1,762,789	1,734,461	1,746,089
Fertilizer:												
Exports.....long tons...	115,580	118,761	125,441	112,346	155,103	129,849	103,575	99,611	87,115	1,369,867	1,278,928	1,051,495
Consumption, Southern States.....short tons...	38,256	128,302	94,720	46,930	174,347	101,295	62,823	131,120	142,828	5,308,660	5,249,441	5,371,507

\* Revised.

\* Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>CHEMICALS AND OILS—Continued</b>												
<b>Chemicals—Continued</b>												
Crude arsenic:												
Production.....short tons..	1,217	2,077	2,694	887	1,027	3,113	2,086	1,079	1,238	17,200	15,898	13,648
Stocks, end of month.....short tons..	3,254	4,026	5,125	1,876	1,777	3,309	2,999	2,978	3,024			
Refined arsenic:												
Production.....short tons..	1,002	1,101	1,265	857	868	1,036	803	799	835	9,942	8,863	7,462
Stocks, end of month.....short tons..	1,525	1,930	1,813	3,414	3,180	3,672	1,618	1,971	2,344			
Dyes and dyestuffs, exports:												
Vegetable.....thous. of lbs..	124	204	309	191	422	247	237	157	231	1,843	2,049	2,612
Coal tar.....thous. of lbs..	1,757	866	2,481	13	39	18	1,351	1,330	5,194	22,271	11,654	23,420
Price index numbers:												
Crude drugs.....rel. to Aug., 1914..	176	176	176	177	177	177	164	164	164			
Essential oils.....rel. to Aug., 1914..	97	91	90	188	168	161	161	158	155			
Drugs and pharmaceuticals.....rel. to Aug., 1914..	143	139	137	179	180	180	193	193	195			
Chemicals.....rel. to 1927..	94	94	94	100	100	100	99	99	99			
Oils and fats.....rel. to 1927..	87	78	74	96	100	105	94	95	97			
<b>Wood Chemicals</b>												
Acetate of lime:												
Production—												
United States.....thous. of lbs..	4,660	4,955		11,025	10,154	12,532	9,486	8,605	10,526	\$70,495	\$104,339	\$96,990
Canada.....thous. of lbs..				715	421	367		446	999			
Shipments—												
United States.....thous. of lbs..	3,503	4,325		10,862	10,162	12,172	12,840	13,355	10,407	\$47,436	\$103,546	\$110,145
Canada.....thous. of lbs..	48			821	349		2,098	348				
Stocks, end of month—												
United States.....thous. of lbs..	30,733	31,362		1,259	1,241	1,687	7,950	3,134	2,863			
Canada.....thous. of lbs..	3,894			73	147		140	183	349			
Exports.....thous. of lbs..	23						1,141	449	36	23	208	11,129
Price, wholesale.....dolls. per cwt..	3.00	3.00	2.42	4.50	4.50	4.50	3.88	4.00	4.00			
Methanol, crude:												
Production—												
United States.....gallons..	272,823	289,765		656,414	598,545	719,064	535,803	495,555	641,823	\$4,322,547	\$6,166,367	\$5,420,803
Canada.....gallons..				25,950	17,581	16,904		18,816	45,768			
Stocks at crude plants, end of month—												
United States.....gallons..	576,563	612,735		244,185	256,356	255,204	287,492	229,683	314,171			
Canada.....gallons..	3,337			20,092	17,061	12,924	37,933	13,665	34,399			
Stocks at refineries and in transit—												
United States.....gallons..	541,380	617,571		526,172	514,572	590,710	160,156	164,972	161,723			
Canada.....gallons..	23,584			63,702	65,505	47,479	64,817	67,314	57,814			
Exports.....gallons..	157,037	82,168	100,479	33,849	49,948	12,329	14,000	32,540	20,408	825,173	419,836	463,762
Wood at chemical plants:												
Consumption—												
United States.....cords..	34,300	35,400		70,454	63,460	75,508	55,086	49,444	65,182	\$464,647	\$644,899	\$548,334
Canada.....cords..				3,228	2,041			2,160	5,366			
Stocks, end of month—												
United States.....cords..	591,727	601,801		565,119	552,338	527,210	509,435	514,204	550,412			
Canada.....cords..	70,000			72,026	72,040		73,700	73,759	73,119			
Daily capacity—												
Total.....cords..	3,170	3,190		3,264	3,264	3,246	3,482	3,486	3,486			
Shutdown.....cords..	1,598	1,518		475	525	289	1,053	1,083	668			
Methanol, refined:												
Production—												
United States.....gallons..	275,712	201,663		454,160	432,094	445,183	436,811	355,353	487,384	\$2,959,010	\$3,933,173	\$4,290,945
Canada.....gallons..	20,400			43,700	27,800	56,300	14,700	38,600	56,700			
Stocks, end of month—												
United States.....gallons..	184,107	20,346		783,674	729,932	725,620	306,730	300,478	325,914			
Canada.....gallons..	41,786			37,761	21,888	14,238	26,715	33,101	23,339			
Shipments—												
United States.....gallons..	310,215	365,927		487,153	508,551	558,179	497,971	415,340	493,712	\$3,811,207	\$4,433,016	\$4,441,365
Canada.....gallons..	8,896			22,188	31,902	48,532	22,076	25,396	48,330			
Price, wholesale, N. Y.....dolls. per gal..	.40	.40	.40	.58	.58	.58	.48	.48	.51			
<b>Ethyl Alcohol</b>												
Production.....thous. of gals..	12,890	14,299	18,455	20,026	20,739	25,426	18,764	18,613	20,685	128,522	169,502	145,863
Withdrawn for denaturation.....thous. of gals..	11,777	12,615	18,537	18,688	19,199	24,203	16,128	15,269	20,718	117,141	155,610	131,025
Warehouse stocks, end of month.....thous. of gals..	9,317	10,010	2,898	11,489	11,617	11,932	9,263	11,295	9,907			
<b>Explosives</b>												
(Black powder, permissible, and other high explosives)												
Production.....thous. of lbs..	31,168	35,688	34,113	40,584	42,019	42,108	35,092	35,310	38,636	327,890	371,635	328,253
Shipments.....thous. of lbs..	32,289	35,069	34,198	39,163	42,299	40,246	33,039	37,465	38,854	327,466	372,549	330,509
New orders.....thous. of lbs..	32,687	33,173	34,324	39,580	40,141	40,295	32,268	33,611	36,347	321,628	361,933	313,129
Stocks, end of month.....thous. of lbs..	16,043	16,694	16,812	17,529	16,895	17,811	18,554	16,274	16,011			
<b>Naval Stores</b>												
Turpentine (gum):												
Net receipts, southern ports.....barrels..	46,521	42,873	38,500	49,436	42,127	33,356	42,724	34,312	33,924	332,320	325,154	284,193
Stocks at port, end of month.....barrels..	65,024	76,774	88,499	63,151	65,770	67,038	73,304	73,595	79,509			
Price, southern, New York.....dolls. per gal..	.41	.44	.41	.52	.55	.56	.52	.52	.53			
Rosin (gum):												
Net receipts, southern ports.....barrels..	151,269	140,090	127,621	172,670	140,212	120,886	145,357	116,029	115,235	1,106,792	1,119,427	956,387
Stocks at 3 ports, end of month.....barrels..	267,540	276,565	303,669	205,595	233,215	244,767	227,517	230,672	216,917			
Price, B, New York.....dolls. per bbl..	5.39	5.80	5.54	8.51	9.01	9.27	9.59	9.18	9.31			
Rosin (wood):												
Production.....barrels..	37,349	38,293	34,818	38,315	36,905	40,903	37,623	35,473	36,942	400,823	372,226	351,115
Stocks, end of month.....barrels..	114,281	117,726	109,785	98,777	90,036	84,111	114,074	112,964	111,728			
Turpentine (wood):												
Production.....barrels..	6,125	6,573	5,817	6,721	6,695	7,640	6,274	6,257	6,486	70,569	68,893	61,486
Stocks, end of month.....barrels..	12,772	11,163	11,257	4,713	4,344	5,569	6,898	6,027	5,704			
Pine oil:												
Production.....gallons..	224,546	229,238	225,688	229,388	222,112	259,017	225,668	211,828	219,525	2,431,170	2,272,434	2,272,864
Stocks, end of month.....gallons..	1,512,730	1,528,564	1,609,625	894,993	888,328	875,424	822,813	845,762	845,645			

\* Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>CHEMICALS AND OILS—Continued</b>												
<b>Fats and Oils</b>												
Total vegetable oils and copra:												
Exports.....thous. of lbs.	1,317	1,794	2,591	1,285	2,632	3,061	1,444	2,222	3,681	26,105	21,467	44,508
Imports.....thous. of lbs.	87,072	73,445	105,699	109,091	82,942	88,409	56,364	80,914	82,176	817,445	920,304	620,845
Copra, imports.....short tons	16,885	31,139	33,725	26,622	18,007	17,208	19,716	20,754	22,897	228,868	249,508	190,992
Copra or coconut oil:												
Imports.....thous. of lbs.	19,331	14,846	43,124	36,623	36,952	36,770	12,581	34,008	31,534	257,503	347,434	224,522
Consumption in oleomargarine.....thous. of lbs.	11,479	15,818	18,248	14,715	16,075	19,511	11,910	14,452	15,714	144,388	150,786	128,687
Oleomargarine:												
Production.....thous. of lbs.	23,071	28,554	32,191	28,400	30,562	36,624	23,610	28,446	30,631	267,102	289,931	257,021
Consumption.....thous. of lbs.	24,672	27,194	33,138	25,788	31,423	34,591	24,965	29,002	30,137	263,136	285,048	256,184
Animal glues, shipments.....thous. of lbs.	4,598	4,885	5,891	7,231	6,749	8,071	6,780	6,256	7,528	54,307	62,525	66,158
<b>Cottonseed</b>												
Cottonseed:												
Receipts at mills.....short tons	336,129	1,040,865	1,323,103	239,069	917,344	1,490,757	175,643	865,691	1,536,083	3,743,103	3,449,556	3,230,942
Consumption (crush).....short tons	165,770	561,625	936,743	120,023	489,048	802,039	74,116	421,362	910,576	3,766,990	3,603,024	3,050,560
Stocks at mills, end of month.....short tons	214,965	695,033	1,081,393	160,652	588,948	1,177,666	123,499	567,828	1,192,935			
Cottonseed oil, crude:												
Production.....thous. of lbs.	49,322	169,458	283,929	35,218	149,121	277,468	20,914	126,787	282,715	1,176,250	1,145,416	970,362
Stocks, end of month.....thous. of lbs.	25,606	79,280	110,829	28,823	77,215	120,472	15,261	68,856	124,625			
Cottonseed oil, refined:												
Production.....thous. of lbs.	26,525	102,460	232,179	22,877	84,351	210,636	21,012	61,637	201,483	1,052,656	1,047,181	885,677
Stocks, end of month.....thous. of lbs.	200,273	174,208	175,437	230,683	175,437	231,627	234,485	159,588	223,046			
Price, yellow, prime, New York.....dolls. per lb.	.084	.081	.076	.094	.093	.093	.094	.099	.099			
Consumption in oleomargarine.....thous. of lbs.	2,906	2,151	2,505	2,387	2,362	3,022	2,062	2,437	2,678	23,176	23,810	21,788
Cottonseed cake and meal:												
Production.....short tons	76,440	251,128	421,283	56,303	214,982	402,576	35,101	185,728	406,795	1,687,706	1,627,110	1,384,739
Stocks, end of month.....short tons	45,340	116,396	202,156	48,894	82,541	163,821	18,715	61,411	123,833			
Exports.....short tons	175	2,092	4,361	12,837	21,608	33,434	944	22,013	60,015	42,563	182,387	189,756
<b>Flaxseed</b>												
Minneapolis and Duluth:												
Receipts.....thous. of bush.	3,266	5,054	2,636	1,479	4,111	3,189	1,025	3,812	6,600	12,964	11,319	15,194
Shipments.....thous. of bush.	1,436	2,045	1,618	567	1,655	1,697	426	1,260	2,348	6,645	5,883	7,563
Stocks, end of month.....thous. of bush.	447	1,893	2,182	23	909	1,179	310	615	2,585			
Imports.....thous. of bush.	551	59	148	1,020	842	2,582	1,068	1,254	1,209	12,056	21,209	14,649
Production, crop estimate.....thous. of bush.		24,168			16,844			19,928				
Price No. 1, Minneapolis.....dolls. per bush.	2.00	1.90	1.80	2.79	3.23	3.32	2.05	2.09	2.28			
Linseed oil:												
Shipments from Minneapolis.....thous. of lbs.	6,117	11,565		10,787	14,789	13,707	13,571	14,443	15,437	65,969	128,002	133,425
Price, New York.....dolls. per lb.	.131	.105	.099	.129	.155	.159	.098	.098	.101			
Linseed cake and meal:												
Shipments from Minneapolis.....thous. of lbs.	13,398	27,149		15,683	27,415	30,466	16,051	26,257	30,071	111,866	159,246	187,157
Exports.....thous. of lbs.	22,593	8,474	12,519	74,874	59,539	52,423	52,394	38,770	51,894	328,495	632,580	470,911
<b>FOODSTUFFS</b>												
<b>Wheat</b>												
Visible supply, end of month:												
United States.....thous. of bush.	194,800	213,804	205,437	190,911	198,982	202,781	92,108	114,523	138,239			
Canada.....thous. of bush.	90,617	148,288	178,827	96,224	156,620	213,351	32,728	78,069	158,204			
Receipts, principal markets.....thous. of bush.	85,476	62,569	28,943	101,669	47,046	36,256	84,221	73,322	84,423	378,762	419,387	446,292
Shipments, principal markets.....thous. of bush.	48,053	44,746	25,238	60,983	32,134	27,116	46,105	39,508	30,365	255,605	269,591	248,480
Production, crop estimate:												
Winter wheat.....thous. of bush.			597,392			577,784			578,673			
Spring wheat.....thous. of bush.			242,220			228,006			336,203			
Total, wheat.....thous. of bush.			839,612			805,790			914,876			
Exports:												
United States—												
Wheat only.....thous. of bush.	18,646	12,716	6,311	12,094	13,104	8,767	10,374	17,979	22,058	82,000	73,003	78,088
Including wheat flour.....thous. of bush.	24,167	19,069	12,295	16,935	18,335	14,664	14,568	22,568	28,290	131,618	124,309	121,803
Canada—												
Including wheat flour.....thous. of bush.	20,461	31,120	33,447	13,050	9,624	23,215	29,220	30,928	48,957	181,860	210,239	279,871
Prices:												
No. 1, Northern Spring, Minneapolis.....dolls. per bush.	.91	.87	.82	1.35	1.35	1.31	1.19	1.19	1.16			
No. 2, Red Winter, St. Louis.....dolls. per bush.	.89	.88	.87	1.32	1.35	1.32	1.38	1.45	1.44			
No. 2, Hard Winter, Kansas City.....dolls. per bush.	.81	.78	.74	1.23	1.24	1.22	1.06	1.07	1.10			
<b>Wheat Flour</b>												
Grindings of wheat:												
United States.....thous. of bush.	47,654	49,382	49,964	50,725	47,583	50,445	47,657	48,014	52,890	441,442	443,757	433,914
Canada.....thous. of bush.	6,930	7,255	8,348	7,178	5,745	6,814	7,330	8,554	9,473	61,264	71,885	73,090
Production:												
United States, actual.....thous. of bbls.	10,313	10,674	10,817	11,058	10,372	10,968	10,370	10,512	11,587	95,649	96,864	93,951
United States, prorated.....thous. of bbls.	11,562	12,241	12,089	12,562	11,870	12,153	11,567	11,197	13,316	105,556	108,684	105,311
Canada.....thous. of bbls.	1,548	1,624	1,869	1,607	1,283	1,528	1,590	1,892	2,130	13,685	15,853	15,944
Exports:												
United States.....thous. of bbls.	1,227	1,412	1,330	1,076	1,163	1,311	932	1,020	1,385	11,026	11,401	9,715
Canada.....thous. of bbls.	627	734	814	643	492	554	925	890	1,171	6,121	8,431	8,655
Grain offal, production.....thous. of lbs.	851,404	888,576	899,884	882,931	831,523	886,094	819,994	820,934	910,900	7,856,418	718,949	7,598,488
Capacity operated, flour mills.....per cent.	62	67	62	62	66	62	58	66	66			
Consumption (computed).....thous. of bbls.	9,585	10,929	11,059	11,686	10,007	11,642	10,435	9,078	12,536	94,930	95,887	93,704
Stocks, all positions, end of month (computed).....thous. of bbls.	9,600	9,500	9,200	8,800	9,500	8,700	7,400	8,500	7,900			
Wholesale prices:												
Standard patents, Minn.....dolls. per bbl.	5.34	5.08	4.98	7.31	7.17	6.91	6.62	6.59	6.41			
Winter, straights, Kansas City.....dolls. per bbl.	4.56	4.44	4.23	6.24	6.10	6.01	5.66	5.65	5.59			

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Corn</b>												
Exports, including meal...thous. of bush.	332	394	295	895	693	732	1,018	668	871	6,903	33,195	18,489
Visible supply, end of month.....thous. of bush.	4,226	4,976	4,703	5,765	4,638	3,924	9,985	7,114	2,271			
Receipts, principal markets.....thous. of bush.	20,282	16,048	15,176	19,023	19,532	18,303	21,467	19,658	13,323	205,913	217,227	261,414
Shipments, prin. markets.....thous. of bush.	12,792	9,829	8,705	13,643	11,082	11,075	15,778	11,949	9,044	139,804	147,807	182,033
Grinding (starch, glucose).....thous. of bush.	6,565	6,473	6,253	7,672	7,913	8,721	5,193	6,541	7,725	64,987	74,111	72,839
Production, crop estimate.....thous. of bush.			2,094,481			2,614,307			2,818,901			
Prices:												
No. 3, Yellow, Chicago.....dolls. per bush.	.99	.94	.82	1.01	1.01	.95	1.02	1.00	.96			
No. 3, Yellow, Kansas City.....dolls. per bush.	.92	.89	.82	.99	.99	.92	.94	.94	.86			
No. 3, White, Chicago.....dolls. per bush.	.99	.97	.88	1.01	1.02	.96	1.02	1.00	.98			
<b>Oats</b>												
Receipts, prin. markets.....thous. of bush.	25,277	15,381	9,445	36,320	13,833	15,336	27,271	14,375	13,872	108,989	132,040	132,251
Visible supply, end of month.....thous. of bush.	25,867	31,979	33,509	25,897	28,809	32,069	15,687	18,004	17,882			
Exports, including meal.....thous. of bush.	292	194	157	1,182	1,640	1,320	2,571	2,753	2,354	3,079	9,425	11,611
Production, crop estimate.....thous. of bush.			1,410,761			1,233,574			1,439,467			
Price, No. 3, white, Chicago.....dolls. per bush.	.39	.38	.36	.43	.48	.47	.38	.41	.42			
Grindings, Canada.....thous. of bush.	817	1,054	1,174	1,101	975	1,156	988	1,100	1,292	8,244	9,331	9,395
Production, oatmeal and rolled oats, Canada.....thous. of lbs.	11,032	14,843	14,749	14,228	12,263	14,632	15,968	16,499	17,760	104,465	118,142	124,052
<b>Barley</b>												
Receipts, prin. markets.....thous. of bush.	10,822	12,477	5,765	18,666	7,807	5,554	23,611	21,710	16,797	48,805	59,749	88,645
Visible supply, end of month.....thous. of bush.	7,429	11,991	12,035	9,805	9,519	9,877	6,313	8,084	8,962			
Exports.....thous. of bush.	1,281	1,359	1,295	4,624	6,209	1,795	8,658	14,830	11,639	9,738	30,391	45,361
Production, crop estimate.....thous. of bush.			1,328,020			1,303,552			1,357,487			
Price, No. 2, Minneapolis.....dolls. per bush.	.52	.53	.52	.61	.60	.59	.65	.63	.63			
<b>Rye</b>												
Receipts, prin. markets.....thous. of bush.	5,200	6,662	2,001	5,766	3,720	3,405	2,636	6,001	6,770	18,890	20,247	24,327
Visible supply, end of month.....thous. of bush.	12,649	14,842	13,860	8,015	8,889	9,903	1,440	1,927	4,437			
Exports, including flour.....thous. of bush.	23	25	49	470	1,220	562	709	2,471	3,098	307	3,473	12,790
Price, No. 2, Minneapolis.....dolls. per bush.	.60	.55	.49	.98	.97	.97	.94	.94	.94			
Production, crop estimate.....thous. of bush.			1,466,655			1,405,533			1,433,366			
<b>Total Grains</b>												
Total grain exports, incl. flour.....thous. of bush.	26,095	21,041	14,091	24,106	28,097	19,073	27,644	43,250	46,233	151,647	201,125	210,546
<b>Rice</b>												
Southern paddy, receipts at mills.....bbls.	507,920	1,084,277	2,062,928	583,944	1,387,795	2,330,286	338,269	1,197,924	2,113,697	6,179,931	6,933,201	7,368,665
Shipments:												
Total from mills.....pockets (100 lbs.)	498,911	766,414	1,322,711	506,895	841,027	1,376,400	346,076	777,583	1,245,714	7,412,049	7,905,843	7,916,218
New Orleans.....pockets (100 lbs.)	90,755	128,756	201,433	126,470	147,464	249,474	96,643	147,464	202,697	963,863	1,409,865	1,559,583
Stocks, end of month.....pockets (100 lbs.)	487,724	841,705	1,670,195	506,953	1,099,055	2,173,838	695,660	1,102,564	2,142,144			
Exports.....pockets (100 lbs.)	99,249	94,030	150,938	221,314	131,509	229,686	120,281	150,623	230,320	1,781,917	3,099,175	2,838,393
Imports.....pockets (100 lbs.)	5,977	5,667	7,285	5,549	6,292	6,662	6,026	15,412	8,864	139,960	189,147	289,547
Production, crop estimate.....thous. of bush.			1,409,976			1,402,217			1,433,240			
<b>Fruits and Vegetables</b>												
Apples:												
Production, crop estimate.....thous. of bush.			1,162,016			1,142,078			1,186,893			
Cold-storage holdings, end of month.....thous. of bbls.	114	1,872	8,566		1,633	7,997		1,631	8,733			
Car-lot shipments.....carloads	2,729	12,757	35,782	3,532	13,114	36,366	4,170	18,085	44,034	78,752	81,234	88,610
Potatoes:												
Production, crop estimate.....thous. of bush.			1,368,444			1,359,796			1,465,350			
Car-lot shipments.....carloads	15,979	21,924	28,788	16,871	23,978	31,253	15,538	20,267	28,921	216,467	216,487	220,161
Onions, car-lot shipments.....carloads	2,793	5,437	5,593	2,545	5,040	5,484	2,561	6,009	4,115	33,237	30,351	29,990
Citrus fruits, car-lot shipments.....carloads	4,441	4,510	6,301	7,348	5,684	8,652	4,254	3,636	5,868	69,235	117,601	69,191
<b>Hay</b>												
Production, crop estimate.....thous. of tons			1,84,071			1,101,736			1,193,351			
Receipts.....no. of cars	4,717	4,808	5,401	4,325	4,325	6,258	4,747	5,361	8,435	48,577	52,662	60,028
<b>Cattle and Beef</b>												
Cattle movements, primary markets:												
Receipts.....thousands	1,605	2,108	2,377	1,619	2,105	2,407	1,829	2,191	2,541	16,734	16,943	18,004
Shipments, total.....thousands	619	947	1,223	687	888	1,271	814	1,067	1,327	6,717	6,763	7,466
Shipments, stocker and feeder.....thousands	150	443	691	267	423	747	336	563	799	2,617	2,829	3,216
Local slaughter.....thousands	959	1,084	1,183	940	1,117	1,170	1,007	1,069	1,195	9,866	10,025	10,361
Beef products:												
Production, inspected.....thous. of lbs.	403,081	434,625	468,983	406,700	419,281	458,440	398,056	418,882	430,688	3,963,171	3,957,468	3,950,769
Apparent consumption.....thous. of lbs.	409,472	434,287	464,450	419,494	423,701	453,543	407,512	433,958	421,850	4,046,857	4,097,796	4,059,873
Exports.....thous. of lbs.	1,661	1,793	2,347	1,457	1,259	1,223	1,419	647	1,276	16,587	14,073	11,513
Cold-storage holdings, end of month.....thous. of lbs.	59,755	60,023	63,652	48,014	56,434	72,059	31,065	37,223	58,036			
Prices:												
Cattle, corn-fed, Chicago.....dolls. per 100 lbs.	9.14	10.33	9.97	14.69	13.80	13.31	15.11	16.19	14.63			
Steer rounds, No. 2.....dolls. per lb.	.168	.191	.195	.238	.236	.236	.244	.259	.255			
Western dressed steers, New York.....dolls. per lb.	.173	.203	.205	.251	.250	.238	.260	.284	.282			

As of Nov. 1.

Final estimate for 1929.

Final estimate for 1928.

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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Hogs and Pork</b>												
Hog movements, primary markets:												
Receipts.....thousands..	2,617	2,799	3,441	2,964	3,089	3,701	2,523	2,600	3,666	33,343	35,908	37,679
Shipments, total.....thousands..	1,133	1,090	1,392	1,132	1,128	1,381	1,160	1,093	1,341	13,071	13,308	14,186
Shipments, stocker and feeder.....thousands..	35	38	39	38	40	50	51	51	65	438	517	625
Local slaughter.....thousands..	1,487	1,703	2,048	1,835	1,944	2,333	1,863	1,500	2,311	20,262	22,575	23,452
Pork production, total:												
Production, inspected.....thous. of lbs..	500,438	472,467	575,706	586,150	552,490	651,681	466,696	434,291	623,716	6,253,743	6,840,533	6,868,783
Apparent consumption.....thous. of lbs..	558,041	551,557	637,371	617,432	614,108	717,951	550,185	588,472	675,222	5,738,612	6,039,581	6,055,255
Exports.....thous. of lbs..	72,719	53,892	53,798	87,277	84,630	97,081	81,924	65,617	75,384	809,969	972,466	886,596
Cold-storage holdings, end of month:												
Total.....thous. of lbs..	639,827	507,159	392,071	899,485	754,188	591,247	859,903	641,977	516,634			
Fresh and cured.....thous. of lbs..	550,959	447,427	356,343	719,400	600,498	491,402	682,015	515,087	433,160			
Lard (included in pork products):												
Production.....thous. of lbs..	98,167	88,059		121,894	114,179	128,951	92,401	80,135	113,968	81,149,595	81,312,598	81,297,561
Exports.....thous. of lbs..	49,287	37,417	41,396	55,487	58,329	70,698	50,658	46,158	59,865	554,820	668,009	605,649
Cold-storage holdings, end of month.....thous. of lbs..	88,868	59,732	35,728	180,085	153,690	99,845	177,888	126,890	83,474			
Prices:												
Hogs, heavy, Chicago.....dolls. per 100 lbs..	9.78	10.58	9.86	10.66	9.96	9.65	11.71	12.43	10.03			
Hams, smoked, Chicago.....dolls. per lb..	.229	.227	.221	.275	.267	.242	.249	.254	.250			
Lard, prime contract, New York.....dolls. per lb..	.114	.119	.119	.124	.122	.114	.128	.132	.124			
<b>Sheep and Lambs</b>												
Sheep movement, primary market:												
Receipts.....thousands..	2,583	3,580	3,784	2,544	3,355	4,093	2,362	3,386	3,938	24,887	22,996	21,934
Shipments, total.....thousands..	1,317	2,016	2,238	1,392	1,971	2,819	1,250	2,161	2,485	11,990	12,057	11,539
Shipments, stocker and feeder.....thousands..	465	907	1,024	639	1,027	1,831	564	1,080	1,466	3,420	4,807	4,272
Local slaughter.....thousands..	1,266	1,479	1,597	1,155	1,301	1,328	1,097	1,213	1,403	12,856	10,891	10,319
Lamb and mutton:												
Production, inspected.....thous. of lbs..	52,268	59,297	65,060	49,096	50,158	52,677	44,525	49,237	54,107	542,049	456,516	435,926
Apparent consumption.....thous. of lbs..	52,646	58,875	64,957	48,743	49,551	51,906	44,443	49,042	52,077	541,897	461,022	437,753
Cold-storage holdings, end of month.....thous. of lbs..	3,977	4,320	4,337	3,159	4,113	4,992	1,691	2,113	4,321			
Prices:												
Sheep, ewes, Chicago.....dolls. per 100 lbs..	3.09	3.08	3.84	5.16	4.68	4.63	5.72	5.50	5.35			
Sheep, lambs, Chicago.....dolls. per 100 lbs..	7.72	7.35	7.03	12.88	12.55	12.09	14.31	14.16	13.08			
<b>Miscellaneous Meats</b>												
Cold-storage holdings, end of month.....thous. of lbs..	84,324	80,653	72,414	76,539	71,511	63,914	56,888	49,798	52,201			
<b>Total Meats</b>												
Production, inspected.....thous. of lbs..	955,786	966,388	1,109,743	1,041,946	1,021,929	1,162,798	909,277	902,414	1,108,511	10,758,962	11,254,518	11,255,475
Cold-storage holdings, end of month.....thous. of lbs..	787,883	652,155	532,474	1,027,197	886,246	732,212	949,547	731,111	631,192			
Apparent consumption.....thous. of lbs..	1,020,159	1,044,719	1,166,778	1,085,669	1,087,360	1,223,457	1,002,140	1,071,472	1,149,149	10,347,366	10,598,399	10,552,881
<b>Poultry</b>												
Receipts at 5 markets.....thous. of lbs..	20,527	24,900	33,128	26,150	28,477	37,725	22,361	23,859	35,613	237,209	238,530	225,127
Cold-storage holdings, end of month.....thous. of lbs..	42,589	46,938	59,281	49,010	61,976	86,873	40,749	43,578	58,093			
<b>Fish</b>												
Total catch, prin. ports.....thous. of bbls..	35,875	40,687	30,541	43,903	50,270	33,243	30,130	24,284	27,129	342,297	327,821	252,189
Cold-storage holdings, 15th of month.....thous. of lbs..	78,997	85,498	88,616	64,810	72,674	75,864	66,170	71,352	73,410			
Canned salmon:												
Shipments, United States.....cases..	1,030,095	1,432,990	653,227	830,404	937,041	584,590	832,632	1,113,495	810,723	5,534,084	4,550,124	4,607,711
Exports, Canada.....cases..	29,494	152,779	194,623	53,100	118,250	162,831	121,152	168,963	253,265	736,335	923,787	1,024,000
<b>Butter</b>												
Production (factory).....thous. of lbs..	133,600	119,388	117,372	152,192	123,582	118,116	145,430	119,499	105,894	1,326,557	1,397,987	1,306,820
Receipts, 5 markets.....thous. of lbs..	44,821	40,853	38,933	54,885	44,500	42,963	55,339	44,969	41,884	503,457	524,597	505,294
Cold-storage holdings, creamery, end of month.....thous. of lbs..	143,089	131,489	109,582	168,952	158,541	138,405	136,175	128,071	105,811			
Apparent consumption.....thous. of lbs..	193,116	170,395	181,569	185,708	174,193	172,922	189,164	176,879	171,922	1,797,959	1,798,941	1,764,416
Wholesale price, New York.....dolls. per lb..	.39	.40	.41	.43	.40	.41	.47	.49	.48			
<b>Cheese</b>												
Total, all varieties:												
Production (factory).....thous. of lbs..	41,125	36,062	28,239	55,593	47,382	43,206	49,842	45,509	41,017	367,796	508,893	462,675
Receipts, 5 markets.....thous. of lbs..	14,952	14,509	12,226	18,605	15,289	14,344	18,727	18,222	18,665	143,411	156,192	170,743
Apparent consumption.....thous. of lbs..	47,564	43,695	41,637	39,453	38,414	42,329	36,541	48,660	43,522	409,811	387,207	414,586
Cold-storage holdings, end of month.....thous. of lbs..	107,219	103,691	96,397	106,009	102,849	94,879	101,498	98,339	97,421			
Imports.....thous. of lbs..	3,687	4,333	6,293	5,268	4,929	6,911	5,597	6,744	9,410	58,000	62,506	63,187
Exports, United States.....thous. of lbs..	137	121	183	138	284	195	215	141	204	1,679	2,273	2,133
Exports, Canada.....thous. of lbs..	10,188	12,632	16,568	11,047	16,954	17,144	15,788	17,123	24,282	61,461	74,058	93,148
American whole milk:												
Cold-storage holdings, end of month.....thous. of lbs..	87,221	85,076	78,949	86,558	84,815	78,058	83,906	81,833	82,318			
Wholesale price, New York.....dolls. per lb..	.19	.20	.19	.23	.24	.24	.26	.27	.26			
<b>Eggs</b>												
Receipts, 5 markets.....thous. of cases..	944	952	717	1,151	944	735	1,076	939	794	14,805	14,545	14,286
Cold-storage holdings, end of month:												
Case.....thous. of cases..	10,375	9,174	6,777	8,547	7,195	4,930	9,944	8,542	6,247			
Frozen.....thous. of lbs..	113,138	106,631	98,324	86,693	81,541	70,331	89,196	82,255	73,327			

\* Revised.

\* Cumulative through Sept. 30.



## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>FOODSTUFFS—Continued</b>												
<b>Milk</b>												
Condensed milk:												
Total stocks, mfrs., end of mo.—												
Case goods.....thous. of lbs..	30,875	27,314	24,650	32,142	29,893	29,182	30,542	27,837	23,949			
Bulk goods.....thous. of lbs..	25,765	23,727	21,965	29,217	30,038	27,559	19,332	17,604	14,429			
Unsold stocks, mfrs., end of mo.—												
Case goods.....thous. of lbs..	26,464	22,951	20,427	26,950	24,237	23,614	24,159	21,821	17,818			
Bulk goods.....thous. of lbs..	6,954	8,119	7,935	8,751	8,019	7,735	8,367	6,351	4,840			
Exports.....thous. of lbs..	3,294	1,479	1,718	3,366	3,116	4,019	3,246	3,405	2,531	25,585	38,373	32,997
Wholesale price, New York.....dolls. per case..	6.03	6.03	6.03	6.13	6.13	6.13	6.18	6.18	6.18			
Evaporated milk:												
Manufacturers' stocks, end of mo.—												
Total, case goods.....thous. of lbs..	244,969	218,486	224,486	272,427	249,936	244,035	161,679	165,682	164,989			
Unsold, case goods.....thous. of lbs..	197,189	179,047	187,262	186,717	192,761	192,084	101,819	134,259	138,808			
Exports.....thous. of lbs..	5,223	3,452	4,718	4,609	3,703	5,179	6,343	5,583	5,264	52,348	58,849	65,694
Wholesale price, New York.....dolls. per case..	3.80	3.80	3.80	4.30	4.21	3.95	4.45	4.58	4.58			
Production, condensed and evaporated milk.....thous. of lbs..	163,034	139,822	149,136	191,805	147,939	135,209	160,360	140,388	118,848	1,742,525	1,968,855	1,769,977
Powdered milk:												
Manufacturer's stocks, end month.....thous. of lbs..	34,186	32,770	33,105	33,491	30,775	29,118		18,857	16,864			
Exports.....thous. of lbs..	426	477	467	250	329	678	526	322	313	5,251	4,381	3,151
Net new orders.....thous. of lbs..	9,623	10,151	9,579	10,225	9,781	8,640				100,771	89,228	
Fluid milk:												
Receipts—												
Boston (including cream).....thous. of qts..	19,007	19,634	19,340	19,115	18,273	18,699	19,081	17,329	18,385	195,557	184,134	180,402
Greater New York.....thous. of qts..	116,769	119,356	116,140	117,248	118,605	118,929	117,162	113,552	116,849	1,172,055	1,170,751	1,141,036
Consumption in manufacture of oleomargarine.....thous. of lbs..	6,173	7,799	9,066	8,144	8,824	10,321	7,014	8,530	9,151	73,639	80,186	75,940
<b>Sugar</b>												
Raw:												
Imports—												
From Hawaii, Porto Rico.....long tons..	132,240	117,776	82,660	90,922	120,481	92,684	107,202	89,047	104,841	1,357,518	1,146,548	1,286,993
From foreign countries.....long tons..	181,184	273,960	277,350	410,479	292,699	256,953	274,366	315,722	257,825	2,522,789	4,023,267	3,019,787
Meltings, 8 ports.....long tons..	360,592	413,912	402,333	504,207	322,716	380,758	471,175	417,983	436,122	4,016,375	4,235,160	4,036,603
Stocks at refineries, end month.....long tons..	442,894	378,969	283,778	830,508	873,286	798,870	488,161	465,386	357,506			
Refined:												
Shipments, 2 ports.....long tons..	49,066	72,208	62,113	89,294	47,447	60,610	82,773	66,428	61,799	667,642	720,511	620,807
Stocks, 2 ports.....long tons..	53,324	53,998	46,134	47,419	49,631	39,375	34,049	26,725	32,920			
Exports, including maple.....long tons..	7,246	6,668	8,553	8,579	5,705	5,674	11,329	7,413	11,971	58,178	84,082	88,795
Prices:												
Wholesale, 96° centrif., N. Y.....dolls. per lb..	.032	.031	.033	.038	.040	.040	.041	.042	.039			
Wholesale, granulated, N. Y.....dolls. per lb..	.044	.043	.044	.054	.053	.054	.055	.056	.052			
Retail granulated, N. Y.....dolls. per lb..	.054	.053	.053	.060	.061	.061	.063	.063	.062			
Retail average, 51 cities.....rel. to 1913..	111	107	106	120	122	122	129	127	126			
Cuban movement (raw):												
Receipts at Cuban ports.....long tons..	160,710	152,166	124,848	211,090	120,530	94,130	182,414	168,638	154,547	3,468,161	4,687,084	4,753,634
Exports.....long tons..	314,239	274,588	291,311	464,310	349,972	241,256	348,808	370,339	323,317	2,702,225	4,299,809	3,429,724
Stocks, end of month.....long tons..	1,278,971	1,162,515	957,767	739,068	503,592	326,927	829,437	630,548	446,210			
<b>Candy</b>												
Sales by manufacturers.....thous. of dolls..	19,044	28,027	31,004	26,174	34,779	38,523				239,229	275,013	
<b>Coffee</b>												
Imports.....thous. of bags..	712	991	1,159	875	925	1,004	925	1,655	809	10,052	9,453	10,147
Visible supply:												
World.....thous. of bags..	5,529	5,498	5,051	5,269	5,227	5,043	5,515	5,378	5,390			
United States.....thous. of bags..	784	934	828	685	689	686	793	702	693			
Receipts, total, Brazil.....thous. of bags..	1,462	1,595	1,437	1,191	1,266	1,365	1,181	1,040	1,157	13,503	11,607	11,798
Clearances:												
Total, Brazil, for world.....thous. of bags..	1,318	1,469	1,176	1,242	1,234	1,324	1,057	997	1,330	12,155	11,559	11,501
Total, Brazil, for U. S.....thous. of bags..	652	852	659	655	642	682	548	570	667	6,414	5,978	6,082
Price, Rio No. 7, Brazil grades.....dolls. per lb..	.072	.072	.089	.161	.158	.139	.173	.173	.178			
<b>Tea</b>												
Imports.....thous. of lbs..	8,134	8,717	9,917	7,019	8,737	10,555	8,086	9,754	10,512	69,332	71,606	71,302
Price, Formosa fine, N. Y.....dolls. per lb..	.290	.224	.223	.310	.310	.310	.325	.325	.310			
<b>Cocoa</b>												
Shipments from the Gold and Nigerian Coasts, Africa.....long tons..												
Imports.....long tons..	13,441	7,554	12,660	5,238	4,459	18,491	4,011	3,724	15,326	198,120	210,687	187,901
Spot price, Accra, New York.....dolls. per lb..	17,863	11,008	7,410	15,922	10,481	16,147	13,461	6,388	5,450	146,583	189,504	148,498
	.0775	.0670	.0675	.1081	.1100	.1063	.1213	.1163	.1125			
<b>TOBACCO</b>												
Consumption (tax-paid withdrawals):												
Large cigars.....thousands..	517,200	523,973	623,861	598,583	591,738	701,711	601,877	586,267	723,318	5,011,370	5,517,882	5,411,228
Small cigarettes.....thousands..	10,577,438	10,190,031	10,947,130	10,930,629	10,350,544	11,202,294	10,627,344	9,126,271	9,921,537	102,998,604	101,736,443	89,864,438
Manufactured tobacco and snuff.....thous. of lbs..	31,370	32,166	33,026	34,470	32,260	33,738	34,981	31,789	35,333	317,085	324,731	348,597
Production, crop estimate.....thous. of lbs..			1,518,781			1,519,081			1,374,547			
Exports:												
Unmanufactured.....thous. of lbs..	39,527	53,841	78,262	41,343	55,965	79,150	26,833	57,509	88,509	460,597	428,827	437,107
Cigarettes.....thousands..	295,744	305,676	318,751	659,187	558,249	586,767	860,791	961,827	956,846	4,336,613	7,354,575	9,482,337
Stocks, end of quarter:												
Chewing, smoking, snuff, and export.....thous. of lbs..		1,214,466			1,214,166			1,274,580				
Cigar tobacco.....thous. of lbs..		7,303,104			7,313,147			7,308,660				
Total, including imported.....thous. of lbs..		1,649,000			1,611,938			1,679,477				

As of Nov. 1.

Final estimate for 1929.

Final estimate for 1928.

Revised.

Quarter ended in month indicated.



## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>TRANSPORTATION</b>												
<b>River and Canal Cargo Traffic</b>												
Panama Canal:												
Total cargo traffic, thous. of long tons	2, 145	2, 000	2, 394	2, 681	2, 433	2, 846	2, 425	2, 313	2, 582	23, 415	26, 392	24, 157
In American vessels.....thous. of long tons	1, 022	1, 040	1, 133	1, 311	1, 194	1, 344	1, 103	1, 140	1, 195	11, 242	12, 355	11, 304
In British vessels, thous. of long tons	532	436	546	639	600	774	707	602	679	5, 771	6, 966	6, 754
Sault Ste. Marie canals.....thous. of short tons	11, 267	10, 347	9, 094	14, 085	13, 356	11, 213	13, 680	12, 812	13, 603	67, 455	85, 186	75, 273
New York State canals.....thous. of short tons	457	458	608	380	389	491	517	411	536	3, 216	2, 544	2, 811
Cape Cod Canal.....thous. of met. tons	247, 376	244, 640	230, 043	206, 188	199, 955	243, 668	148, 691	130, 566	160, 903	2, 048, 600	1, 779, 395	1, 111, 480
Suez Canal.....thous. of met. tons	2, 288			2, 762	2, 772	2, 997	2, 602	2, 634	2, 622			
Welland Canal.....short tons	985, 829	980, 532	916, 563	612, 943	574, 241	623, 651	1, 115, 601	996, 833	1, 115, 190	5, 437, 346	4, 274, 113	6, 321, 341
St. Lawrence Canal.....short tons	1, 005, 853	914, 038	876, 821	809, 323	775, 772	749, 287	1, 359, 561	1, 150, 058	1, 270, 051	5, 551, 929	5, 171, 381	7, 244, 159
Mississippi River Govt. barges.....short tons	70, 088	113, 749	103, 000	85, 000	90, 947	137, 021	113, 903	148, 377	120, 444	959, 308	1, 115, 477	1, 151, 903
Ohio River, Pittsburgh, Pa., to Wheeling, W. Va.....short tons	997, 548	927, 902	1, 037, 028	1, 080, 996	1, 144, 682	1, 151, 819	1, 034, 775	963, 766	1, 010, 860	9, 092, 098	9, 414, 890	8, 469, 721
Allegheny River.....short tons	387, 260	282, 393	246, 832	330, 123	364, 309	366, 351	346, 670	288, 629	377, 744	2, 567, 698	2, 720, 808	2, 409, 291
Monongahela River.....short tons	2, 152, 186	2, 086, 575	2, 075, 278	2, 500, 617	2, 374, 949	2, 464, 099	2, 304, 619	2, 305, 681	2, 396, 557	21, 674, 832	23, 717, 749	21, 679, 768
Ohio River, tonnage originating (quarterly):												
Pittsburgh district.....thous. of short tons		7 3, 015			7 3, 287			7 2, 932		8 8, 009	8 8, 189	8 7, 419
Huntington district.....thous. of short tons		7 1, 394			7 1, 862			7 1, 423		8 4, 001	8 4, 211	8 3, 861
Cincinnati district.....thous. of short tons		7 294			7 179			7 139		8 490	8 354	8 362
Louisville district.....thous. of short tons		7 1, 305			7 1, 251			7 1, 178		8 2, 813	8 3, 970	8 3, 042
Total.....thous. of short tons		7 6, 009			7 6, 579			7 5, 673		8 15, 314	8 16, 724	8 14, 685
<b>Ocean Traffic</b>												
Clearances, vessels in foreign trade:												
Total.....thous. of net tons	8, 480	7, 653	7, 074	8, 428	7, 559	7, 503	8, 377	7, 365	7, 806	69, 906	69, 916	66, 012
American.....thous. of net tons	3, 359	3, 060	2, 651	3, 219	2, 833	3, 041	3, 173	2, 912	3, 252	27, 457	26, 847	25, 804
Foreign.....thous. of net tons	5, 121	4, 593	4, 423	5, 208	4, 726	4, 463	5, 204	4, 453	4, 554	42, 449	43, 069	40, 208
<b>Shipbuilding</b>												
Completed during month:												
Total.....gross tons	75, 030	32, 083	51, 667	32, 298	28, 325	8, 620	12, 537	27, 833	7, 148	358, 015	180, 751	155, 139
Steel seagoing.....gross tons	33, 302	20, 125	16, 895	21, 497	24, 322	2, 167	2, 245	24, 483	4, 318	180, 903	99, 991	95, 059
Building or under contract, end of month:												
Merchant vessels, thous. of gross tons	489	423	366	215	254	400	235	242	260	4, 138	2, 238	2, 421
<b>Freight cars</b>												
Surplus (daily av. last week of month):												
Total.....cars	431, 971	394, 032	402, 637	158, 112	118, 523	124, 194	201, 864	103, 906	105, 017			
Box.....cars	232, 896	202, 398	230, 705	87, 985	72, 612	80, 956	114, 355	53, 170	54, 263			
Coal.....cars	141, 721	139, 416	126, 935	31, 021	12, 117	17, 066	47, 615	21, 809	21, 128			
Shortage (daily av. last week of month):												
Total.....cars				12	127	436	8	279	44			
Box.....cars												
Coal.....cars					112	34	8	159	44			
<b>Car loadings:</b>												
Total.....cars	4, 670, 368	3, 725, 243	3, 817, 786	5, 600, 706	4, 542, 289	4, 679, 411	5, 348, 407	4, 470, 541	4, 703, 882	38, 976, 434	44, 599, 437	42, 928, 644
Grain and grain products.....cars	303, 994	189, 215	162, 815	316, 111	199, 464	185, 748	288, 572	238, 470	219, 320	1, 932, 611	2, 044, 348	2, 061, 036
Livestock.....cars	105, 550	107, 777	128, 906	121, 357	123, 685	149, 137	126, 780	136, 923	154, 670	1, 051, 629	1, 160, 482	1, 248, 500
Coal and coke.....cars	769, 079	637, 889	733, 345	902, 230	799, 349	864, 517	874, 369	764, 880	869, 200	6, 948, 628	7, 939, 948	7, 529, 078
Forest products.....cars	207, 372	161, 532	158, 742	343, 804	251, 851	254, 486	332, 061	254, 527	264, 690	2, 073, 453	2, 791, 096	2, 793, 852
Ore.....cars	284, 388	195, 118	153, 932	378, 809	274, 599	240, 164	321, 700	250, 969	240, 985	1, 550, 281	2, 102, 608	1, 706, 021
Merchandise and l. c. l.....cars	1, 178, 655	943, 536	965, 743	1, 307, 838	1, 048, 912	1, 086, 100	1, 290, 844	1, 034, 957	1, 081, 804	10, 248, 679	11, 020, 853	10, 944, 53
Miscellaneous.....cars	1, 821, 330	1, 490, 176	1, 514, 303	2, 230, 557	1, 844, 429	1, 899, 259	2, 114, 081	1, 789, 815	1, 873, 213	15, 171, 153	17, 540, 102	16, 645, 599
<b>Railroad Operations</b>												
Operating revenues:												
Freight.....thous. of dolls.	354, 713	363, 473	385, 684	446, 610	435, 530	483, 596	421, 771	424, 092	493, 064			
Passenger.....thous. of dolls.	67, 432	59, 092	52, 368	84, 315	75, 759	66, 165	85, 187	80, 200	69, 690			
Total operating.....thous. of dolls.	466, 370	467, 469	483, 455	587, 322	567, 365	609, 358	558, 751	556, 916	618, 751			
Operating expenses.....thous. of dolls.	327, 204	320, 131	326, 286	396, 205	383, 859	404, 943	384, 528	376, 241	402, 161			
Net operating income.....thous. of dolls.	95, 604	104, 078	112, 251	141, 758	134, 346	153, 202	138, 728	134, 491	165, 623			
Freight carried.....mills. ton-miles	37, 421	36, 220		44, 950	44, 222	47, 814	42, 425	43, 791	48, 234			
<b>Railway Equipment</b>												
Locomotives (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....number	56, 287	56, 236	56, 157	57, 477	57, 355	57, 195	59, 709	59, 600	59, 371			
Tractive power.....mills. of lbs.	2, 540	2, 541	2, 543	2, 540	2, 540	2, 538	2, 585	2, 582	2, 578			
In bad order, end of month—												
Awaiting classified repairs.....number	4, 585	4, 676	4, 936	4, 002	4, 075	4, 057	4, 486	4, 327	4, 414			
Per cent of total in use.....per cent	8. 2	8. 6	8. 9	7. 0	7. 2	7. 1	7. 6	7. 3	7. 5			
Installed.....number	161	147	127	153	127	166	114	93	102	1, 461	1, 377	1, 190
Retired.....number	216	198	206	306	248	327	320	260	331	2, 116	2, 881	2, 609
New orders.....number	34	25	7	31	84	125	70	8	4	337	797	253
Shipments, manufacturers' (Census)—												
Total.....number	77	65	50	129	75	96	34	41	36	667	688	471
Steam, domestic.....number	68	62	48	117	60	90	23	28	26	632	570	311
Electric, domestic.....number	5	3	2	6	7	6	4	2		19	38	87
Unfilled orders (railroads), end of mo.—												
From manufacturers.....number	189	143	102	370	329	248	81	98	104			
In railroad shops.....number	46	38	37	25	25	46	19	15	17			
Unfilled orders, manufacturers' (Census)—												
Total.....number	234	174	132	436	429	423	204	178	170			
Steam, domestic.....number	193	136	96	392	347	347	135	118	113			
Electric, domestic.....number	36	33	31	13	55	49	26	27	29			
Exports, steam.....number	2	2	5	30	20	11	20	33	8	49	176	174

\* Revised.

† Quarter ended in month indicated.

‡ Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>TRANSPORTATION—Continued</b>												
<b>Railway Equipment—Continued</b>												
Freight cars (Am. Ry. Assn.):												
Owned, end of month—												
Quantity.....thous. of cars..	2,274	2,275	2,272	2,268	2,266	2,265	2,299	2,296	2,292			
Capacity.....mills. of lbs..	211,831	211,942	211,822	208,897	209,001	209,137	210,483	210,335	210,092			
In bad order, end of month—												
Quantity.....cars..	153,046	157,141	157,727	134,253	132,611	126,055	149,252	148,333	138,238			
Per cent of total in use...per cent..	6.8	7.1	7.1	6.0	6.0	5.7	6.6	6.6	6.2			
New orders.....cars..	823	565	3,291	2,562	4,257	17,207	767	1,236	1,635	36,428	83,397	26,271
Shipments—												
Total.....cars..	5,940	4,235	2,384	7,811	7,614	7,818	5,295	3,220	2,507	62,684	57,403	36,157
Domestic.....cars..	5,934	4,176	2,307	7,633	7,239	7,363	5,261	3,000	2,345	61,341	54,363	35,108
Unfilled orders (railroads)—												
Total.....cars..	10,802	6,175	5,423	31,671	29,317	33,123	8,177	6,619	5,437			
From manufacturers.....cars..	7,723	4,127	2,445	27,289	25,554	29,857	5,673	3,878	1,880			
In railroad shops.....cars..	3,079	2,048	2,978	4,382	3,763	3,266	2,504	2,741	3,557			
Passenger cars:												
New orders.....cars..	13	62		149		51	589	2	56	623	1,128	1,760
Shipments—												
Total.....cars..	35	50	73	76	96	69	147	146	68	648	821	885
Domestic.....cars..	35	50	73	64	77	69	144	143	68	608	753	815
<b>Highways</b>												
Concrete pavements, new contracts:												
Total.....thous. of sq. yds..	10,657	10,080	9,745	11,969	10,220	13,151	16,889	14,752	7,068	130,720	126,843	131,568
Road.....thous. of sq. yds..	7,243	6,360	6,820	7,010	5,945	9,157	9,254	9,630	3,856	98,135	84,303	83,153
Federal-aid highways:												
Completed—												
Cost.....thous. of dolls..	18,541	18,422	41,088	9,729	22,469	27,504	12,145	26,105	13,413	153,313	143,233	132,926
Distance.....miles..	537	544	1,025	442	830	996	599	1,169	598	5,132	5,108	5,707
Under construction, end of month												
.....miles..	8,339	8,459	8,325	8,724	8,584	8,322	9,547	9,427	9,337	76,512	81,269	59,695
<b>Passenger Travel</b>												
National Parks:												
Visitors.....number..	549,287	183,583	72,270	523,623	220,766	67,012	499,633	222,698	68,997	2,055,423	2,006,922	1,979,397
Automobiles entered.....number..	127,133	43,939	16,777	112,574	49,102	12,415	98,523	44,873	10,466	500,314	423,470	378,126
Arrivals from abroad:												
Immigrants.....number..	14,816	17,792		22,778	28,020	26,740	24,629	29,317	29,917	150,661	202,837	217,218
United States citizens.....number..	69,957	80,900		70,783	85,946	47,757	63,191	80,233	49,831	378,511	375,982	350,659
Departures abroad:												
Emigrants.....number..	5,245	5,100		5,571	5,150	4,907	6,488	8,093	7,479	37,177	40,333	55,307
United States citizens.....number..	88,372	56,526		70,551	49,429	39,767	50,323	42,105	34,643	398,384	365,074	369,776
Passports issued.....number..	10,510	8,772	7,834	11,295	9,135	8,485	9,866	8,056	8,494	189,166	180,715	171,813
Pullman company operations:												
Revenue.....thous. of dolls..	7,128	6,476		7,927	7,433	6,800	7,593	7,297	6,650	59,495	63,355	61,916
Passengers carried.....thousands..	2,767	2,517		3,287	3,031	2,721	3,312	3,081	2,738	22,871	25,546	25,962
Trend of business in hotels:												
Room occupancy...per ct. of capacity..	60	64	69	65	69	75	63	68	72			
Average sale per occupied room	3.96	3.82	3.90	4.13	4.02	4.11	4.09	3.98	4.07			
<b>Warehouses</b>												
Public merchandise warehouses, space occupied...per ct. of total..	68.4	68.3		71.9	74.3	76.4	67.9	66.1	66.4			
<b>PUBLIC UTILITIES</b>												
Telephone companies:												
Operating revenues.....thous. of dolls..	76,279	76,925		75,898	75,606	79,653	68,784	68,432	72,464	700,669	672,976	609,002
Operating income.....thous. of dolls..	16,445	17,756		17,601	18,197	20,047	15,985	16,496	18,565	157,386	161,390	149,041
Telegraph companies:												
Commercial telegraph												
tolls.....thous. of dolls..	10,121	10,117		12,067	11,531	12,485	11,530	11,010	11,765	94,239	103,163	90,874
Operating revenues.....thous. of dolls..	12,965	13,054		15,316	14,751	15,047	14,328	13,911	14,928	120,871	130,820	121,259
Operating income.....thous. of dolls..	1,400	1,467		1,688	1,724	2,029	1,887	1,918	2,247	10,681	14,910	15,576
Gas and electric companies:												
Gross earnings.....thous. of dolls..	189,423	191,696		179,500	185,000	197,500	173,952	179,346	190,796	1,754,059	1,697,250	1,648,724
Net earnings.....thous. of dolls..	71,538	80,838		73,000	80,000	83,000	61,810	68,236	73,671	751,426	731,500	622,668
Electric railways (212 companies):												
Passengers carried.....thous. of persons..	646,750	646,036	701,279	724,812	704,818	774,466	736,223	717,810	795,140	7,044,002	7,599,377	7,712,505
<b>ELECTRIC POWER</b>												
Electric power production:												
Total.....mills. of kw. hours..	7,878	7,763		8,356	8,062	8,709	7,510	7,276	7,922	71,720	71,889	64,263
By water power.....mills. of kw. hours..	2,488	2,257		2,837	2,473	2,732	3,036	2,787	2,873	26,026	26,501	26,274
By fuels.....mills. of kw. hours..	5,390	5,506		5,518	5,589	5,976	4,474	4,488	5,049	45,655	45,388	37,989
In street railways,												
manf. plants, etc. mills. of kw. hours..	526	479		390	380	389	382	355	374	4,533	3,455	3,871
In central stations, mills. of kw. hours..	7,352	7,284		7,966	7,682	8,320	7,128	6,921	7,548	67,189	68,434	60,408
Electric power production (Canada):												
Total.....mills. of kw. hours..	1,403	1,428		1,445	1,477	1,594	1,314	1,280	1,460	13,145	12,902	11,589
By water power.....mills. of kw. hours..	1,382	1,404		1,426	1,455	1,559	1,298	1,262	1,439	12,923	12,681	11,436
Exported.....mills. of kw. hours..	143	154		133	136	126	146	130	155	1,169	1,092	1,173
Electric power, gross												
revenue.....thous. of dolls..	168,100	174,400		166,200	173,600	182,500	148,600	156,100	164,900	1,588,200	1,541,000	1,391,199
Rate of manufacturing operations (based on the consumption of electrical energy for power purposes):												
Activity by geographical divisions—												
United States...rel. to 1923-25..	106.9	110.7	103.2	128.2	135.8	134.6	120.8	134.5	132.0			
New England...rel. to 1923-25..	87.1	88.1	93.2	108.7	118.2	126.2	102.2	115.3	119.3			
North Central...rel. to 1923-25..	112.0	110.6	107.3	135.5	140.6	136.9	132.4	149.7	143.5			
Middle Atlantic...rel. to 1923-25..	94.3	103.1	99.6	127.9	138.0	133.0	118.3	136.0	133.4			
Southern...rel. to 1923-25..	110.2	120.1	118.4	132.7	126.3	131.2	112.8	127.5	129.7			
Western...rel. to 1923-25..	125.0	130.9	116.1	127.0	143.1	133.8	127.5	150.8	148.7			

Revised.

Cumulative through September 30.

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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>ELECTRIC POWER—Continued</b>												
Rate of manufacturing operations—Con.												
Activity by industries—												
All industry.....rel. to 1923-25..	106.9	110.7	103.2	128.2	135.8	134.6	120.8	134.5	132.0			
Chemical and allied products.....rel. to 1923-25..	135.7	147.1	122.4	125.0	139.9	145.0	119.2	132.0	129.4			
Food and kindred products.....rel. to 1923-25..	141.2	148.6	137.2	132.2	141.2	131.7	128.3	142.0	138.0			
Rolling mills and steel plants.....rel. to 1923-25..	112.0	110.3	126.0	150.9	152.3	144.8	125.4	141.2	144.7			
Metal working plants.....rel. to 1923-25..	95.2	97.4	87.0	134.6	147.4	145.0	125.8	144.2	144.5			
Metal groups.....rel. to 1923-25..	101.3	101.4	101.2	140.7	149.2	145.1	125.5	143.0	144.6			
Leather and its products.....rel. to 1923-25..	87.7	73.5	84.9	102.2	105.4	93.0	94.7	106.9	103.8			
Lumber and its products.....rel. to 1923-25..	97.7	105.6	77.1	102.3	111.4	109.8	111.6	111.3	109.3			
Paper and pulp.....rel. to 1923-25..	115.1	119.3	120.0	123.6	127.0	141.0	129.1	132.0	133.3			
Rubber and its products.....rel. to 1923-25..	110.5	107.2	99.0	120.2	133.7	135.1	138.4	151.2	146.4			
Shipbuilding.....rel. to 1923-25..	122.8	124.1	121.5	96.3	114.9	134.4	67.3	72.3	73.8			
Stone, clay, and glass.....rel. to 1923-25..	118.2	120.5	106.3	157.7	165.7	159.2	135.3	152.0	144.7			
Textiles.....rel. to 1923-25..	72.5	85.1	85.4	110.0	115.5	129.8	97.3	112.5	121.0			
Automobiles, including repair parts.....rel. to 1923-25..	86.6	88.4	80.9	143.0	138.1	122.4	143.2	161.0	141.2			
<b>EMPLOYMENT AND WAGES</b>												
Employment in factories:												
New York State.....rel. to 1923-25..	73.9	75.6	74.3	87.7	89.3	89.7	82.5	84.3	86.0			
Maryland.....rel. to 1924.....	82.0	83.4	81.6	93.0	94.2	93.1	85.1	89.0	90.4			
Iowa.....rel. to 1923-25..	117.2	115.1	114.3	133.2	133.4	133.6	124.0	124.0	126.0			
Massachusetts.....rel. to 1925-27..	72.8	73.3	72.5	88.8	91.1	90.8	84.9	86.5	90.1			
Illinois.....rel. to 1925-27..	84.9	82.9	80.2	105.1	105.8	103.8	96.3	97.7	97.8			
Ohio.....rel. to 1926.....	82.8	81.9	80.2	106.5	105.6	102.9	104.9	106.5	106.3			
Cleveland.....rel. to Jan., 1921..	96.1	92.0	91.6	125.0	124.0	119.2	113.8	114.5	110.6			
Detroit.....rel. to 1923-25..	83.0	74.8	79.0	127.0	119.0	98.5	132.7	134.0	129.0			
New York State.....number.....	408,895	418,262	411,333	485,330	494,311	496,578	450,303	460,357	475,753			
Oklahoma.....number.....	35,139	35,058	35,058	38,978	38,239	38,620	31,137	30,812	31,960			
Total pay roll:												
New York State (weekly).....thous. of dolls..	11,631	12,061	11,489	14,599	15,053	14,938	13,411	13,862	14,168			
Oklahoma (weekly).....thous. of dolls..	958	944	944	1,074	1,015	1,054	877	865	868			
New York State.....rel. to 1923-25..	77.2	80.0	76.2	96.8	99.9	99.1	89.0	92.0	94.0			
Illinois.....rel. to 1925-27..	73.2	71.4	69.0	106.0	105.0	105.8	96.3	97.1	98.3			
Employment:												
Canada.....rel. to cal. year 1926..	118.8	116.6	116.2	127.8	126.8	125.6	119.3	119.1	118.8			
Ohio construction.....rel. to 1923-25..	95.4	89.6	89.6	120.9	115.0	114.7	138.4	136.3	134.0			
Employment, trade-unions:												
United States.....per cent of total..	78.0	79.0	79.0	91.0	90.0	89.0	91.0	90.0	91.0			
Canada.....per cent of total..	90.7	90.6	90.6	96.5	96.3	94.0	97.6	97.8	96.9			
Anthracite mines:												
Employment.....rel. to 1923-25..	80.8	84.5	99.7	93.6	105.5	109.8	110.9	112.7	135.9			
Pay roll.....rel. to 1923-25..	67.2	78.1	99.9	68.9	83.4	116.6	97.2	112.5	134.7			
Federal civilian employees, Washington, D. C., end of month.....number.....	70,197	70,598	70,790	63,632	63,516	63,713	62,111	62,010	62,016			
Average weekly earnings, factories:												
Illinois.....dollars.....	26.45	26.43	26.42	28.57	28.26	29.17	29.13	28.31	28.57			
New York State.....dollars.....	28.45	28.84	27.94	30.08	30.47	30.08	29.39	29.72	29.78			
Wisconsin.....dollars.....	22.21	22.16	22.16	26.51	25.17	26.70	26.60	26.30	27.25			
Oklahoma.....dollars.....	27.27	26.92	26.92	27.55	26.50	27.28	28.15	28.08	27.16			
New York.....rel. to 1923-25..	104.4	105.9	102.6	110.4	111.9	110.4	107.9	109.1	109.3			
Illinois.....rel. to 1925-27..	93.2	93.1	93.1	100.7	99.6	102.8	99.9	99.8	100.7			
Average weekly earnings (National Industrial Conference Board):												
Grand total (both sexes).....dollars..	25.38	25.22	24.92	27.94	28.58	28.80	27.35	27.76	27.76			
Total, males.....dollars.....	27.15	26.87	26.25	30.69	31.56	31.60	30.30	30.93	30.70			
Skilled male.....dollars.....	28.35	28.08	27.25	32.18	33.06	33.14	31.77	32.42	32.26			
Unskilled male.....dollars.....	22.30	21.93	22.13	25.09	25.82	25.64	24.78	25.27	24.72			
Total, women.....dollars.....	15.71	15.27	15.72	17.47	17.81	17.84	17.04	17.33	17.34			
Average weekly hours:												
Nominal (both sexes).....hours.....	49.1	48.3	48.2	49.4	49.6	49.3	49.6	49.8	49.6			
Actual (both sexes).....hours.....	42.6	42.5	42.3	48.4	49.0	49.4	47.9	48.2	48.0			
Wages, road labor, by districts:												
New England.....cents per hour.....	50	50	49	51	51	51	48	48	51			
Middle Atlantic.....cents per hour.....	42	42	41	42	43	42	41	41	41			
South Atlantic.....cents per hour.....	23	23	22	30	29	27	34	24	26			
East South Central.....cents per hour.....	23	24	24	25	25	26	26	26	26			
West South Central.....cents per hour.....	26	27	27	30	31	30	29	26	30			
East North Central.....cents per hour.....	36	38	38	39	39	38	39	39	40			
West North Central.....cents per hour.....	36	37	38	37	37	37	38	39	39			
Mountain.....cents per hour.....	46	48	48	48	48	48	50	52	49			
Pacific.....cents per hour.....	53	53	53	52	54	53	53	54	54			
United States, average, cents per hour.....	39	40	39	40	41	40	42	43	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.....	177	170	193	124	114	127	129	107	117			
Eastern States.....number.....	214	181	192	136	121	132	223	120	128			
Central States.....number.....	204	222	240	135	132	148	132	126	133			
Southern States.....number.....	252	201	277	178	148	164	121	91	142			
Western States.....number.....	79	71	74	75	67	71	69	63	62			
Illinois.....number.....	234	230	278	137	136	147	138	130	133			
Wisconsin.....number.....	162	188	188	117	117	128	107	104	116			
Canada.....number.....	145	159	159	119	129	143	109	110	123			

\* 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>EMPLOYMENT AND WAGES—Con.</b>												
<b>Factory Labor Turnover</b>												
(Percentage of number on pay roll)												
Departures:												
Total.....per cent (annual basis)...	28.0	30.0	27.8	48.5	50.6	42.6	42.3	50.6	41.9			
Voluntary												
quits.....per cent (annual basis)...	11.2	13.7	9.6	38.4	38.2	28.5	31.9	40.3	31.9			
Lay offs.....per cent (annual basis)...	15.3	14.3	17.0	4.8	6.3	9.4	5.1	5.0	4.7			
Discharges.....per cent (annual basis)...	1.5	2.0	1.2	5.3	6.1	4.7	5.3	5.3	5.3			
Accessions.....per cent (annual basis)...	14.7	22.2	17.6	54.3	59.7	46.0	55.7	56.9	57.1			
Industrial disputes:												
Disputes.....number.....	635	48		43	49	31	42	34	42			
Workers involved.....number.....	7,112	13,970		6,714	8,132	6,135	105,760	62,862	41,474			
Man-days lost in month.....number.....	145,696	203,126		358,148	244,864	272,018	3,553,750	2,571,982	1,304,913			
<b>DISTRIBUTION MOVEMENT</b>												
<b>Retail Sales</b>												
Mail-order houses:												
Total sales, 2 houses.....thous. of dolls...	50,682	54,419	68,877	60,088	63,078	79,256	45,994	50,814	63,587	538,582	571,267	443,314
Sears, Roebuck & Co.....thous. of dolls...	29,715	33,086	38,785	35,133	36,950	47,075	28,986	30,004	37,002	317,347	345,386	268,367
Montgomery Ward & Co.....thous. of dolls...	20,967	21,333	30,092	24,955	26,128	32,181	17,008	20,810	26,585	221,245	225,880	174,947
Ten-cent chain stores:												
Total sales (4 chains).....thous. of dolls...	41,995	42,377	48,597	46,613	43,180	51,061	41,049	42,906	48,993	421,270	434,709	308,503
Total stores operated (4 chains).....number.....	2,988	3,002	3,011	2,787	2,816	2,834	2,552	2,586	2,615			
F. W. Woolworth & Co.....thous. of dolls...	22,055	22,353	26,422	24,446	22,264	27,678	21,812	22,637	26,896	222,881	232,719	217,206
Stores operated.....number.....	1,881	1,886	1,889	1,802	1,815	1,823	1,675	1,698	1,718			
S. S. Kresge Co.....thous. of dolls...	11,410	11,265	12,853	13,001	11,971	13,761	11,272	11,914	12,925	113,868	118,065	109,485
Stores operated.....number.....	656	665	668	547	560	568	468	474	481			
McCrary Stores Corp.....thous. of dolls...	3,406	3,278	3,606	3,853	3,582	3,798	3,115	3,344	3,471	32,824	33,559	30,372
Stores operated.....number.....	240	240	241	240	241	243	224	224	224			
S. H. Kress & Co.....thous. of dolls...	5,125	5,478	5,716	5,317	5,363	5,824	4,850	5,110	5,701	51,696	50,372	47,440
Stores operated.....number.....	211	211	213	198	200	200	185	190	192			
W. T. Grant Co.....thous. of dolls...	5,385	5,286	7,084	5,066	4,777	6,164	3,996	4,708	5,418	52,583	47,401	39,144
Stores operated.....number.....	309	318	340	252	258	263	191	199	203			
F. & W. Grand.....thous. of dolls...	1,669	1,663	2,026	1,731	1,731	2,016	1,236	1,443	1,756	16,897	16,261	12,053
Stores operated.....number.....	108	111	111	89	90	91	74	76	80			
Isaac Silver & Bros.....thous. of dolls...	608	566	693	719	679	919	460	512	610	6,261	6,133	4,676
Stores operated.....number.....	45	45	44	43	43	45	28	29	30			
J. C. Penny Co.....thous. of dolls...	14,397	15,956	19,860	16,493	18,245	23,301	12,877	16,478	19,447	150,281	155,691	132,290
Stores operated.....number.....	1,440	1,446	1,450	1,292	1,337	1,373	982	1,006	1,020			
G. C. Murphy Co.....thous. of dolls...	1,362	1,344	1,621	1,273	1,336	1,403	873	1,046	1,056	12,747	11,616	8,537
Stores operated.....number.....	163	162	163	148	149	150	118	119	120			
Restaurant chains:												
Total sales (3 chains).....thous. of dolls...	4,642	4,642	4,884	5,151	5,005	5,262	4,577	4,591	4,802	47,799	49,321	45,974
Stores operated.....number.....	379	380	377	369	367	373	369	366	367			
Childs Co., sales.....thous. of dolls...	2,173	2,136	2,259	2,478	2,400	2,474	2,217	2,191	2,266	22,137	23,076	21,850
Stores operated.....number.....	113	113	111	113	112	109	116	113	110			
J. R. Thompson Co., sales.....thous. of dolls...	1,208	1,215	1,287	1,331	1,282	1,367	1,190	1,185	1,269	12,511	13,012	12,123
Stores operated.....number.....	120	120	121	122	122	121	121	121	123			
Waldorf System (Inc.), sales.....thous. of dolls...	1,261	1,291	1,338	1,342	1,323	1,421	1,170	1,215	1,267	13,151	13,233	12,009
Stores operated.....number.....	146	147	145	134	133	143	132	132	134			
Installment sales in New England dept. stores, ratio to total sales.....per cent...	13.0	8.0	8.8	12.5	7.6	8.8	12.1	8.2	9.0			
<b>Advertising</b>												
Magazine advertising.....thous. of lines...												
Magazine advertising, total cost.....thous. of dolls...	1,658	2,145	3,490	1,959	2,536	3,050	1,770	2,287	2,916			
Newspaper advertising.....thous. of lines...	12,075	15,214	17,759	12,433	16,548	20,319	11,437	14,349	19,595	169,144	171,254	157,407
Radiobroadcast cost, facilities.....thous. of dolls...	70,018	88,648	98,437	84,645	105,702	118,614	83,240	99,839	112,053	887,916	1,015,453	971,287
National advertising in newspapers:												
Total.....thous. of lines...	1,960	2,123	2,669	1,330	1,599	1,948	676	814	1,362	21,515	14,851	7,985
Passenger cars.....thous. of lines...	31,126	40,579		42,932	52,195	64,037	39,167	43,402	52,955	412,899	473,953	371,930
Tires, trucks, and accessories.....thous. of lines...	2,736	3,154		6,910	7,033	7,396	7,064	6,720	6,523	46,077	73,901	61,676
Financial.....thous. of lines...	5,431	4,063		6,570	5,274	5,719	5,681	4,696	5,022	48,255	52,831	38,700
Building materials.....thous. of lines...	3,755	5,112		6,155	7,374	8,812	4,796	5,821	7,193	56,255	69,669	55,053
Electrical appliances, supplies.....thous. of lines...	99	216		279	757	769	400	811	821	2,733	5,609	4,997
Foods and beverages.....thous. of lines...	459	685		851	1,550	1,354	887	895	893	9,302	10,993	7,621
Heating and plumbing equipment.....thous. of lines...	5,898	6,618		5,716	6,258	7,713	5,802	5,678	6,628	65,484	59,624	51,979
Medical.....thous. of lines...	484	979		388	737	817	476	970	879	4,627	4,440	4,185
Radio.....thous. of lines...	1,760	2,382		2,136	3,007	5,595	2,214	2,920	5,224	33,153	39,856	30,748
Tobacco.....thous. of lines...	1,049	3,584		2,887	6,037	7,109	1,009	3,759	3,924	12,725	23,616	10,452
Toilet requisites.....thous. of lines...	1,760	5,633		2,041	3,152	4,617	2,709	2,006	2,653	36,092	30,854	24,482
Transportation.....thous. of lines...	2,055	1,841		2,316	2,963	4,807	1,949	2,139	2,831	27,000	27,133	20,861
All other.....thous. of lines...	2,323	1,689		3,041	2,271	2,530	2,467	1,734	1,996	24,722	27,466	21,308
Postal Business	3,318	4,623		3,644	5,783	7,800	3,715	5,245	7,366	46,478	48,006	39,874
Postal receipts:												
50 selected cities.....thous. of dolls...	25,876	28,764	32,279	29,251	30,549	35,743	27,951	29,261	34,196	299,781	314,675	305,659
50 industrial cities.....thous. of dolls...	3,132	3,160	3,568	3,289	3,303	3,737	3,115	3,074	3,583	33,534	33,701	33,036
Money orders:												
Domestic issued (50 cities)—												
Quantity.....thousands.....	3,285	3,415	3,662	3,510	3,407	3,843	3,165	2,879	3,669	36,529	36,525	33,673
Value.....thous. of dolls.....	33,363	33,923	35,916	37,027	35,916	39,963	32,886	32,382	37,554	363,138	371,909	343,074
Domestic paid (50 cities)—												
Quantity.....thousands.....	9,681	9,758	11,514	10,862	10,328	12,690	10,183	9,748	12,020	107,744	113,330	108,147
Value.....thous. of dolls.....	77,670	79,174	90,647	88,806	86,974	107,699	81,180	79,877	99,310	843,051	892,274	841,909
Air mail, weight dispatched.....pounds...	695,305	705,963		701,538	658,984	705,772	419,047	423,991	465,635	4,854,948	5,141,636	4,210,571

\*Revised.

†Cumulative through Sept. 30.

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BANKING AND FINANCE</b>												
<b>Banking</b>												
Bank debits:												
New York City.....mills. of dolls..	25,052	27,383	30,781	49,034	50,342	63,325	35,102	38,725	45,189	333,149	509,634	402,014
Outside of New York												
City.....mills. of dolls..	20,966	* 21,253	23,700	28,339	27,314	* 32,202	23,401	24,450	27,705	234,771	276,822	250,656
Canada.....mills. of dolls..	1,464	1,514	1,884	1,937	1,884	2,461	1,813	1,681	2,395	16,212	19,966	19,127
Federal reserve banks:												
Bills discounted.....mills. of dolls..	231	186	202	974	931	991	1,039	1,026	932			
Notes in circulation.....mills. of dolls..	1,368	1,376	1,355	1,829	1,851	1,880	1,651	1,704	1,710			
Total investments.....mills. of dolls..	781	801	773	328	484	658	394	545	671			
Total reserve.....mills. of dolls..	3,086	3,128	3,192	3,149	3,141	3,177	2,765	2,751	2,773			
Total deposits.....mills. of dolls..	2,454	2,457	2,519	2,348	2,471	2,696	2,325	2,414	2,419			
Reserve ratio.....per cent..	80.5	81.6	82.4	75.4	72.7	69.4	69.5	66.8	67.2			
Federal reserve member banks:												
Total loans and dis-												
counts.....mills. of dolls..	16,830	17,013	16,764	16,950	17,428	18,934	15,729	15,952	16,067			
Total investments.....mills. of dolls..	6,338	6,454	6,731	5,456	5,401	5,496	6,405	6,401	6,430			
Net demand deposits.....mills. of dolls..	13,629	13,812	13,830	12,985	13,295	15,110	12,871	13,226	13,368			
Brokers' loans, end of month—												
To N. Y. Stock Ex. members—												
Total.....mills. of dolls..	3,599	3,481	3,556	7,882	8,549	6,109	5,051	5,513	5,879			
Ratio to market value.....per cent..	5.31	5.79	4.65	8.79	9.82	8.51	8.80	9.29	9.62			
By New York F. R.												
member banks.....mills. of dolls..	3,110	3,063	2,512	6,217	6,804	5,538	4,235	4,570	4,907			
Deposits, New York State												
savings banks, end of												
month.....mills. of dolls..	4,591	4,662	4,658	4,426	4,457	4,372	4,299	4,352	4,345			
Interest rates:												
Time loans, 90 days.....per cent..	2.63	2.63	2.50	8.88	8.88	8.00	6.25	7.00	7.13			
Call loans, renewal.....per cent..	2.21	2.19	2.00	8.23	8.50	6.43	6.87	7.26	6.98			
Prime com. paper (4-6 mo.).....per cent..	3.00	3.00	3.00	6.13	6.25	5.38	5.38	5.63	5.50			
Prime bankers' acceptances.....per cent..	1.88	1.88	1.88	5.13	5.13	5.13	4.63	4.50	4.50			
N. Y. Fed. Res. Bank (redis.).....per cent..	2.50	2.50	2.50	6.00	6.00	5.00	5.00	5.00	5.00			
Federal land banks.....per cent..	5.63	5.63	5.63	5.31	5.44	5.51	5.04	5.04	5.04			
Intermediate credit banks.....per cent..	4.13	4.06	4.00	5.67	5.67	5.68	4.84	5.12	5.24			
<b>Public Finance</b>												
Government debt, gross,												
end month.....mills. of dolls..	16,188	16,081	16,180	16,805	16,720	16,698	17,648	17,367	17,544			
Customs receipts.....thous. of dolls..	32,083	36,655	39,319	56,427	52,612	57,607	52,797	59,741	59,741	419,043	519,274	471,261
Total ordinary receipts.....thous. of dolls..	127,388	602,811	147,813	174,502	670,736	175,998	173,495	557,398	187,627	3,117,155	3,356,320	3,125,787
Expenditures chargeable to												
ordinary receipts.....thous. of dolls..	224,117	308,221	375,244	210,725	399,068	364,678	308,594	482,600	368,653	3,200,149	3,136,645	3,157,557
U. S. money in circulation:												
Daily average.....mills. of dolls..	4,476	4,492	4,501	4,777	4,811	4,810	4,743	4,804	4,836			
<b>Gold and Silver</b>												
Gold:												
Domestic receipts at mint, fine ounces..	112,395	125,871	152,648	100,387	77,029	121,193	98,769	83,247	121,539	984,986	781,858	801,200
Rand output.....fine ounces..	* 921,081	* 903,176	926,561	889,601	849,553	888,690	891,863	857,731	897,720	8,926,515	8,701,339	8,626,351
Monetary stock of U. S.—												
daily average.....mills. of dolls..	4,496	4,503	4,520	4,351	4,368	4,381	4,118	4,125	4,133			
Imports.....thous. of dolls..	19,714	* 13,680	35,635	19,271	18,781	21,321	2,445	4,273	14,331	323,117	276,405	114,357
Exports.....thous. of dolls..	39,332	* 11,133	9,267	881	1,205	3,805	1,698	3,810	992	110,924	12,747	536,208
Silver:												
Production—												
United States.....thous. of fine oz..	3,835	* 3,780	3,910	5,006	4,634	5,130	4,776	4,087	4,352	42,877	49,793	47,120
Canada.....thous. of fine oz..	2,685	3,486	2,291	2,744	2,437	2,605	2,252	2,177	2,051	19,992	17,993	17,054
Stocks, end of month—												
United States.....thous. of fine oz..	677	813	648	1,074	1,112	1,451	263	872	856			
Canada.....thous. of fine oz..	410	341	217	880	914	489	720	1,457	718			
Imports.....thous. of dolls..	3,492	3,461	3,098	7,345	4,111	5,403	6,496	5,739	7,319	37,277	54,316	57,551
Exports.....thous. of dolls..	4,544	3,903	4,421	8,522	4,374	7,314	9,246	6,229	7,252	46,579	68,360	71,218
Price at New York.....dolls. per fine oz..	.352	.363	.358	.526	.510	.499	.589	.575	.581			
<b>Business Failures</b>												
Firms (United States):												
Total commercial.....number..	1,913	1,963	2,124	1,762	1,568	1,822	1,852	1,635	2,023	21,799	19,076	20,061
Manufacturers.....number..	566	434	490	482	427	483	493	454	528	5,293	4,967	4,907
Trade establishments.....number..	1,234	1,395	1,474	1,163	1,039	1,211	1,241	1,073	1,369	15,162	12,907	13,945
Agents and brokers.....number..	113	134	151	117	102	128	112	108	126	1,394	1,202	1,203
Firms (Canada).....number..	167	175	214	132	164	* 177	136	119	159	1,932	1,649	1,486
Liabilities (United States):												
Total commercial.....thous. of dolls..	49,181	46,947	56,297	33,746	34,125	31,314	58,202	33,957	34,990	529,339	363,741	408,184
Manufacturers.....thous. of dolls..	22,735	16,448	17,989	13,857	14,914	12,071	16,877	14,727	13,490	199,254	139,289	149,249
Trade establish-												
ments.....thous. of dolls..	17,829	19,311	22,096	16,002	16,660	14,464	19,096	13,567	17,268	223,361	180,060	189,144
Agents and brokers.....thous. of dolls..	8,617	11,188	16,212	3,888	2,551	4,778	22,229	5,662	4,232	106,727	24,393	69,790
Liabilities (Canada).....thous. of dolls..	2,939	2,664	2,532	1,393	2,457	* 2,572	2,584	2,632	2,504	35,844	24,905	30,185
By groups:												
Manufacturers—												
Metals.....number..	33	30	34	35	29	35	36	35	33	365	352	367
Textiles.....number..	55	53	97	48	48	66	59	74	79	694	580	639
Lumber.....number..	98	65	54	102	77	94	60	73	94	893	841	698
Chemicals.....number..	14	9	7	11	8	3	4	8	13	100	102	79
Printing and engraving.....number..	19	16	20	11	10	10	22	6	18	179	150	152
Foodstuffs.....number..	29	35	34	38	38	36	51	24	47	388	397	421
Leather, etc.....number..	21	14	15	4	11	17	8	15	14	128	127	131
Liquors and tobacco.....number..	11	8	15	6	3	4	6	4	6	57	63	57
Stone, clay, and glass.....number..	7	7	12	6	9	8	10	3	7	89	82	81
All other.....number..	279	197	211	225	194	210	237	212	217	2,400	2,173	2,222
Traders—												
General stores.....number..	67	93	108	72	60	78	54	60	87	955	848	838
Foods and tobacco.....number..	329	341	398	399	363	408	423	376	503	3,859	4,132	4,300
Clothing.....number..	270	257	260	163	168	191	210	168	225	2,999	2,211	2,703
Household furniture.....number..	204	247	253	179	127	167	171	187	190	2,734	2,216	2,392
Chemicals and paints.....number..	78	98	94	64	54	86	71	43	78	873	633	676
Books and paper.....number..	11	12	18	15	11	10	11	13	10	137	121	125
All other.....number..	275	347	353	271	256	271	307	226	276	3,555	2,746	2,908

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Federal Reserve Bank of St. Louis

## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BANKING AND FINANCE—Contd.</b>												
<b>Life Insurance</b>												
<i>(Association of Life Insurance Presidents)</i>												
Policies and certificates, new (44 companies):												
Ordinary..... number of policies..	245, 110	228, 764	261, 141	273, 484	245, 042	289, 055	245, 081	214, 010	263, 201	2, 728, 585	2, 687, 547	2, 435, 486
Industrial..... number of policies..	804, 504	721, 848	846, 805	795, 451	805, 623	879, 483	740, 371	770, 416	946, 284	8, 732, 774	9, 011, 761	8, 669, 891
Group..... number of certificates..	38, 851	45, 713	35, 311	40, 622	21, 799	49, 062	24, 605	52, 943	18, 911	4, 776, 609	464, 008	388, 799
Total policies and certificates number..	1, 085, 465	996, 325	1, 143, 257	1, 109, 557	1, 072, 464	1, 217, 600	1, 010, 057	1, 037, 369	1, 228, 396	11, 935, 968	12, 163, 316	11, 495, 176
Amount of new insurance (44 companies):												
Ordinary..... thous. of dolls..	622, 075	545, 481	619, 528	698, 194	608, 869	707, 478	626, 594	534, 112	659, 844	7, 171, 608	7, 256, 335	6, 721, 615
Industrial..... thous. of dolls..	233, 745	210, 423	243, 773	219, 144	221, 006	240, 488	193, 365	198, 949	233, 530	2, 413, 845	2, 414, 866	2, 243, 529
Group..... thous. of dolls..	73, 188	138, 492	51, 573	99, 773	75, 151	105, 393	56, 922	277, 943	72, 119	902, 327	938, 686	1, 058, 429
Total insurance..... thous. of dolls..	929, 008	894, 396	914, 883	1, 017, 113	905, 026	1, 053, 360	876, 885	1, 011, 004	965, 493	10, 487, 780	10, 609, 887	10, 028, 573
Premium collections (44 companies):												
Ordinary..... thous. of dolls..	150, 754	147, 907	165, 954	154, 201	143, 078	160, 724	143, 386	135, 743	154, 489	1, 651, 272	1, 639, 216	1, 537, 150
Industrial..... thous. of dolls..	58, 961	59, 859	55, 851	56, 143	56, 773	51, 705	50, 228	49, 343	55, 691	581, 177	548, 261	516, 488
Group..... thous. of dolls..	6, 508	7, 220	7, 944	7, 125	6, 485	8, 497	5, 705	5, 738	6, 447	79, 480	91, 090	74, 324
Annuities..... thous. of dolls..	5, 797	5, 016	6, 917	.....	.....	.....	.....	.....	.....	67, 122	.....	.....
Total..... thous. of dolls..	22, 020	220, 002	236, 666	217, 478	206, 336	229, 921	199, 319	190, 824	216, 627	2, 389, 051	2, 278, 567	2, 127, 962
Admitted life insurance assets (40 companies):												
Grand total..... mills. of dolls..	14, 926	.....	.....	13, 691	13, 798	13, 906	12, 406	12, 510	12, 634	.....	.....	.....
Mortgage loans—												
Total..... mills. of dolls..	6, 213	.....	.....	5, 887	5, 925	5, 972	5, 382	5, 429	5, 484	.....	.....	.....
Farm..... mills. of dolls..	1, 571	.....	.....	1, 600	1, 600	1, 599	1, 602	1, 604	1, 606	.....	.....	.....
All other..... mills. of dolls..	4, 642	.....	.....	4, 287	4, 325	4, 373	3, 780	3, 825	3, 878	.....	.....	.....
Bonds and stocks (book value):												
Total..... mills. of dolls..	5, 616	.....	.....	5, 188	5, 208	5, 234	4, 704	4, 718	4, 752	.....	.....	.....
Government..... mills. of dolls..	1, 085	.....	.....	1, 062	1, 070	1, 063	927	930	939	.....	.....	.....
Railroad..... mills. of dolls..	2, 621	.....	.....	2, 526	2, 527	2, 534	2, 411	2, 406	2, 410	.....	.....	.....
Public utility..... mills. of dolls..	1, 473	.....	.....	1, 274	1, 281	1, 295	1, 138	1, 151	1, 163	.....	.....	.....
All other..... mills. of dolls..	437	.....	.....	321	330	342	228	231	240	.....	.....	.....
Policy loans and premium notes..... mills. of dolls..	3, 041	.....	.....	1, 688	1, 707	1, 738	1, 486	1, 497	1, 510	.....	.....	.....
<i>(Life Insurance Sales Research Bureau)</i>												
Sales of ordinary life insurance:												
United States total..... thous. of dolls..	685, 864	603, 102	685, 755	765, 702	677, 104	787, 133	702, 275	578, 193	764, 577	7, 830, 612	7, 952, 446	7, 328, 122
Eastern manuf. dis. thous. of dolls..	275, 228	238, 909	285, 594	300, 810	261, 657	309, 637	273, 055	218, 788	316, 574	3, 243, 674	3, 251, 029	2, 998, 291
Western manuf. dis. thous. of dolls..	153, 052	136, 170	153, 704	177, 990	161, 222	184, 974	163, 568	136, 379	176, 739	1, 759, 879	1, 841, 149	1, 638, 420
Western agric. district..... thous. of dolls..	99, 276	89, 779	97, 300	116, 749	104, 534	121, 985	104, 287	90, 916	112, 916	1, 128, 344	1, 164, 611	1, 107, 889
Southern district..... thous. of dolls..	80, 858	69, 724	77, 196	90, 526	77, 810	89, 697	86, 288	71, 371	85, 408	879, 235	897, 541	865, 386
Far western district..... thous. of dolls..	77, 450	68, 520	71, 961	79, 627	71, 881	80, 840	75, 077	60, 739	72, 940	819, 480	798, 116	718, 136
Canada total 15 companies..... thous. of dolls..	37, 061	39, 643	46, 019	42, 468	43, 911	52, 985	43, 503	38, 872	55, 743	471, 314	502, 704	469, 162
<b>Dividend and Interest Payments</b>												
Grand total..... thous. of dolls..	423, 500	524, 100	763, 325	410, 500	530, 200	767, 850	335, 800	413, 250	624, 400	6, 908, 599	6, 327, 651	5, 027, 264
Interest payments..... thous. of dolls..	227, 000	296, 000	443, 325	201, 000	292, 000	424, 650	182, 000	262, 000	388, 600	3, 643, 800	3, 433, 851	3, 086, 354
Dividend payments												
Total..... thous. of dolls..	196, 500	228, 100	320, 000	209, 500	238, 200	343, 200	153, 800	151, 250	235, 800	3, 264, 800	2, 893, 800	1, 940, 910
Industrial and misc. thous. of dolls..	152, 900	183, 900	250, 000	165, 000	191, 000	269, 000	112, 100	121, 100	175, 900	2, 456, 300	2, 151, 000	1, 426, 480
Steam railroads..... thous. of dolls..	36, 900	29, 900	44, 000	37, 600	31, 100	45, 500	35, 200	23, 400	36, 800	425, 300	389, 800	325, 280
Street railways..... thous. of dolls..	6, 700	6, 800	10, 500	6, 900	7, 100	11, 000	6, 500	6, 750	11, 100	97, 200	88, 700	97, 150
<b>New Security Issues</b>												
Foreign loans in the U. S. thous. of dolls..	19, 680	59, 650	84, 000	25, 250	13, 197	42, 295	577	108, 949	64, 621	1, 057, 674	600, 784	1, 269, 885
Foreign governments..... thous. of dolls..	2, 680	52, 900	.....	15, 000	8, 000	3, 500	.....	43, 500	36, 750	472, 386	68, 250	623, 120
Total corporation..... thous. of dolls..	189, 866	346, 887	213, 795	788, 222	1, 507, 876	757, 254	201, 426	428, 184	658, 604	5, 143, 781	9, 479, 282	6, 048, 020
Purpose of issue—												
New capital..... thous. of dolls..	121, 516	284, 570	151, 148	763, 177	1, 201, 284	724, 166	182, 716	391, 158	603, 473	4, 625, 910	8, 190, 754	4, 429, 974
Refunding..... thous. of dolls..	68, 350	62, 317	62, 647	25, 045	306, 592	33, 088	18, 710	55, 131	57, 871	1, 517, 871	1, 288, 528	1, 618, 046
Type of security—												
Stocks..... thous. of dolls..	57, 673	61, 775	30, 136	670, 090	1, 265, 887	471, 166	73, 892	172, 047	393, 610	1, 476, 333	6, 591, 082	2, 478, 504
Bonds and notes..... thous. of dolls..	132, 193	285, 112	183, 659	118, 132	241, 989	286, 088	127, 534	256, 137	264, 994	3, 667, 448	2, 888, 200	3, 569, 517
Class of industry:												
Railroads..... thous. of dolls..	41, 516	76, 254	5, 000	660	81, 520	57, 220	13, 726	.....	45, 830	1, 004, 687	618, 229	590, 461
Public utilities..... thous. of dolls..	48, 071	172, 243	104, 642	108, 910	380, 291	102, 356	97, 776	202, 239	209, 591	2, 359, 701	2, 265, 482	2, 264, 170
Industrial..... thous. of dolls..	84, 714	10, 273	44, 605	91, 282	280, 078	98, 202	32, 989	98, 234	114, 233	781, 460	1, 862, 373	1, 169, 345
Oil..... thous. of dolls..	.....	.....	35, 750	2, 105	51, 000	109, 680	.....	.....	.....	274, 824	339, 695	95, 027
Land and buildings..... thous. of dolls..	3, 101	15, 615	8, 740	35, 503	6, 501	32, 723	30, 256	57, 517	85, 627	200, 042	495, 220	692, 128
Shipping and misc. thous. of dolls..	9, 363	72, 501	15, 058	549, 763	708, 487	306, 075	26, 678	70, 194	178, 624	463, 568	3, 723, 058	1, 186, 160
States and municipalities:												
Permanent loans..... thous. of dolls..	98, 514	79, 578	157, 142	80, 415	100, 257	122, 346	78, 445	70, 170	98, 233	1, 201, 613	1, 089, 889	1, 099, 854
Temporary loans..... thous. of dolls..	26, 406	76, 501	39, 172	86, 164	95, 978	99, 505	63, 543	73, 419	82, 552	753, 120	796, 171	676, 114
Bond sales (Canada):												
Govt. and provincial..... thous. of dolls..	7, 150	20, 150	111, 552	.....	8, 257	2, 000	.....	9, 733	24, 060	229, 988	70, 466	83, 563
Municipal..... thous. of dolls..	2, 365	8, 485	12, 547	1, 449	3, 760	1, 080	964	260	5, 144	107, 881	68, 824	22, 514
Corporation..... thous. of dolls..	35, 875	4, 345	34, 166	693	5, 147	23, 775	4, 095	11, 980	15, 396	196, 116	183, 568	238, 120
Tax-exempt securities outstanding, end of month..... mills. of dolls..	19, 873	19, 836	20, 523	17, 635	18, 255	18, 378	16, 865	16, 897	16, 954	.....	.....	.....
<b>Agricultural Finances</b>												
Loans outstanding, end mo.:												
Federal farm loan banks..... thous. of dolls..	1, 191, 212	1, 190, 270	1, 189, 309	1, 203, 806	1, 202, 490	1, 200, 932	1, 187, 365	1, 189, 345	1, 190, 278	.....	.....	.....
Joint-stock land banks..... thous. of dolls..	564, 933	562, 747	560, 052	594, 876	593, 388	590, 507	608, 706	608, 451	607, 632	.....	.....	.....
Federal intermediate credit banks..... thous. of dolls..	122, 697	123, 336	126, 104	68, 882	72, 204	75, 373	66, 978	68, 619	76, 547	.....	.....	.....

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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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>BANKING AND FINANCE—Contd.</b>												
<b>Stocks and Bonds</b>												
Stock prices, average daily closing:												
25 industrials, average.....dolls. per share.....	282.81	282.92	240.49	431.20	448.78	395.95	267.16	283.99	293.51	-----	-----	-----
25 railroads, average.....dolls. per share.....	110.38	110.16	97.30	151.29	152.26	142.30	121.57	124.82	123.40	-----	-----	-----
Southern cotton mills.....dolls. per share.....	68.96	65.70	63.54	90.41	89.37	88.61	104.82	103.31	103.19	-----	-----	-----
103 stocks, average.....dolls. per share.....	55.92	47.40	43.44	90.35	82.47	69.91	76.59	78.49	78.45	-----	-----	-----
Stock prices, average weekly closing:												
Industrials, rails, and utilities												
(402).....rel. to 1926.....	147.6	148.8	127.6	218.1	225.3	201.7	148.3	156.6	159.1	-----	-----	-----
All industrials (335).....rel. to 1926.....	138.7	139.3	117.8	210.3	216.1	194.4	152.6	162.2	166.2	-----	-----	-----
All railroads (33).....rel. to 1926.....	121.2	122.6	110.9	165.4	168.1	157.0	126.5	129.6	128.2	-----	-----	-----
All utilities (34).....rel. to 1926.....	212.7	216.4	187.0	304.3	321.0	276.6	147.9	155.8	154.5	-----	-----	-----
Automobiles and trucks												
(13).....rel. to 1926.....	134.1	132.5	108.0	240.8	240.9	195.6	244.7	270.0	283.6	-----	-----	-----
Automobile tires and rubber goods (7).....rel. to 1926.....	72.0	65.5	52.5	169.5	163.4	147.4	119.3	127.6	137.6	-----	-----	-----
Airplane (10).....rel. to 1926.....	400.9	391.1	269.6	1130.0	994.4	693.9	591.5	693.7	667.4	-----	-----	-----
Agricultural implements												
(4).....rel. to 1926.....	268.5	265.3	211.7	423.9	444.8	373.2	281.7	301.3	309.4	-----	-----	-----
Chain stores (17).....rel. to 1926.....	90.1	95.6	88.1	148.7	154.6	138.7	142.9	150.5	150.9	-----	-----	-----
Copper and brass (9).....rel. to 1926.....	121.3	114.4	92.6	288.9	294.4	258.7	155.2	172.0	185.1	-----	-----	-----
Food, other than meat												
(20).....rel. to 1926.....	147.2	149.8	133.5	186.7	191.1	176.2	158.1	167.1	167.1	-----	-----	-----
Machinery and machine equipment (10).....rel. to 1926.....	152.3	154.1	134.4	177.2	191.4	172.3	135.4	139.4	140.1	-----	-----	-----
Oil producing and refining												
(16).....rel. to 1926.....	129.7	125.4	106.4	157.5	166.7	161.4	112.6	115.7	117.0	-----	-----	-----
Railroad equipment (9).....rel. to 1926.....	93.4	95.6	82.0	157.8	157.6	143.6	123.6	129.5	126.8	-----	-----	-----
Rayon (5).....rel. to 1926.....	65.8	71.4	64.6	126.2	119.8	111.0	165.1	160.7	161.3	-----	-----	-----
Steel and iron (9).....rel. to 1926.....	160.4	161.5	141.5	238.4	243.9	217.1	143.6	155.8	158.7	-----	-----	-----
Textiles (30).....rel. to 1926.....	66.0	67.2	58.2	118.1	114.1	108.1	120.5	125.9	131.6	-----	-----	-----
Theaters, motion pictures, and amusements (7).....rel. to 1926.....	106.1	112.4	87.8	133.4	139.0	142.5	116.6	135.1	136.7	-----	-----	-----
Tobacco and tobacco products												
(10).....rel. to 1926.....	149.2	152.6	136.8	141.6	141.5	146.4	137.6	142.5	141.8	-----	-----	-----
Traction, motor transportation, etc. (9).....rel. to 1926.....	72.7	74.6	72.3	83.1	84.7	80.4	95.7	99.5	96.3	-----	-----	-----
Stock yields:												
Total common (90).....per cent.....	4.42	4.33	5.05	3.01	2.92	3.33	4.01	3.78	3.72	-----	-----	-----
Industrials (50).....per cent.....	4.69	4.60	5.39	3.26	3.19	3.61	3.96	3.72	3.62	-----	-----	-----
Public utilities (20).....per cent.....	3.12	3.04	3.64	1.78	1.69	2.05	3.39	3.14	3.19	-----	-----	-----
Railroad (20).....per cent.....	5.50	5.45	5.98	4.04	3.96	4.26	5.08	4.98	5.03	-----	-----	-----
Preferred high-grade industrial (20).....per cent.....	5.53	5.48	5.52	5.54	5.52	5.54	5.43	5.41	5.44	-----	-----	-----
Stock sales, N. Y. Stock Exchange.....thous. of shares.....												
39,869	53,545	65,497	95,705	100,056	141,668	67,704	90,007	99,077	714,790	968,674	713,279	
Bond sales:												
Miscellaneous.....thous. of dolls.....	167,584	221,327	264,357	251,287	210,995	337,374	173,561	190,582	226,621	2,272,894	2,375,714	2,382,564
Liberty-Treasury.....thous. of dolls.....	4,951	9,631	7,773	8,510	9,267	15,839	9,988	10,467	11,949	92,384	111,040	150,799
Total.....thous. of dolls.....	172,535	230,958	272,130	259,797	220,262	353,213	183,549	201,049	238,570	2,365,277	2,476,754	2,533,363
Bond prices:												
Highest-grade rails.....p. ct. of par. 4% bond.....	94.25	95.83	95.85	85.98	85.51	86.69	89.66	91.05	90.72	-----	-----	-----
Second-grade rails.....p. ct. of par. 4% bond.....	86.94	88.32	87.49	77.25	77.64	79.35	80.99	82.51	81.98	-----	-----	-----
Public utility.....p. ct. of par. 4% bond.....	76.82	79.49	78.92	73.14	73.13	73.31	79.08	79.51	81.12	-----	-----	-----
Industrial.....p. ct. of par. 4% bond.....	76.33	76.13	71.63	74.54	73.84	74.88	77.97	78.18	78.34	-----	-----	-----
Comb. price index.....p. ct. of par. 4% bond.....	82.93	84.26	82.49	77.43	77.23	78.23	81.68	82.53	82.79	-----	-----	-----
Bond prices, 1st of following month:												
5 Liberty bonds.....p. ct. of par.....	105.23	105.84	106.06	100.61	100.34	102.20	103.88	103.11	103.85	-----	-----	-----
50 domestic bonds.....p. ct. of par.....	100.41	100.96	100.08	96.51	96.34	96.75	99.48	99.57	99.72	-----	-----	-----
40 representative issues.....p. ct. of par.....	90.99	88.25	86.08							-----	-----	-----
Bond yields:												
Total, 60 high grade.....per cent.....	4.43	4.41	4.41	4.74	4.76	4.73	4.59	4.57	4.57	-----	-----	-----
Railroads (15).....per cent.....	4.29	4.25	4.25	4.67	4.71	4.66	4.49	4.43	4.43	-----	-----	-----
Industrial (15).....per cent.....	4.87	4.85	4.89	5.09	5.12	5.08	4.96	4.95	4.95	-----	-----	-----
Utilities (15).....per cent.....	4.59	4.55	4.53	4.89	4.90	4.91	4.73	4.73	4.74	-----	-----	-----
Municipal (15).....per cent.....	3.97	3.97	3.94	4.31	4.32	4.29	4.16	4.17	4.17	-----	-----	-----
Municipal bond yield (20).....per cent.....	4.01	3.97	3.99	4.41	4.49	4.37	4.18	4.16	4.16	-----	-----	-----
U. S. Treasury notes and certificates, 3-6 months.....per cent.....	1.53	1.84	1.90	4.70	4.58	4.37	4.36	4.57	4.70	-----	-----	-----
Liberty and Treasury bond.....per cent.....	3.38	3.37	3.34	3.72	3.70	3.67	3.56	3.54	3.55	-----	-----	-----
Long-term and real-estate bonds issued:												
Grand total.....thous. of dolls.....	1,938	13,890	6,635	28,403	5,338	19,275	21,947	52,116	64,864	131,132	317,955	582,953
Purpose of issue—												
Finance construction												
Real-estate mortgage.....thous. of dolls.....	300	1,475	1,210	16,108	950	13,875	9,970	4,460	33,290	54,031	127,375	227,800
Acquisitions and improvements.....thous. of dolls.....	1,388	165	1,975	8,485	188	2,250	5,590	32,955	11,898	16,518	79,688	190,227
Kind of structure—												
Office and commercial.....thous. of dolls.....	250	2,300	3,050	9,875	880	2,050	4,785	2,510	15,018	52,813	100,235	177,689
Hotels.....thous. of dolls.....	675	600		9,995		11,600	2,200	400	9,900	4,173	36,830	44,460
Apartments.....thous. of dolls.....			175	1,588	215	225	3,145	270	8,423	21,510	15,877	38,702
Interest rates.....per cent.....	5.46	5.89	5.61	6.03	6.14	6.16	5.76	5.79	6.12	-----	-----	-----
<b>Corporation Stockholders</b>												
<i>(Quarterly)</i>												
Pennsylvania Railroad Co.:												
Domestic.....number.....	9 207,869	7 212,311		9 158,456	7 184,997		9 153,294	7 154,415				
Foreign.....number.....	9 3,087	7 3,096		9 2,978	7 2,931		9 3,016	7 3,032				
U. S. Steel Corp. common stock:												
Domestic.....number.....	9 131,357	7 132,479		9 103,805	7 107,747		9 96,649	7 102,547				
Foreign.....number.....	9 2,106	7 3,026		9 1,807	7 2,419		9 1,688	7 1,748				
Shares held by brokers.....per ct. of total.....	9 18.57	7 18.60		9 25.27	7 25.25		9 25.79	7 23.95				
American Telephone & Telegraph Co.:												
Domestic.....number.....	9 507,774	7 540,826		9 453,434	7 450,170		9 427,195	7 451,603				
Foreign.....number.....	9 5,555	7 5,866		9 5,425	7 5,250		9 5,172	7 5,426				

† Quarter ended in month indicated.

‡ Quarter ending June 30.



## 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 OCTOBER 31		
	August	September	October	August	September	October	August	September	October	1930	1929	1928
<b>FOREIGN EXCHANGE RATES</b>												
<b>Europe:</b>												
England.....dolls. per £ sterling..	4.87	4.86	4.86	4.85	4.85	4.87	4.85	4.85	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	.052	.052	.052			
Belgium.....doll. per franc.....	.140	.140	.139	.139	.139	.140	.139	.139	.139			
Netherlands.....dolls. per guilder..	.403	.403	.403	.401	.401	.403	.401	.401	.401			
Sweden.....dolls. per krona.....	.269	.269	.269	.268	.268	.268	.268	.268	.268			
Switzerland.....dolls. per franc....	.194	.194	.194	.192	.193	.193	.193	.193	.192			
<b>Asia:</b>												
Japan.....dolls. per yen.....	.494	.494	.496	.467	.473	.478	.451	.458	.462			
India.....dolls. per rupee.....	.360	.360	.360	.360	.360	.362	.363	.363	.365			
<b>America:</b>												
Canada.....dolls. per Canadian doll..	1.001	1.001	1.001	.994	.992	.988	1.000	1.000	1.000			
Argentina.....dolls. per gold peso....	.825	.818	.781	.954	.953	.950	.959	.957	.956			
Brazil.....dolls. per milreis.....	.100	.101		.119	.119	.119	.119	.119	.120			
Chile.....dolls. per paper peso.....	.121	.121	.121	.121	.121	.121	.121	.121	.121			
<b>U. S. FOREIGN TRADE</b>												
<b>Imports</b>												
Grand total.....thous. of dolls....	\$ 218,417	\$ 226,345	248,296	369,358	351,304	390,998	346,715	319,618	355,358	2,649,537	3,751,016	3,425,471
By grand divisions:												
<b>Europe—</b>												
Total.....thous. of dolls.....	63,495	73,423		109,759	120,056	138,934	107,793	102,315	121,234	\$ 709,377	\$ 1,000,376	\$ 907,429
France.....thous. of dolls.....	8,806	10,851		14,028	17,462	20,128	15,075	13,783	17,279	\$ 86,619	\$ 126,758	\$ 112,336
Germany.....thous. of dolls.....	14,334	14,050		22,731	2,800	26,232	21,023	18,661	22,309	\$ 136,630	\$ 193,360	\$ 162,615
Italy.....thous. of dolls.....	4,546	4,976		7,660	9,407	13,733	6,876	6,548	10,072	\$ 61,251	\$ 82,168	\$ 70,177
United Kingdom.....thous. of dolls....	13,840	17,017		25,920	28,987	35,059	27,535	26,373	33,417	\$ 165,506	\$ 252,504	\$ 257,655
<b>North America—</b>												
Total.....thous. of dolls.....	55,129	58,584		82,242	76,942	81,684	78,216	76,926	84,398	\$ 589,550	\$ 760,937	\$ 721,235
Canada.....thous. of dolls.....	29,286	32,508		43,751	42,257	46,073	43,254	42,209	47,404	\$ 311,373	\$ 378,112	\$ 359,330
<b>South America—</b>												
Total.....thous. of dolls.....	26,280	28,028		51,624	45,387	56,186	51,043	37,560	41,535	\$ 346,073	\$ 488,079	\$ 436,623
Argentina.....thous. of dolls.....	3,341	3,396		7,818	6,734	11,617	8,975	6,313	6,677	\$ 64,362	\$ 85,227	\$ 80,433
<b>Asia and Oceania—</b>												
Total.....thous. of dolls.....	68,789	62,020		114,589	102,504	109,074	100,880	97,554	100,888	\$ 697,458	\$ 1,023,592	\$ 931,850
Japan.....thous. of dolls.....	25,249	23,232		40,254	39,973	43,375	38,993	33,741	35,261	\$ 201,713	\$ 310,846	\$ 284,322
Africa, total.....thous. of dolls.....	4,696	4,257		11,144	6,415	5,146	8,782	5,263	7,302	\$ 55,970	\$ 87,033	\$ 69,974
By economic classes:												
Crude materials.....thous. of dolls....	\$ 72,617	\$ 75,394	77,474	125,817	122,062	126,532	122,186	110,289	117,624	873,821	1,321,542	1,240,475
Foodstuffs, crude and food animals.....thous. of dolls.....	26,598	27,582	32,850	39,357	40,700	47,210	45,940	37,207	42,007	343,339	456,720	459,967
Manufactured food-stuffs.....thous. of dolls.....	\$ 17,210	\$ 20,600	23,210	35,558	32,327	35,085	30,060	33,771	35,370	249,641	370,562	345,914
Semimanufactures.....thous. of dolls....	\$ 44,196	\$ 40,986	45,630	\$ 79,465	\$ 70,146	81,850	66,337	63,455	71,174	531,723	756,640	628,935
Finished manufactures.....thous. of dolls..	\$ 57,797	\$ 61,783	69,231	\$ 89,161	\$ 86,069	100,521	82,192	74,906	89,184	651,014	844,651	750,192
<b>Exports</b>												
Grand total, including reexports.....thous. of dolls....	298,118	\$ 311,889	328,000	380,758	437,671	528,578	379,006	421,607	550,014	3,281,058	4,372,828	4,107,600
By grand division:												
<b>Europe—</b>												
Total.....thous. of dolls.....	43,262	158,717		160,654	201,300	263,351	149,216	192,840	268,856	\$ 1,366,774	\$ 1,642,801	\$ 1,592,619
France.....thous. of dolls.....	16,152	20,069		17,095	24,026	33,531	15,167	20,049	28,928	\$ 158,813	\$ 179,491	\$ 154,270
Germany.....thous. of dolls.....	22,784	32,912		26,367	38,993	57,552	24,579	46,298	57,989	\$ 203,006	\$ 270,201	\$ 299,007
Italy.....thous. of dolls.....	5,775	8,105		6,620	14,500	16,348	9,856	14,275	16,936	\$ 75,300	\$ 109,205	\$ 112,996
United Kingdom.....thous. of dolls....	53,928	57,841		58,333	72,609	95,129	52,827	59,182	97,963	\$ 490,896	\$ 590,047	\$ 548,931
<b>North America—</b>												
Total.....thous. of dolls.....	82,945	79,533		111,517	117,649	127,224	118,041	115,500	126,793	\$ 817,477	\$ 1,070,395	\$ 972,580
Canada.....thous. of dolls.....	53,695	52,070		76,862	80,485	83,946	84,963	87,139	89,492	\$ 532,519	\$ 739,552	\$ 678,892
<b>South America—</b>												
Total.....thous. of dolls.....	25,744	25,911		39,430	43,550	44,049	43,767	33,805	49,251	\$ 264,373	\$ 420,273	\$ 339,041
Argentina.....thous. of dolls.....	9,741	9,776		17,352	17,995	17,153	17,348	11,457	19,848	\$ 101,833	\$ 163,938	\$ 125,718
<b>Asia and Oceania—</b>												
Total.....thous. of dolls.....	38,641	41,268		58,610	66,039	81,979	59,971	71,917	92,484	\$ 430,393	\$ 610,949	\$ 572,818
Japan.....thous. of dolls.....	8,821	15,025		11,507	19,117	31,362	15,517	27,542	39,137	\$ 128,346	\$ 172,227	\$ 184,968
Africa, total.....thous. of dolls.....	7,525	6,460		10,546	9,133	11,975	8,011	7,544	12,630	\$ 74,051	\$ 99,829	\$ 80,517
By economic classes:												
Total domestic ex-ports only.....thous. of dolls....	\$ 293,906	\$ 307,739	322,845	374,723	431,801	522,380	371,312	414,859	543,171	3,225,658	4,301,258	4,025,492
Crude materials.....thous. of dolls....	53,156	\$ 93,750	104,829	50,891	112,260	174,271	52,375	120,188	176,354	660,927	871,633	947,181
Foodstuffs, crude and food animals.....thous. of dolls.....	24,160	18,183	15,228	28,438	29,943	24,110	29,310	42,363	52,383	149,668	229,670	235,417
Manufactured food-stuffs.....thous. of dolls.....	28,325	27,823	32,060	37,107	40,963	47,737	34,749	35,761	51,643	305,547	399,213	374,765
Semimanufactures.....thous. of dolls....	40,770	37,192	38,038	57,069	57,691	64,558	55,873	51,077	59,967	446,008	622,736	597,296
Finished manufactures.....thous. of dolls..	\$ 147,495	130,791	132,728	201,218	190,944	211,703	199,005	165,460	202,824	1,663,507	2,178,008	1,870,832
<b>Agricultural exports (quantities):</b>												
All commodities.....rel. to 1910-1914..	87	124	139	76	121	166	75	138	201			
All commodities ex-cept cotton.....rel. to 1910-1914..	130	114	130	132	143	147	126	168	232			
<b>CANADIAN FOREIGN TRADE</b>												
<b>Total trade:</b>												
Imports.....thous. of dolls.....	77,906	87,900	78,358	111,631	99,380	116,261	114,175	106,066	112,341	872,029	1,105,842	1,024,608
Exports.....thous. of dolls.....	70,613	82,190	84,298	98,395	89,424	121,437	113,904	111,856	143,955	762,726	1,004,652	1,061,794

\* Revised.

\* Cumulative through September 30.



## 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.

**Agriculture.** Fifteenth Census of United States, 1930: Agriculture, Delaware, Number of Farms, Farm Acreage, and Values of Farm Land and Buildings, Farm Buildings, Farmers' Dwellings, and Farm Implements and Machinery, by Minor Civil Divisions. 4 pages, 1 illustration. (Bureau of the Census.) Price, 5 cents.

**Aviation.** Air Commerce Bulletin is issued semimonthly by the Aeronautics Branch of the Department of Commerce and contains short articles on aviation developments and a list of air transport routes.

Aviation Training. ii+13 pages. (Aeronautics Branch. Aeronautics Bulletin No. 19.) Discussion of the opportunities in different phases of aviation, methods of obtaining training, and objects of flying clubs.

**Building materials.** Seams for Copper Roofing, by K. Hilding Beij. (Bureau of Standards. Research Paper No. 216.) Reprint from Bureau of Standards Journal of Research, vol. 5, September, 1930, pp. 585-608, 14 illustrations, 5 pages of plates. Report on experiments to discover the strength of different types of seams for copper roofing. Price, 15 cents.

**Bureau of Foreign and Domestic Commerce.** Annual Report of Director of Bureau of Foreign and Domestic Commerce to Secretary of Commerce for Fiscal Year Ended June 30, 1930. iv+56 pages, 1 chart. Price, 10 cents.

**Bureau of Mines.** Twentieth Annual Report of Director of Bureau of Mines to Secretary of Commerce for Fiscal Year Ended June 30, 1930. vi+54 pages, 1 plate. Price, 10 cents.

**Bureau of Navigation.** Annual Report of Commissioner of Navigation to Secretary of Commerce for Fiscal Year Ended June 30, 1930. ii+12 pages. Price, 5 cents.

**Bureau of Standards.** Annual Report of Director of Bureau of Standards to Secretary of Commerce for Fiscal Year Ended June 30, 1930. ii+53 pages, 1 chart. (Miscellaneous Publication No. 115.) Price, 10 cents.

**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.

**Chemicals and drugs.** New Crystalline Calcium Chloride Compound of Gulose and its Rotation and Mutarotation in Aqueous Solution, by Horace S. Isbell. (Bureau of Standards. Research Paper No. 226.) Reprint from Bureau of Standards Journal of Research, vol. 5, September, 1930, pp. 741-755, 1 plate, 2 charts. Price, 10 cents.

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

**Explosives.** Production of Explosives in United States During Calendar Year 1929, by W. W. Adams and L. S. Gerry. ii+51 pages, 2 charts. (Bureau of Mines. Technical Paper 478.) This paper shows the materials used in the manufacture of explosives, the production in the United States from 1920 to 1929, the kinds and amounts used by different industries, and the monthly sales in 1929. Price, 10 cents.

**Fish.** Commercial Snappers (Lutjanidae) of Gulf of Mexico, by Isaac Ginsburg. (Bureau of Fisheries. Document No. 1080.) From Bulletin of the Bureau of Fisheries, vol. XLVI, 1930, pp. 265-276, 2 illustrations. Discussion of the characteristics of this species of fish, their habitat and geographical distribution, and their importance as a food. Price, 10 cents.

**Foodstuffs.** Apparent per Capita Consumption of Principal Foodstuffs in United States, by E. G. Montgomery and C. H. Kardell. iv+51 pages. (Bureau of Foreign and Domestic Commerce. Domestic Commerce Series No. 38.) Data on the amount of different foodstuffs consumed in the United States, showing changes during the last 30 years. Price, 10 cents.

**Metals and minerals.** Abrasive Materials in 1929, by Oliver Bowles. (Bureau of Mines. Mineral Resources of United States, 1929, Pt. II, pp. 65-81.) This publication discusses the properties of the different materials used for abrasive purposes. Price, 5 cents.

Antimony in 1929, by Paul M. Tyler. (Bureau of Mines. Mineral Resources of United States, 1929, Pt. I, pp. 45-56.) This pamphlet shows the antimony resources of the different countries of the world and the import trade of the United States in this metal. Price, 5 cents.

Carbon Black in 1929, by G. R. Hopkins and H. Backus. (Bureau of Mines. Mineral Resources of United States, 1929, Pt. II, pp. 51-59, 2 charts.) Account of the carbon black industry, showing the uses of carbon black, production in the United States by States and districts, and the United States export trade in this product. Price, 5 cents.

Economic Relations of Silver to Other Metals in Argentiniferous Ores, by Charles White Merrill. ii+29 pages. (Bureau of Mines. Economic Paper 10.) Study of sources of silver, its relation to other ores, production in the leading countries of the world, and classification of silver ores. Price, 10 cents.

Feldspar in 1929, by Oliver Bowles and Jefferson Middleton. (Bureau of Mines. Mineral Resources of United States, 1929, Pt. II, pp. 83-93.) This publication shows the location of feldspar deposits in the United States, the uses of this mineral, and the amount of production in the United States and other countries. Price, 5 cents.

**Monthly Summary of Foreign Commerce of United States,** September, 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 September, 1929 and 1930, and for nine months ending September, 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.** Resistivity Measurements of Oil-Bearing Beds, by F. W. Lee and J. H. Swartz. ii+12 pages, 11 illustrations. (Bureau of Mines. Technical Paper 488.) This paper shows the results of experiments in locating oil by use of electricity. A short bibliography is included. Price, 5 cents.

**Power and power plants.** Census of Electrical Industries, 1927; Central Electric Light and Power Stations. viii+92 pages, 1 chart. (Bureau of the Census.) This publication contains statistics showing the growth of the electric light and power industry from 1902 to 1927, the geographical distribution of plants, the amount of current sold and the number of users, and the revenue received, with a chapter on technical developments in the industry. Price, 20 cents.

**Radio.** Accurate Method of Measuring Transmitted Wave Frequencies at 5,000 and 20,000 Kilocycles per Second, by E. L. Hall. (Bureau of Standards. Research Paper No. 220.) Reprint from Bureau of Standards Journal of Research, vol. 5, September, 1930, pp. 647-652, 1 illustration. This paper describes method of measuring radio station frequencies. Price, 5 cents.

**Scientific instruments.** Apparatus for Determination Aboard Ship of Salinity of Sea Water by Electrical Conductivity Method, by Frank Wenner, Edward H. Smith, and Floyd M. Soule. (Bureau of Standards. Research Paper No. 223.) Reprint from Bureau of Standards Journal of Research, vol. 5, September, 1930, pp. 711-732, 4 illustrations, 4 pages of plates, 1 chart. Price, 10 cents.

**Shipping.** Seagoing Vessels of United States, 1930. 150 pages, 5 pages of illustrations, 23 plates. (Bureau of Navigation.) This volume is a part of the 62d Annual List of Merchant Vessels of United States for year ended June, 1930. It contains the names of all merchant ships, yachts, and government vessels, giving official number and signal letters, tonnage, size, home port, name of owner, and place and time of construction. Price, 75 cents.

**Statistical Abstract of United States, 1930.** xiv+876 pages. (Bureau of Foreign and Domestic Commerce.) This volume contains tables showing the area and population of the United States, vital statistics, immigration and emigration, educational facilities, public lands and national parks, national, State, and municipal finance, currency and banking, labor and wages, communication services, power resources, roads and motor vehicles, waterways and shipping, foreign commerce, irrigation and drainage, agriculture, forest and mineral resources, fisheries, and manufactures. Price, \$1.

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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. STUART, 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. TYREE, 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.